

HOW TO BE AN ANTI-INTELLIGENT DESIGN ADVOCATE

FRANCIS J. BECKWITH*

For when anyone in the endeavor to prove the faith brings forward reasons which are not cogent, he falls under the ridicule of the unbelievers: since they suppose that we stand upon such reasons, and that we believe on such grounds.

St. Thomas Aquinas (1225–1274)¹

The highway is for gamblers, better use your sense.

Take what you have gathered from coincidence.

The empty-handed painter from your streets.

Is drawing crazy patterns on your sheets.

This sky, too, is folding under you

And it's all over now, Baby Blue.

Bob Dylan (1941–)²

The debate over whether the teaching of Intelligent Design (ID) in public school science classes should be required, permitted, or prohibited has become a cantankerous affair.³ Although it is an issue that has reached the

*Professor of Philosophy & Church-State Studies, and Resident Scholar in the Institute for the Studies of Religion, Baylor University (Waco, Texas). Ph.D., M.A. (philosophy), Fordham University; M.J.S. (law), Washington University School of Law, St. Louis.

1. St. Thomas Aquinas, *Summa Theologica*, I, Q. 32, Art. 1, (Fathers of the English Dominican Province, trans., 2d 1920) available at <http://www.newadvent.org/summa/1032.htm>.

2. Bob Dylan, “It’s All Over Now, Baby Blue.” Copyright ©1965; renewed 1993 Special Rider Music.

3. Sadly, even those of us who have tried to remain modest and circumspect in addressing this issue cannot escape the rhetorical gamesmanship ID has elicited in the public square.

I am a theistic evolutionist in the tradition of the Catholic philosopher Etienne Gilson. See generally ETIENNE GILSON, FROM ARISTOTLE TO DARWIN AND BACK AGAIN: A JOURNEY IN FINAL CAUSALITY, SPECIES AND EVOLUTION (Ignatius Press, 2009, John Lyon trans., 1984) (1971). However critics of intelligent design call me an “intelligent design supporter” because I treat ID with respect, count among my dearest friends some ID proponents, claim that ID advocates raise important questions, and received modest funding from the pro-ID Discovery Institute (\$9,000) in 2000 and thus was named a fellow of the Discovery Institute and remained such until I

federal courts, and will likely someday reach the highest court in the land, it is an issue over which even the most serious adversaries seem to have a superficial understanding. It seems to me that the main reason for this is precisely because it has reached the courts, which have become, for good or for ill, our contemporary version of a coliseum in which we showcase our bread and circuses. In such a social milieu, in which the stakes are routinely presented as so high that victory by either side is predicted by its opposite to mean either imminent theocracy⁴ or endless persecution of religious citizens, it is no wonder that civility and common sense are difficult to come by.

For this reason, in this article I want to take a different tact in addressing the question of intelligent design, public education, and the courts. Instead of presenting intelligent design, assessing the current law, and offering a judgment as to whether ID could be taught in public schools without violating the U. S. Constitution's establishment clause of the First Amendment (which I have in fact done in numerous places since 2001 starting with my M. J. S. thesis at the Washington University School of Law in St. Louis),⁵ in this article I explore another sort of issue. It is one that concerns

resigned in July 2007. See Barbara C. Forrest, "Forrest Responds to Beckwith," on the blog Panda's Thumb (May 10, 2009), available at <http://pandasthumb.org/archives/2009/05/forrest-respond.html>.

On the other hand, leading ID proponent William A. Dembski asserted in 2008 that "Frank Beckwith finally disowns ID" because I admitted in print that I think that ID relies on mistaken philosophical assumptions and that I am not entirely convinced by his arguments and method as well as those of Michael Behe (a biochemistry professor at Lehigh University). See William A. Dembski, "Frank Beckwith Finally Disowns ID," on his blog Uncommon Descent (Nov. 13, 2008), available at <http://www.uncommondescent.com/intelligent-design/frank-beckwith-finally-disowns-id/>. The article of mine to which Dembski refers is Francis J. Beckwith, *The Courts, Natural Rights, and Religious Claims as Knowledge*, 49 SANTA CLARA L. REV. 429, n. 51 (2009). Dembski's co-blogger, Denyse O'Leary claims, "My take is that some philosophy types will always hate ID because it asserts the priority of evidence over theory." "Frank Beckwith and the Plod of the Philosophers," on the blog Uncommon Descent (Nov. 14, 2008), available at <http://www.uncommondescent.com/intelligent-design/francis-beckwith-and-the-plod-of-the-philosophers/>. Apparently, I support ID, disown ID, and hate ID.

4. See, e.g., BARBARA C. FORREST & PAUL GROSS, CREATIONISM'S TROJAN HORSE: THE WEDGE OF INTELLIGENT DESIGN (2005)(Examining the agenda and advances of "Intelligent Design" and explaining and analyzing the "Wedge Strategy").

5. Francis J. Beckwith, *Rethinking Edwards v. Aguillard?: The Establishment Clause of the First Amendment and the Challenge of Intelligent Design*, (M.J.S. dissertation, Washington University School of Law, St. Louis, 2001; Advisor: Professor Stanley Paulsen); Francis J. Beckwith, *A Liberty Not Fully Evolved?: The Case of Rodney LeVake and the Right of Public School Teachers to Criticize Darwinism*, 39 SAN DIEGO L. REV. 1111 (2002); Francis J. Beckwith, *Science and Religion 20 Years After McLean v. Arkansas: Evolution, Public Education, and the Challenge of Intelligent Design*, 26 HARVARD J. L. & PUB. POL'Y 456 (2003); FRANCIS J. BECKWITH, LAW, DARWINISM, & PUBLIC EDUCATION: THE ESTABLISHMENT CLAUSE AND THE CHALLENGE OF INTELLIGENT DESIGN (2003); Francis J. Beckwith, *Public Education, Religious Establishment, and the Challenge of Intelligent Design*, 17 NOTRE DAME J.L. ETHICS & PUB. POL'Y 461 (2003); Francis J. Beckwith, *Design, Darwin, and the Public Schools, in TO EVERYONE AN ANSWER: A CASE FOR THE CHRISTIAN WORLDVIEW* 266-86 (eds. Francis J. Beckwith, William Lane Craig,

the question of what one must believe, affirm, and/or defend in order to reject the proposition that ID ought not to be taught in public schools. I address a question that, as far as I can tell, has been unanimously ignored in this debate, but should be of interest to anyone, especially a member of the judiciary,⁶ who may have a peculiar curiosity as to what “really” lurks behind,⁷ and may unconsciously form, the beliefs of those engaged in this cultural combat. That question is: what must one believe to be an anti-Intelligent Design advocate?

In order to accomplish this, I consult several scholars (including ID critics) as well as Judge John E. Jones III’s opinion in *Kitzmiller v. Dover*,⁸ the well-known federal district court case that struck down a pro-ID school board policy. To set the stage, I explore two issues: (I) Distinguishing Creationism, Design, and Intelligent Design, and (II) Thomism and Intelligent Design.

I. DISTINGUISHING CREATIONISM, DESIGN, AND INTELLIGENT DESIGN

The term “intelligent design” has become ubiquitous in American popular culture as the most recognizable alternative to Darwinian evolution since the ascendancy of “Creationism” (or “Creation Science”).⁹ Although “Cre-

and J. P. Moreland, 2004); Francis J. Beckwith, *Rawls’ Dangerous Idea: Political Liberalism, Naturalistic Evolution, and The Requirements of Legal Neutrality in Shaping Public School Curricula*, 20 J. L. & RELIGION 423 (2005); Francis J. Beckwith, *It’s the Epistemology, Stupid!: Science, Knowledge, and Public Education*, in *DARWIN’S NEMESIS: ESSAYS IN HONOR OF PHILLIP JOHNSON* 105–116 (ed. William A. Dembski, 2006); Francis J. Beckwith, *Intelligent Design, Religious Motives, and the First Amendment*, in *INTELLIGENT DESIGN: WILLIAM A. DEMBSKI AND MICHAEL RUSE IN DIALOGUE* (ed. Robert B. Stewart, 2007).

6. See Francis J. Beckwith, *The Court of Disbelief: The Constitution’s Article VI Religious Test Prohibition and the Judiciary’s Religious Motive Analysis*, 33 HASTINGS CONST. L.Q. 337 (2006).

7. There seems to be among the most vociferous ID critics a case of the “guilt by association / genetic fallacy” tourettes, a malady that manifests itself in the irrational practice of pointing out, like an involuntary vocal utterance, the religious beliefs and affiliations of some ID advocates, as if such revelations (pardon the pun) have any bearing on the quality of the arguments such advocates offer for their point of view. Consider just this example (though this “insight” can be multiplied many times over): “At heart, proponents of intelligent design are not motivated to improve science but to transform it into a theistic enterprise that supports religious faith.” Barbara Forrest, *The Newest Evolution of Creationism: Intelligent Design is About Politics and Religion, Not Science*, NAT. HIST., Apr. 2002, 80, at 80. Just as it would be wrong for anyone to dismiss the arguments of ID critics because a disproportionate number of them are aggressive atheists and social liberals in comparison to the general population, it is wrong for these ID critics to dismiss the arguments of ID supporters because most of them are theists of some sort or another.

8. *Kitzmiller v. Dover Area Sch. Dist.*, 400 F. Supp. 2d 707, 722 (M.D. Pa. 2005).

9. See Ronald H. NUMBERS, *THE CREATIONISTS: FROM SCIENTIFIC CREATIONISM TO INTELLIGENT DESIGN*, (2d. ed., 2005). See also my review of the book at 23 J. L. & RELIGION 735 (2008).

ationism” and “Intelligent Design” are each offered by their respective proponents as alternative accounts of Darwinian evolution, they are not identical, even though some writers in fact claim that they are identical.¹⁰ (One particularly annoying habit on the part of these writers is to refer to “Intelligent Design” as “Intelligent Design Creationism” for the apparent purpose of instilling in their readers the practice of thinking that “guilt by association” is intellectually virtuous).¹¹ It seems to me that their confusion (if it is truly a confusion rather than just a form of McCarthyism) rests on two indisputable facts: (1) some ID advocates run in the same circles as some Creationists, and (2) Some ID criticisms to Darwinian evolution resemble, and are in some cases identical to, Creationist criticisms of Darwinian evolution.¹² But that is a weak argument, for we can marshal just as bad a case against Darwinians who deny that their view supports atheism: (1) many politically passionate Darwinians run in the same circles as some atheists,¹³

10. See, e.g., the comments made by Judge Jones in *Kitzmiller*, 400 F. Supp. 2d at 722:

The weight of the evidence clearly demonstrates, as noted, that the systemic change from “creation” to “intelligent design” occurred sometime in 1987, after the Supreme Court’s important *Edwards v. Aguillard* decision [482 U.S. 578 (1987)]. This compelling evidence strongly supports Plaintiffs’ assertion that ID is creationism re-labeled. Importantly, the objective observer, whether adult or child, would conclude from the fact that *Pandas [and People]*, the ID text recommended to students according to the Dover policy, posits a master intellect that the intelligent designer is God.

Further evidence in support of the conclusion that a reasonable observer, adult or child, who is “aware of the history and context of the community and forum” is presumed to know that ID is a form of creationism concerns the fact that ID uses the same, or exceedingly similar arguments as were posited in support of creationism. One significant difference is that the words “God,” “creationism,” and “Genesis” have been systematically purged from ID explanations, and replaced by an unnamed “designer.” Dr. [Barbara] Forrest testified and sponsored exhibits showing six arguments common to creationists. Demonstrative charts introduced through Dr. Forrest show parallel arguments relating to the rejection of naturalism, evolution’s threat to culture and society, “abrupt appearance” implying divine creation, the exploitation of the same alleged gaps in the fossil record, the alleged inability of science to explain complex biological information like DNA, as well as the theme that proponents of each version of creationism merely aim to teach a scientific alternative to evolution to show its “strengths and weaknesses,” and to alert students to a supposed “controversy” in the scientific community [citations to the Record omitted]. In addition, creationists made the same argument that the complexity of the bacterial flagellum supported creationism as Professors Behe and Minnich now make for ID [citations to the Record omitted]. The IDM [Intelligent Design Movement] openly welcomes adherents to creationism into its “Big Tent,” urging them to postpone biblical disputes like the age of the earth [citations to the Record omitted]. Moreover and as previously stated, there is hardly better evidence of ID’s relationship with creationism than an explicit statement by defense expert Fuller that ID is a form of creationism.

11. See, e.g., *INTELLIGENT DESIGN CREATIONISM AND ITS CRITICS: PHILOSOPHICAL, THEOLOGICAL, AND SCIENTIFIC PERSPECTIVES* (Robert T. Pennock, ed., 2001).

12. See Judge Jones’s comments, *supra* note 10.

13. See Jeffrey Koperski, *Two Bad Ways to Attack Intelligent Design and Two Good Ones*, 43 ZYGON 436 (June 2008). He comments on Dr. Barbara Carroll Forrest, the expert witness cited several times by Judge Jones in *supra* note 10:

[She] is on the board of directors for the New Orleans Secular Humanist Association <http://nosha.secularhumanism.net>, a group that actively tries to prove that religious beliefs are based on ignorance and superstition. They strategically promote Secular Humanism; they hold conferences; they have their own newsletters and publications; they

(2) most Darwinian critiques of Creationism and ID are practically indistinguishable from atheist criticisms of Creationism and ID,¹⁴ and (3) most defenses of atheism maintain that Darwinian evolution is a defeater to theism.¹⁵ These facts, like the ones about Creationism and ID, are indisputable. So, it seems that “guilt by association” is a game that each side can play.

In that case, why should one *not* think of Creationism and ID as identical? First, the cases offered for ID are much more like the argumentation one finds in philosophy or natural theology than they are like the biblicism on which Creationism relies. For the ID advocate, Darwinian evolution claims to be an exhaustive account of the development of life on Earth. And because the Darwinian account is entirely a naturalist (and materialist) account requiring no mind behind it, as most of its supporters contend,¹⁶ the burden of the ID advocate is to show *both* that Darwinism is an incomplete account of the development of life *and* that there is design in nature that requires a mind (or intelligence) to account for it. Because Creationists believe that God created the universe—and thus the universe is designed—it takes little imagination to see why Creationists and ID advocates would run in the same circles and find some of the same arguments congenial to their point of view. But that’s where the similarities between the two views end. This is because for the Creationist a particular interpretation of the Bible’s Book of Genesis is her starting point. Thus, it is in her interest to show that any account of the origin and nature of the universe, including Darwinian evolution, is inadequate in comparison to the biblical account. Although there are ID advocates who accept such a biblical account,¹⁷ ID as a point of

take donations. I submit that Forrest’s academic publications are motivated by her anti-religious views. That may be interesting in terms of biography, but friends and critics alike should agree that it is irrelevant when assessing her arguments.

14. See, e.g., Richard Dawkins’ critique of ID in his brief for atheism, RICHARD DAWKINS, *THE GOD DELUSION* 119–134 (2008); compare with Kenneth Miller’s critique of ID in his case for the reality of both God and evolution in KENNETH R. MILLER, *FINDING DARWIN’S GOD: A SCIENTIST’S SEARCH FOR COMMON GROUND BETWEEN GOD AND EVOLUTION* 130–164 (2000). In fact, Dawkins relies on Miller’s work in making his case against ID. I am, of course, not arguing that either writer is being duplicitous. What I am suggesting, by offering this comparison, is that “guilt by association” is a lousy way to argue on these matters.

15. See e.g. DAWKINS, *DELUSION*, *supra* note 14; see also, RICHARD DAWKINS, *THE BLIND WATCHMAKER* 6 (1986), where Dawkins writes:

An atheist before Darwin could have said, following Hume: “I have no explanation for complex biological design. All I know is that God isn’t a good explanation, so we must wait and hope that somebody comes up with a better one.” I can’t help feeling that such a position, though logically sound, would have left one feeling pretty unsatisfied, and that although atheism might have been *logically* tenable before Darwin, Darwin made it possible to be an intellectually fulfilled atheist.

16. DAWKINS, *DELUSION*, *supra* note 14, at 158: “Darwin and his successors have shown how living creatures, with their spectacular statistical improbability and appearance of design, have evolved by slow, gradual degrees from simple beginnings. We can now safely say that the illusion of design in living creatures is just that—an illusion.”

17. One such person is Paul Nelson, a fellow of the Discovery Institute. He is a Young Earth creationist who earned his Ph.D. in the philosophy of biology from the University of Chicago.

view has no necessary connection to any biblical account. For, as I note below, the ID advocate is offering a case that depends exclusively on the plausibility of arguments whose premises consist of empirical, conceptual, mathematical, and/or philosophical claims. Of course, whether such arguments actually work (or are at least minimally plausible) is another question altogether, one that falls outside the narrow scope of this article. Nevertheless, the important point here is to understand that regardless of whether ID arguments work or not, ID is not Creationism, even though it shares some characteristics with it.¹⁸

Moreover, some design arguments embraced by ID advocates are also embraced by ID critics! For example, two strong critics of ID, former Human Genome Project director Francis Collins and Brown University biologist Ken Miller, both Christians, defend the plausibility of design arguments that support some form of theism. Miller, who testified as an expert witness for the plaintiffs in the *Kitzmiller* case,¹⁹ maintains that the alignment of the cosmic constants soon after the Big Bang points toward an extra-natural mind as the Intelligent Cause of the universe.²⁰ Collins agrees,²¹ but also offers an argument for the existence of God from the existence of the moral law, not unlike C. S. Lewis' argument in *Mere Christianity*.²² The sorts of cosmic "fine-tuning" arguments presented by Collins and Miller are also defended by thinkers associated with The Discovery Institute (DI),²³ the

Young Earth creationism (YEC) is "the point of view that holds that the first twelve chapters of Genesis are to be taken as scientifically accurate. This entails the special creation of all life forms including human beings, an earth no more than 10,000 years old, and a universal flood in which Noah's Ark safely floated." Beckwith, review of CREATIONISTS, *supra* note 9. But, as I also point in that same review:

[F]or the ID advocate, the most important thing to do is to show the failure of philosophical materialism as a worldview. This may or may not involve a full-orbed critique of Darwinism. In fact, some ID advocates, including Lehigh University biochemist Michael Behe, believe in common descent, which is Creationist Kryptonite. On the other hand, Paul Nelson... is a Young Earth creationist (YEC). Yet, Nelson makes a distinction between what he believes theologically and which of those theological beliefs he can legitimately defend scientifically and/or philosophically by means of natural reason. So, when Nelson is defending ID, he is not defending YEC. For Nelson, and others like him, ID is consistent with and lends support to YEC, but it does not rule out the falsity of YEC. For if it did, then Behe, a type of theistic evolutionist, and Nelson, a Young Earth creationist, could not be "on the same ID team," so to speak. These subtle, though important, distinctions are sometimes lost on critics of ID, who often confuse an argument offered by an ID advocate with the ID advocate who offers the argument.

Id. at 736-37.

18. This point has been persuasively made by atheist philosopher Bradley Monton in BRADLEY MONTON SEEKING GOD IN SCIENCE: AN ATHEIST DEFENDS INTELLIGENT DESIGN (2009) (*see especially* chapter 1).

19. *See e.g.*, *Kitzmiller*, 400 F. Supp. 2d at 724.

20. KENNETH MILLER, FINDING DARWIN'S GOD (2000) (*see especially* chapter 8).

21. FRANCIS COLLINS, THE LANGUAGE OF GOD: A SCIENTIST PRESENTS EVIDENCE FOR BELIEF (2006) (*see especially* chapter 3; Collins' criticisms of ID are in chapter 6).

22. C. S. LEWIS, MERE CHRISTIANITY (ed. HarperCollins, 2001) (1952).

23. *See e.g.*, Stephen Meyer, *The Return to the God Hypothesis*, 11 JOURNAL OF INTERDISCIPLINARY STUDIES 1 (1999); *see also* GUILLERMO GONZALEZ AND JAY WESLEY

Seattle think-tank that is in the forefront in supporting ID research.

For these reasons, there is understandable confusion on what precisely constitutes ID. In my previous works I defined ID so broadly that it would include the arguments of thinkers like Miller and Collins who, though critical of ID in the life sciences, seem not to be troubled by the detection of design in cosmology. Here is how I defined ID in 2007:

Intelligent Design (or ID) is not one theory. It is a short-hand name for a cluster of arguments that offer a variety of cases that attempt to show, by reasoning unaccompanied by religious authority or sacred scripture, that intelligent agency rather than unguided matter better accounts for apparently natural phenomena and/or the universe as a whole. Some of these arguments challenge aspects of neo-Darwinism. Others make a case for a universe designed at its outset, and thus do not challenge any theory of biological evolution. Nevertheless, they all have in common the notion that the human intellect has the capacity to acquire knowledge of, or at least have rational warrant to believe in, an inference that mind, rather than non-mind, best accounts from some apparently natural phenomena or the universe as a whole.²⁴

When I wrote this definition I was trying to explain to a wider audience that the best way to understand ID is to see it as a counter to the hegemony of philosophical materialism that some thinkers believe is entailed by Darwinian evolution as well as a particular understanding of science. It is a view of science that maintains that the hard sciences are the best or only way of acquiring exhaustive knowledge of the natural world and its genesis, and that these sciences, in order to function properly, require methodological naturalism. According to ID advocate, William A. Dembski, *methodological naturalism* is “the view that science must be restricted solely to undirected natural processes.”²⁵ Thus, it seemed to me that any view that challenged philosophical materialism, either by critiquing its methodological assumptions and/or its ontological commitments, could rightfully be in-

RICHARDS, THE PRIVILEGED PLANET: HOW OUR PLACE IN THE COSMOS IS DESIGNED FOR DISCOVERY (2004).

24. FRANCIS J. BECKWITH, *Intelligent Design, Religious Motives, and the Constitution's Religion Clauses*, in INTELLIGENT DESIGN: WILLIAM A. DEMBSKI AND MICHAEL RUSE IN DIALOGUE 90, 93 (Robert B. Stewart, ed., 2007).

25. WILLIAM A. DEMBSKI, INTELLIGENT DESIGN: THE BRIDGE BETWEEN SCIENCE AND THEOLOGY 119 (1999). According to another ID advocate, Phillip Johnson, “[a] methodological naturalist defines science as the search for the best naturalistic theories. A theory would not be naturalistic if it left something out (such as the existence of genetic information or consciousness) to be explained by a supernatural cause.” Therefore, “all events in evolution (before the evolution of intelligence) are assumed attributable to unintelligent causes. The question is not *whether* life (genetic information) arose by some combination of chance and chemical laws, to pick one example, but merely *how* it did so.” PHILLIP E. JOHNSON, REASON IN THE BALANCE: THE CASE AGAINST NATURALISM IN SCIENCE, LAW, & EDUCATION 208 (1996).

cluded under the big tent of Intelligent Design. I am now convinced that my definition—though an accurate description of what would constitute a central belief to a broad coalition of anti-naturalists—does not truly capture the core arguments of what has come to be known as the Intelligent Design Movement (IDM).

Take, for example, Miller and Collins, who defend cosmological fine-tuning arguments (CFT)²⁶ for cosmic design, but who are at the same time critics of ID. Former Discovery Institute vice president, Mark Ryland, points out that although ID advocates will, at times, incorporate CFT arguments into their works, CFT supporters, like Miller and Collins, do not reciprocate.²⁷ Ryland explains the reason for this:

CFT does not imply any intervention by God in the evolution of the cosmos. The laws and constants at issue are preordained, built into the very fabric of reality. IDT [Intelligent Design Theory], on the other hand, implies intervention, divine or otherwise, by arguing that an “intelligent cause” must have done something superadded to an “unguided natural process.”²⁸

Consequently, one ought not to confuse ID (or as Ryland calls it, “IDT”)²⁹ with other views that claim that the natural universe is designed (such as CFT) and/or includes both formal and final causes. It seems to me, then, that Ryland is correct when he defines ID as a view that “purports to be a scientific theory about the development of life on earth. . . [It] defines itself in part by arguing against the adequacy of standard neo-Darwinian evolutionary theory and in part by making allegedly scientific arguments in favor of *design* in biology.”³⁰ Its three most important theorists are biochemist Michael Behe,³¹ philosopher of science Stephen Meyer,³² and mathematician and philosopher William A. Dembski.³³ Thus, when critics and defenders write of the Intelligent Design Movement (IDM), they are virtually always referring to the works of these and other thinkers including others associated with the Discovery Institute. It was this view that was the focus

26. I am borrowing the acronym CFT (for “cosmological fine-tuning”) from Mark Ryland, *Intelligent Design Theory*, in *NEW CATHOLIC ENCYCLOPEDIA SUPPLEMENT VOL. 1*, 473 (Robert L. Fastiggi, ed., 2009).

27. *Id.*

28. *Id.*

29. *Id.* at 470.

30. *Id.*

31. MICHAEL J. BEHE, *DARWIN’S BLACK BOX: THE BIOCHEMICAL CHALLENGE TO EVOLUTION* 39 (1996); MICHAEL BEHE, *THE EDGE OF EVOLUTION: THE SEARCH FOR THE LIMITS OF DARWINISM* (2008).

32. See, e.g., STEPHEN C. MEYER, *SIGNATURE IN THE CELL: DNA AND THE EVIDENCE FOR INTELLIGENT DESIGN* (2009); see also *DARWINISM, DESIGN AND PUBLIC EDUCATION* (James Angus Campbell and Stephen C. Meyer, eds., 2004).

33. See, e.g., WILLIAM A. DEMBSKI, *THE DESIGN INFERENCE* (1998); see also *DEBATING DESIGN: FROM DARWIN TO DNA* (William A. Dembski and Michael Ruse, eds., 2004).

of the 2005 *Kitzmiller* case.³⁴

Nevertheless, both ID advocates and other believers in design (e.g., CFT supporters) hold at least one belief in common, namely, that the human mind has the capacity and power to detect and know that the universe and/or parts of it are designed and thus the product of mind rather than non-mind. ID advocates, however, typically argue for the application of certain design-detecting criteria to empirical observations *in* the natural world. Hence, Dembski defines ID as “the study of patters *in* nature that are best explained as the result of intelligence.”³⁵ So, for example, Behe argues that because things that are *irreducibly complex* are the product of mind (e.g., a mousetrap), therefore some aspects of the natural world (e.g., the bacterial flagellum) are the product of mind since they too are irreducibly complex. Dembski offers a similar criterion based on a concept he calls *specified complexity*. He argues that because things that exhibit specified complexity are the product of mind (e.g., a lock’s combination), therefore, aspects of the natural world (e.g., the bacterial flagellum) are products of mind since they too exhibit specified complexity.

Consequently, for both Behe and Dembski design is a property had by an entity that exhibits a certain type and level of complexity. Both maintain that there is a threshold at which a living organism’s irreducible complexity (in the case of Behe)³⁶ or specified complexity (in the case of Dembski)³⁷ becomes incapable of being accounted for by non-agent causes, such as natural selection, random mutation, and/or scientific laws. (Meyer offers a different criterion, “inference to the best explanation” (or IBE), though it, like Behe’s and Dembski’s, is a criterion by which one may detect intelli-

34. *Kitzmiller*, 400 F. Supp. 2d at 722.

35. WILLIAM A. DEMBSKI, *Opening Statement*, in INTELLIGENT DESIGN: WILLIAM A. DEMBSKI AND MICHAEL RUSE IN DIALOGUE 12, 20 (Robert B. Stewart ed., 2007).

36. Behe’s project takes its cue from Charles Darwin’s (1809-1882) claim that “[i]f it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down.” CHARLES DARWIN, *THE ORIGIN OF SPECIES*, 154 (6th ed. 1872), as quoted in Michael Behe, *Intelligent Design as an Alternative Explanation for the Existence of Biomolecular Machines*, 1 RHETORIC & PUBLIC AFFAIRS 566 (1998). Thus, reasons Behe, a system that is *irreducibly complex* (IC) is a serious challenge to the explanatory power of the Darwinian paradigm. See *supra* note 31, BEHE, BLACK BOX 39, for Behe’s definition of an IC system, “a single system of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively cease functioning.”

37. William A. Dembski, *Detecting Design in the Natural Sciences*, 111 NATURAL HISTORY 76 (2002):

Intelligence leaves behind a characteristic trademark or signature--what I call "specified complexity." An event exhibits specified complexity if it is contingent and therefore not necessary; if it is complex and therefore not easily repeatable by chance; and if it is specified in the sense of exhibiting an independently given pattern. Note that complexity in the sense of improbability is not sufficient to eliminate chance: flip a coin long enough, and you'll witness a highly complex or improbable event. Even so, you'll have no reason not to attribute it to chance.

gent, and exclude non-intelligent, causes for certain biological entities, including organs and systems, in nature)³⁸ For both Behe and Dembski it is the complex arrangement of an entity's parts and the end of that arrangement that requires an agent cause. However, short of achieving that threshold of irreducible or specified complexity, no design inference is warranted. And because ID offers an account of the natural world that is a rival to non-design hypotheses, Behe and Dembski maintain that ID should be considered "science."³⁹

Although this question—whether or not ID is science—turned out to be one of the central issues in the *Kitzmiller* opinion,⁴⁰ it seems to me that this question is a red herring and serves to obscure the more important philosophical issues that percolate beneath the surface of this dispute. Both sides, however, have an interest in keeping this question alive. The ID advocates

38. MEYER, SIGNATURE *supra* note 32 at 154–228. See also a 2000 essay in *First Things*, where Meyer explains IBE as it applies to his argument from "DNA to design":

The design argument from information content in DNA, therefore, does not depend upon analogical reasoning since it does not depend upon assessments of degree of similarity. The argument does not depend upon the similarity of DNA to a computer program or human language, but upon the presence of an identical feature ("information content" defined as "complexity and specification") in both DNA and all other designed systems, languages, or artifacts. While a computer program may be similar to DNA in many respects, and dissimilar in others, it exhibits a precise identity to DNA in its ability to store information content (as just defined).

Thus, the "DNA to Design" argument does not represent an argument from analogy of the sort that Hume criticized, but an "inference to the best explanation." Such arguments turn, not on assessments of the degree of similarity between effects, but instead on an assessment of the adequacy of competing possible causes for the same effect. Because we know intelligent agents can (and do) produce complex and functionally specified sequences of symbols and arrangements of matter (i.e., information content), intelligent agency qualifies as a sufficient causal explanation for the origin of this effect. Since, in addition, naturalistic scenarios have proven universally inadequate for explaining the origin of information content, mind or creative intelligence now stands as the best and only entity with the causal power to produce this feature of living systems.

Stephen C. Meyer, *DNA and Other Designs*, 102 *FIRST THINGS* 30, 37–38 (2000).

39. WILLIAM A. DEMBSKI, *THE DESIGN REVOLUTION: ANSWERING THE TOUGHEST QUESTIONS ABOUT INTELLIGENT DESIGN* 37 (2004): "[t]he related concepts of irreducible complexity and specified complexity render intelligent causes empirically detectable and make intelligent design a full-fledged scientific theory, distinguishing it from the design arguments of philosophers and theologians, or what has traditionally been called *natural theology*."

40. Judge Jones writes:

We find that ID fails on three different levels, any one of which is sufficient to preclude a determination that ID is science. They are: (1) ID violates the centuries-old ground rules of science by invoking and permitting supernatural causation; (2) the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980's; and (3) ID's negative attacks on evolution have been refuted by the scientific community. As we will discuss in more detail below, it is additionally important to note that ID has failed to gain acceptance in the scientific community, it has not generated peer-reviewed publications, nor has it been the subject of testing and research.

Kitzmiller, 400 F. Supp. 2d at 734–36. For a critique of Jones' criteria, see Bradley Monton, *Is Intelligent Design Science? Dissecting the Dover Decision* (Jan. 18, 2006), available at <http://philsoci-archive.pitt.edu/archive/00002592/>.

seem to believe that if they can prove that ID is indeed science, then it can get a fair hearing in the academy. The ID opponents seem to believe that if they can prove that ID is not science, then ID cannot be and ought not to be taken seriously by scientists. Nevertheless, it seems to me that the “science” question in this dispute is, in a sense, a sort of epistemological nuclear device that ensures total victory for the side that can successfully deliver it first. But the device is a philosophical dud, as I argued in my 2003 book on the subject:

[I]f ID arguments lack certain theoretical virtues that are considered earmarks of good theories or explanations—e.g., explanatory power, empirical adequacy, simplicity, predictive and/or retrodictive success (as broadly construed in the historical sciences), testability, clarity of concepts—and/or exhibit the vices of bad theories—e.g., “God-of-the-gaps” strategy, heavy reliance on ad hoc hypotheses, lack of explanatory power—and if there are better alternatives, then perhaps one could reject ID as an explanation and/or theory for apparent design in nature. But one would be doing so, not because ID is unable to pass a metaphysical litmus test, but rather, because it fails as an hypothesis qua hypothesis. That is, whether ID fits some *a priori* definition of “science” or “pseudo-science” is a red herring, for such definitions tell us nothing about whether a theory and/or explanation, such as ID, provides us with real knowledge of the order and nature of things. In the words of [philosopher of science Larry] Laudan, who is not an ID supporter: “If we could stand up on the side of reason, we ought to drop terms like ‘pseudo-science’. . . . They do only emotive work for us.”⁴¹

In other words, the question of what is “science” and whether ID counts as science does not advance the conversation, since each side typically employs it as either a ticket to cultural acceptability (the ID advocates) or as an epistemological exclusionary rule (the ID critics). Thus, it impermissibly shifts the discussion from the plausibility of ID arguments to the question of whether the whole idea of ID, regardless of the quality of the arguments for it, is capable of getting past a gauntlet of intellectual gatekeepers.

II. THOMISM AND INTELLIGENT DESIGN

We have seen that ID is not Creationism, that not all design arguments (e.g., CFT) are necessarily the spawn of the Intelligent Design Movement, and that the question of whether or not ID is science is beside the point.

41. *Supra* note 5, BECKWITH, LAW, DARWINISM, & PUBLIC EDUCATION, quoting LARRY LAUDAN, *The Demise of the Demarcation Problem*, in BUT IS IT SCIENCE?: THE PHILOSOPHICAL QUESTION IN THE CREATION/EVOLUTION CONTROVERSY 337, 349 (Michael Ruse ed., 1988).

Now I want to discuss another way of thinking about design in nature. It is a view defended by Thomists,⁴² followers of the philosopher and theologian St. Thomas Aquinas (1225–1274).⁴³ And it is a view that is both contrary to the dominant account of ID as well as those views of nature held by ID’s materialist critics (though not all of its non-materialist critics). Calling this view Thomistic Design (TD), it maintains that the universe was brought into being by God *ex nihilo* and that this universe consists of a vast variety of inanimate and animate entities that are subject to certain scientific laws. Among the animate entities are human beings, who possess an active power for self-movement that allows them to engage in free acts initiated and/or accompanied by thought and reflection. The universe is not God’s “artifact,” since he did not change that which already existed,⁴⁴ as Aristotle (384–322 B.C.) believed that his deity, “the Unmoved Mover,” did to prime matter.⁴⁵ Rather, according to St. Thomas, the universe is radically contingent upon God for its genesis as well as its continued existence, including the development and order within it. This is why, in his famous Five Ways (or arguments) to show God’s existence, St. Thomas includes as a fifth way an argument from the universe’s design as a *whole*, appealing to those scientific laws that make motion possible. St. Thomas writes:

The fifth way is taken from the governance of the world. We see that things which lack intelligence, such as natural bodies, act for an end, and this is evident from their acting always, or nearly al-

42. See e.g., GILSON *supra* note 3; FESER, THE LAST SUPERSTITION (2008); RIC MACHUGA, IN DEFENSE OF THE SOUL: WHAT IT MEANS TO BE HUMAN 161–66 (2002); Michael W. Tkacz, *Thomas Aquinas vs. the Intelligent Designers: What Is God’s Finger Doing in My Pre-Biotic Soup?* in INTELLIGENT DESIGN: SCIENCE OR RELIGION? CRITICAL PERSPECTIVES 275 (Robert M. Baird & Stuart E. Rosenbaum eds., 2007).

43. It is a common error to mistakenly link the arguments of contemporary ID advocates with St. Thomas Aquinas’s argument from final causes in nature. See, e.g., MARTHA NUSSBAUM, LIBERTY OF CONSCIENCE: IN DEFENSE OF AMERICA’S TRADITION OF RELIGIOUS EQUALITY 322 (2008). Although it is true that final causes imply design, the ID movement is a project in which the irreducible or degree of specified complexity of the parts in natural objects are offered as evidence that these entities are designed. But that is not the same as a final or formal cause (as we will see in what follows in the text in II), which is something intrinsic to the entity and not detectable by *mere* empirical observation. For example, if I were to claim that the human intellect’s final cause is to know because the human being’s formal cause is his nature of “rational animal,” I would not be making that claim based on the irreducible or degree of specified complexity of the brain’s parts. Rather, I would be making a claim about the proper end of a power possessed by the human person. That end cannot be strictly observed, since in-principle one can exhaustively describe the efficient and material causes of a person’s brain-function without recourse to its proper end or purpose. Yet, the end or purpose of the human intellect seems in fact to be knowable. For more on St. Thomas Aquinas and design, see Joseph A. Bujis, *On Misrepresenting the Thomistic Five Ways*, 48 SOPHIA 15–34 (2009); EDWARD FESER, THE LAST SUPERSTITION 74–119 (2008); Tkacz, *supra* note 42, at 257–82.

44. Thomas Aquinas, *Summa Theologica*, I, q. 45, art. 3, available at <http://www.newadvent.org/summa/1045.htm>

45. Aristotle, *The Metaphysics* (trans. W. D. Ross), bk. IX, available at http://classics.mit.edu/Aristotle/meta_physics.9.ix.html.

ways, in the same way, so as to obtain the best result. Hence it is plain that not fortuitously, but designedly, do they achieve their end. Now whatever lacks intelligence cannot move towards an end, unless it be directed by some being endowed with knowledge and intelligence; as the arrow is shot to its mark by the archer. Therefore some intelligent being exists by whom all natural things are directed to their end; and this being we call God.⁴⁶

For St. Thomas, the design or purpose of nature refers to the interrelationship of “all things” in the universe, including scientific laws and all inanimate and animate things and their powers, which have their own natures that direct them to certain ends. And they are all kept in existence by God, who brought the universe into being *ex nihilo*. St. Thomas, though a believer in design, was no ID advocate.

As I have already noted, the ID advocate tries to detect instances of design in nature by eliminating chance and necessity (or scientific law). This implies that one has no warrant to say that the latter two are the result of an intelligence that brought into being a whole universe whose parts, including its laws and those events that are apparently random, seem to work in concert to achieve a variety of ends. But this is precisely the position advanced by the Thomist. In response, someone could say that an ID advocate who accepts a CFT argument does in fact have warrant to believe that chance and necessity are the result of intelligence as well, since both function as parts of the Creator’s plan for the universe’s fine-tuning. But then, what happens to irreducible and specified complexity as criteria by which to eliminate non-agent causes of apparently designed effects *in nature*? Perhaps this is why some ID advocates are reticent to call their “designer” God,⁴⁷ since it would mean that God creates everything *ex nihilo* and then returns now and again to tidy things up a bit when they seem to be going awry.

But, as Brad S. Gregory writes, this puts the ID advocates in the ironic position of sharing a philosophical assumption with the New Atheists,⁴⁸ the latest apologists for Darwinian evolution who claim that it entails unbelief:

Advocates of intelligent design posit that ordinary biological processes of natural selection and genetic mutation can account for much but not everything in the evolution of species, the remainder

46. Thomas Aquinas, *Summa Theologica*, I, q. 2, art. 3, available at <http://www.newadvent.org/summa/1002.htm>

47. See David K. DeWolf, Stephen C. Meyer, & Mark Edward DeForrest, *Teaching the Origins Controversy: Science, or Religion, or Speech?*, 2000 UTAH L. REV. 39, 85 (2000) (“Design theory, unlike neo-Darwinism, attributes this appearance to a designing intelligence, but it does not address the characteristics or identity of the designing intelligence”).

48. “The New Atheists” is a term that was coined to refer to several atheist thinkers and writers who have authored bestselling books during the middle of the first decade of the 21st century. This group usually includes Dawkins, Christopher Hitchens, Daniel Dennett, and Sam Harris.

requiring recourse to God's intervention. Insofar as proponents of intelligent design posit normally autonomous natural processes usually devoid of God's influence, they share important assumptions with the New Atheists.⁴⁹

Gregory points out the fallacy in this understanding of God's relationship to nature: "[P]erhaps in the past Darwinism wasn't explanatorily powerful enough to drive God out, but recent, further scientific findings no longer leave room for God."⁵⁰ The result is a strange parallel of ferocious posturing between ID advocates and the New Atheists: "The intelligent design proponents scramble to find remaining places for supernatural intervention; the New Atheists claim there are none left. Both assume that God, conceived in spatial and quasi-spatial terms, needs 'room' to be God—which is precisely what traditional Christian theology says God does not need."⁵¹

Thomistic Design (TD) also has something to say about the detection of purpose in the universe. For the Thomist, the human intellect has the power to "see" formal and final causes in both artifacts and in nature. Following Aristotle, St. Thomas maintained that there are four causes of change in the universe: efficient, material, formal, and final. In order to explain them, consider this example. Imagine a marble statute of Jesus made for the chapel of a large cathedral in order to facilitate worship. The marble is the material cause. Its maker, the artist, is the efficient cause. The reason for why it was made—to assist the chapel attendees in worship—is the final cause. And the formal cause is the pattern of the statute in the artist's mind that he imposes on the unformed marble. Consider now an organ system of a living organism, a human being's lungs. The organic material of which that system consists is its material cause. Its efficient cause is the biological parents of the human being in which the lungs reside. Its formal cause is the nature of the being in which the lungs function, for they are fully integrated parts that work in concert with the body's other parts to help sustain the whole being for its own flourishing (which depends on a "pattern," the sort of being it is). And the lungs' final cause is respiration. Their end is to exchange oxygen for the sake of the person who owns them.

For St. Thomas (again, following Aristotle), the formal and final causes of artifacts, like desks, computers, and iPods, are imposed from outside the collection of parts by an intelligent agent. On the other hand, the formal and final causes of natural objects are intrinsic to those objects. This is why, as Aristotle points out, if you own a bed made out of wood and then plant a piece of the bed in the ground, "it would not be a bed that would come up,

49. Brad S. Gregory, *Science v. Religion?: The Insights and Oversights of the "New Atheists,"* LOGOS: A JOURNAL OF CATHOLIC THOUGHT AND CULTURE, Fall 2009, at 17, 41

50. *Id.*

51. *Id.*

but wood.”⁵² This “shows that the arrangement in accordance with the rules of the art is merely an incidental attribute, whereas the real nature is the other, which, further, persists continuously through the process of making.”⁵³ In other words, the form and finality of the bed is imposed from without (an “arrangement in accordance with the rules of art”) while the form and finality of the wood is intrinsic to the nature of the tree from which it was taken (“the real nature” that “persists continuously through the process of making”). In the words of Etienne Gilson:

The artist is external to his work; the work of art is consequently external to the art which produces it. The end of living nature is, on the contrary, cosubstantial with it. The embryo *is* the law of its own development. It is already of its nature to be what will be later on an adult capable of reproducing itself.⁵⁴

Consequently, for example, a medical scientist may provide an exhaustive account of the mechanics of respiration without any reference to final and formal causes. But it does not follow that final and formal causes play no part in our rational deliberations about the world. In fact, as I show in *infra* at section III, some critics of ID simply cannot resist helping themselves to those causes in their assessments of ID and its advocates, even though many of these critics believe that Darwinian evolution has forever banished these causes from our study of nature. And there is a reason for this: formal and final causes are so much the woof and warp of our lives that we, like the water-skeptic fish submerged in H₂O, are blissfully unaware of the role they play in our ontological and normative pronouncements. As Stephen M. Barr, a physicist at the University of Delaware (and a critic of ID), puts it:

Contrary to what is often claimed, even by some scientists, modern science has not eliminated final and formal causes. It uses them all the time, even if unaware that it is doing so. For example, a liver and a muscle are made up of the same material constituents—hydrogen, carbon, oxygen, and so on—acting on each other by the same basic forces. It is precisely their *forms*, their organic structures, that differ and enable them to play different roles in the body.

The same is true in physics. The very same carbon atoms can form a diamond (transparent, hard, and electrically insulating) or a piece of graphite (opaque, soft, and electrically conducting). What explains their different properties is the difference in *form*, in intelligible structure. Indeed, as one goes deeper into fundamental phys-

52. Aristotle, *Physics* (trans. R. P. Hardie and R. K. Gaye), bk. II, available at <http://classics.mit.edu/Aristotle/physics.2.ii.html>.

53. *Id.*

54. GILSON, *supra* note 3, at 125.

ics, one finds that matter itself seems almost to dissolve into the pure forms of advanced mathematics.

Some people think that the Darwinian mechanism eliminates final causes in biology. It doesn't; the finality comes in but in a different way. Why does natural selection favor this mutation but not that one? Because this one makes the eye see better in some way, which serves the *purpose* of helping the creature find food or mates or avoid predators, which in turn serves the *purpose* of helping the animal to live and reproduce. Why do species that take up residence in caves gradually lose the ability to see? Because seeing serves no *purpose* for them, and so mutations that harm the faculty of sight are not selected against. (Even a Dawkins would not deny purpose in this sense; he would deny only that these purposes were in the mind of God.) Darwinian explanations can account for very little indeed without bringing intrinsic finality into the explanation.⁵⁵

So, the problem with Darwinism in relation to belief in God is *not* the Darwinians claim that natural processes, including scientific laws, are sufficient to account for the variety of life forms that now populate the world. After all, for the Thomist, Darwinian mechanisms and algorithms, as well as scientific laws and other natural processes, no more count against the existence and necessity of God (or even final or formal causality) than does the account of my conception by the natural processes of human reproduction count against the claim that God is Creator of the universe.⁵⁶ Rather, the problem, in the words of Sr. Marie Damien Savino, FSE (an environmental engineer at the University of St. Thomas in Houston), "is when scientists presume that the material dimension is all there is, and then extend their scientific presumptions to a metaphysical stance, that is, atheism. Without an acknowledgement of formal and final causes, this is an easy leap to make."⁵⁷

As I have already noted, for ID advocates Behe and Dembski no design inference about nature is warranted short of achieving that threshold of irreducible or specified complexity. But that means that the person who believes he has good grounds for final and formal causes—while rejecting Behe's and Dembski's criteria—has no warrant for believing that the final

55. Stephen Barr, Letter to the Editor, *Defining Darwinisms*, 179 FIRST THINGS 3-4 (2008). See also Sr. Damien Marie Savino, FSE, *Atheistic Science: The Only Option?*, 12.4 LOGOS: A JOURNAL OF CATHOLIC THOUGHT AND CULTURE, 56 (2009).

56. St. Thomas writes:

[T]he same effect is not attributed to a natural cause and to divine power in such a way that it is partly done by God, and partly by the natural agent; rather, it is wholly done by both, according to a different way, just as the same effect is wholly attributed to the instrument and also wholly to the principal agent.

Summa contra Gentiles III, 70.8 (trans. Vernon J. Bourke) available at <http://www.op-stjoseph.org/Students/study/thomas/ContraGentiles3a.htm>.

57. Savino, *supra* note 55, at 60.

and formal causes he claims to “see” in living organisms. In other words, Behe and Dembski are implicitly accepting the assumption of the materialists—the opponents of final and formal causes—that God’s role in nature may only be exhibited in properly arranged bits of matter so as to signify an agent cause of the arrangement.⁵⁸ But this means that design in nature is more like Aristotle’s bed than the tree from which the bed was made.⁵⁹

Suppose that in the next few years biologists discover another force in nature, similar to natural selection, that has the power to produce in living organisms organs and systems that appear to be irreducibly or specifically complex. According to the ID advocate, the rational person would have to abandon the idea that these organs and systems are intelligently designed, since his criterion would no longer be a reliable detector of “design.” Consequently, the rational person would have to conclude that these organs and systems are probably the product of necessity and/or chance (to employ Dembski’s categories). TD, on the other hand, is not threatened by such discoveries, since the TD advocate actually expects to find such laws in nature, since she believes that God created *ex nihilo* a universe teeming with ends or purposes that depend on laws and principles that cry out for explanation. By rejecting the mechanistic assumptions of both the Darwinian ma-

58. In Dembski’s narrative of the history of the design argument, he pretty much concedes this. See DEMBSKI, DESIGN REVOLUTION, *supra* note 39, at 66. He states that “with the rise of modern science in the seventeenth century, design arguments took a mechanical turn. The mechanical philosophy that was prevalent at the birth of modern science viewed the world as an assemblage of material particles interacting by mechanical forces. Within this view, design was construed as externally imposed on preexisting on inert matter.” He goes on to show how this view made possible the natural theology of William Paley (1743–1805), author of the famous Watchmaker Argument. *Id.* at 67. However, writes Dembski, Darwin, with the publication of *Origin of Species*, “delivered the design argument its biggest blow,” though that did not spell the end of design arguments. *Id.* at 68. Instead of “finding specific instances of design within the universe,” design arguments focused “on determining whether and in what way the universe as a whole was designed.” *Id.* at 69. But, fortunately, all was not lost. According to Dembski, “[d]esign theorists see advances in the biological and information sciences as *putting design back in the saddle* and enabling it to out-explain Darwinism, thus making design rather than natural selection current the best explanation of biological complexity.” *Id.* at 288.

59. I am not suggesting that TD should, like ID, claim it is a “science.” Rather, TD, like Dawkins’ atheistic materialism, is a philosophical point of view. See GILSON *supra* note 3, at 15–16, 133:

[F]inalists [like TD advocates]... are constrained by the evidence of facts which in the tradition and through the example of Aristotle they desire to make intelligible. As far as I know, they do not claim anymore that “scientific” evidence is on their side; the scientific description of ontogenesis and phylogenesis remains identically what it is without the need of going back to the first, transscientific principles of mechanism or finalism. Natural science neither destroys final causality nor establishes it. These two principles belong to the philosophy of the science of nature, to that which we have called its “wisdom.” What scientists, as scientists, can do to help clarify the problem of natural teleology is not to busy themselves with it. They are the most qualified of all to keep philosophizing about it, if they so desire; but it is then necessary that they agree to philosophize....Finalist philosophies [like TD] are responsible to themselves; they do not involve themselves with science at all, and science, as such, has no cause to concern itself with them.”

terialists and the ID advocates, TD does not have the burden of waiting with bated breath for the latest scientific argument or discovery in order to remain confident that the universe, or at least a small sliver of it, is designed. It has something better: rigorous philosophical arguments that challenge the philosophical assumptions of both the Darwinian materialists and the ID advocates who unconsciously (though sometimes purposely) offer their assumptions as undisputed premises under the guise of "science."⁶⁰

It would be one thing if the ID advocates were only offering their point of view as a mere hypothesis subjected to the usual give and take in scientific and philosophical discourse. (In fact, my earlier work on ID assumed as much).⁶¹ But that in fact is not the case. It has over the years morphed into a movement that treats the soundness of its arguments as virtually essential to sustaining the rationality of theism itself. Meyer, for example, suggests that before the 20th century's advances in biochemistry and microbiology, immaterialism and teleology were down for the count.⁶² But now ID stands ready, Meyer contends, to triumphantly procure these ad-

60. Because it falls outside the scope of this article, I cannot offer these philosophical arguments here. So, let me recommend the following works, some of which are more accessible to a general audience than others: William E. Carroll, *Creation, Evolution, and Thomas Aquinas*, 171 *Revue des Questions Scientifiques* 319-347 (2000); William E. Carroll, *At the Mercy of Chance? Evolution and the Catholic Tradition*, 177 *Revue des Questions Scientifiques* 179-204 (2006); THOMAS CREAN, O. P., *GOD IS NO DELUSION: A REFUTATION OF RICHARD DAWKINS* (2007); EDWARD FESER, *AQUINAS: A BEGINNING'S GUIDE* (2009); EDWARD FESER, *THE LAST SUPERSTITION* (2008); Marie I. George, *On Attempts to Salvage Paley's Argument from Design* (1997) available at <http://maritain.nd.edu/jmc/ti/george.htm>; see also GILSON *supra* note 3; RIC MACHUGA, *IN DEFENSE OF THE SOUL* (2002); and DAVID S. ODERBERG, *REAL ESSENTIALISM* (2007).

61. See *supra* note 5.

62. Meyer *supra* note 18, at 37:

For two millennia, the design argument provided an intellectual foundation for much of Western thought. From classical antiquity through the rise of modern science, leading philosophers, theologians, and scientists—from Plato to Aquinas to Newton—maintained that nature manifests the design of a preexistent mind or intelligence. Moreover, for many Western thinkers, the idea that the physical universe reflected the purpose or design of a preexistent mind—a Creator—served to guarantee humanity's own sense of purpose and meaning. Yet today in nearly every academic discipline from law to literary theory, from behavioral science to biology, a thoroughly materialistic understanding of humanity and its place in the universe has come to dominate. Free will, meaning, purpose, and God have become pejorative terms in the academy. Matter has subsumed mind; cosmos replaced Creator.

The reasons for this intellectual shift are no doubt complex. Yet clearly the demise of the design argument itself has played an important role in the loss of this traditional Western belief. Beginning in the Enlightenment, philosophers such as David Hume raised seemingly powerful objections against the design argument. Hume claimed that classical design arguments depended on a weak and flawed analogy between biological organisms and human artifacts. Yet for most, it was not the arguments of the philosophers that disposed of design, but the theories of scientists, particularly that of Charles Darwin. If the origin of biological organisms could be explained naturalistically, as Darwin claimed, then explanations invoking an intelligent designer were unnecessary and even vacuous. Indeed, as Richard Dawkins has put it, it was "Darwin [who] made it possible to be an intellectually fulfilled atheist."

See also *supra* note 58, where Dembski says something similar.

vances to help restore “some of the intellectual underpinning of traditional Western metaphysics and theistic belief.”⁶³ Who knew?

This embellished sense of ID’s importance in the march of history is not a virtue. It is an unattractive enthusiasm that clouds rather than showcases ID’s important, though modest, publishing successes and the legitimate questions these writings bring to bear on many issues that overlap science, theology, and philosophy.⁶⁴ Combine this lack of academic modesty with the ubiquitous propagation of ID within Evangelical Protestantism and its churches, seminaries, and parachurch groups (and even among some Catholics) as a new and improved way to topple the materialist critics of Christianity,⁶⁵ and you have a recipe for widespread disappointment (and perhaps disillusionment with Christianity) if the ID ship takes on too much water in the sea of philosophical and scientific criticism. For this reason, other non-materialist Christian academics, such as Thomists and some CFT supporters, who would ordinarily find ID’s project intriguing and worth in-

63. Meyer *supra* note 18, at 38.

64. For a similar observation, see Koperski, *supra* note 13, at 442:

What critics [of ID] rightly clamor for, however, is peer-reviewed research in which design has more than a mere heuristic role. To be fair, there are more published papers out there than most people realize. And, as ID proponents argue, there is a strong bias against design-motivated articles getting into academic journals....Editors will not risk giving aid and comfort to the enemy. In my view, the ID community is itself partly to blame for this. Some think of ID primarily as a weapon in the culture wars. Anti-design bias in the academy is part of the backlash. Had ID consistently emphasized research over public exposure, the atmosphere of the debate would be different today. Instead, Phillip Johnson and others believed that the underlying ideas were so compelling that, once they were disseminated, ID thought would sweep across the landscape. A 2001 front-page story in *The New York Times*...was cause for much celebration not because it was pro-ID but because it helped place the debate in the public eye. This is proving to be a failed strategy.

(internal citations omitted). As for the peer-reviewed works mentioned by Koperski, he references a Discovery Institute list available at <http://www.discovery.org/a/2640>. Koperski is right that these peer-reviewed works exist.

65. Take, for example, comments from a press release for an ID conference October 30–31, 2009) sponsored by Shepherd Project Ministries in Colorado:

The conference will explore the cultural impact of Darwinism and the ground-breaking new evidence for Intelligent Design that is changing the shape of this crucial conversation today.

With presentations by some of the world’s foremost Intelligent Design experts, this conference will equip Christians to understand the key issues and be able to speak effectively into a culture that is foundering in the sea of meaninglessness that is Darwin’s most lasting legacy.

Available at <http://www.shepherdproject.com/idconf/press/pressreleasechristian.pdf>. See also the descriptions of similar conferences held at Southwestern Baptist Theological Seminary, October 23–24, 2009, available at <http://www.discovery.org/e/901>; see also Westminster Theological Seminary in Philadelphia, March 12–13, 2010, available at <http://www.discovery.org/e/901>. I am, of course, not suggesting that there is anything wrong with having conferences in which theology and science are integrated and their interaction critically assessed. And, to be sure, any such conference should give ID a fair hearing and explain how it interacts with theology and the life of the mind. However, what I am suggesting is that it is intellectually irresponsible to offer Christians, especially prospective clergy, ID as the only legitimate non-religious alternative to Darwinian materialism that a Christian may authentically embrace, as these conferences seem to do.

teracting with (as I do), are hesitant to cooperate with a movement that implies to churchgoers and popular audiences that the very foundations of theism and Western civilization rise or fall on the soundness of Behe's and Dembski's inferences.⁶⁶

III. KITZMILLER V. DOVER AND THE UBIQUITY OF DESIGN

In November 2004 the board of the Dover Area School District of Pennsylvania formulated and promulgated a policy that required Dover High School ninth grade biology teachers to read in class a series of brief paragraphs:

The Pennsylvania Academic Standards require students to learn about Darwin's Theory of Evolution and eventually to take a standardized test of which evolution is a part.

Because Darwin's Theory is a theory, it continues to be tested as new evidence is discovered. The Theory is not a fact. Gaps in the Theory exist for which there is no evidence. A theory is defined as a well-tested explanation that unifies a broad range of observations.

Intelligent Design is an explanation of the origin of life that differs from Darwin's view. The reference book, *Of Pandas and People*, is available for students who might be interested in gaining an understanding of what Intelligent Design actually involves.

With respect to any theory, students are encouraged to keep an open mind. The school leaves the discussion of the Origins of Life to individual students and their families. As a Standards-driven district, class instruction focuses upon preparing students to achieve proficiency on Standards-based assessments.⁶⁷

66. After all, it is not as if ID is some kind of scientific and/or philosophical slam dunk about which no reasonable thinkers have not raised legitimate questions. In addition to the Thomist and CFD criticisms and critics already mentioned in the text and in the notes, there are scores of many other criticisms and critics. The latter include thinkers who exhibit virtually no visceral hostility to the ID Movement as well as those who are unsympathetic to the sort of Darwinian materialism defended by Dawkins and the other New Atheists. See, e.g., STANLEY L. JAKI, INTELLIGENT DESIGN? (2005); LEON R. KASS, TOWARD A MORE NATURAL SCIENCE: BIOLOGY AND HUMAN AFFAIRS 249-75 (1985); LEON R. KASS, LIFE, LIBERTY AND THE DEFENSE OF DIGNITY: THE CHALLENGE FOR BIOETHICS 277-98 (2002); SIMON CONWAY MORRIS, LIFE'S SOLUTION: INEVITABLE HUMANS IN A LONELY UNIVERSITY (2003).

67. *Kitzmiller v. Dover Area Sch. Dist.* 400 F. Supp. 2d 707, 708-709 (M.D. Pa. 2005). There are at least three reasons why I believe that this disclaimer is poorly worded and pedagogically weak. (1) It implies that Darwinism is a theory about "the origin of life." But that is at best misleading if it is referring to biological evolution, which concerns how living things that already exist change over time. (2) Its claim that evolution is "not a fact" is inconsistent with the school board's call for it students to "keep an open mind." The board cannot say that evolution is not a fact and at the same time suggest to students that they should have an open mind on the subject, since having an open mind requires that they critically consider the possibility that evolution is a

The policy never took effect.⁶⁸ Soon after the school board's action, several parents of Dover school children, assisted by attorneys from the American Civil Liberties Union of Pennsylvania, brought suit against the school district.⁶⁹ They argued that the policy violated the establishment clause of the United States Constitution's First Amendment.⁷⁰ Judge Jones agreed, and ruled in their favor.⁷¹

Judge Jones' opinion involves several lines of argument.⁷² However, for the purposes of this article I will only focus on two. The first is his application of the endorsement test, a standard employed by the courts to determine whether a policy or law violates the First Amendment Establishment Clause.⁷³ The second line of argument concerns claims and assumptions of philosophical anthropology⁷⁴ that Judge Jones asserts and implies in his assessment of the ID-policy, the citizens and school board members that supported it, and the end or purpose of science education.

A. THE ENDORSEMENT TEST, OR THE "GOD'S EYE POINT OF VIEW."

In his overturning of the Dover ID-policy, Judge Jones employs what has come to be known as "the endorsement test." First proposed by Justice Sandra Day O'Connor in *Lynch v. Donnelly*, the test stipulates that if a government action creates a *perception* that it is either endorsing or disfavoring a religion, the action is unconstitutional.⁷⁵ The concern of this test is wheth-

fact. (3) The board seems to believe that if scientists offer a "theory," they are offering something that they are unsure about, as if what they are proposing is a "hunch." Thus, the board seems to be saying that because scientists still call evolution "a theory," they believe that they don't consider it a fact. But the board is wrong. For the term "theory" is often applied in science and mathematics to what is solidly established, e.g., "the theory of elasticity," "the BCS theory of superconductivity," "the theory of functions of a real variable," "the theory of relativity," etc. (I owe this last observation to Stephen Barr, who read an earlier version of this article)

68. *Id.* at 709 (plaintiffs sought injunctive and declaratory relief).

69. *Id.* at 708–10.

70. *Id.* at 709.

71. *Id.*

72. Judge Jones' opinion resulted in a number of works assessing it. See, e.g., David K. DeWolf, John G. West & Casey Luskin, *Intelligent Design Will Survive* *Kitzmiller v. Dover*, 68 MONT. L. REV. 7 (2007). For a rebuttal to this article and a defense of *Kitzmiller*, see Peter Irons, *Disaster in Dover: The Trials (and Tribulations) of Intelligent Design*, 68 MONT. L. REV. 59 (2007). For a reply to Irons, see David K. DeWolf, John G. West & Casey Luskin, *Rebuttal to Irons*, 68 MONT. L. REV. 89 (2007). See also, Monton, *supra* note 40; Koperski, *supra* note 13, at 433–449; and Jay D. Wexler, *Kitzmiller and the "Is It Science?" Question*, 5 FIRST AMEND. L. REV. 90 (2006).

73. *Kitzmiller*, 400 F. Supp. 2d at 709.

74. "Philosophical anthropology" is an area of study within the discipline of philosophy that concerns a variety of issues about the nature of human beings, such as whether the human being has an immaterial soul, has a proper end or purpose, is a mind-body composite, and maintains absolute identity over time while undergoing change.

75. *Lynch v. Donnelly*, 465 U.S. 668, 687–94 (1984)(O'Connor, J., concurring suggesting an "endorsement test").

er the disputed activity suggests “a message to nonadherents that they are outsiders, not full members of the political community, and an accompanying message to adherents that they are insiders, favored members of the political community.”⁷⁶ However, who counts as a “nonadherent” seems to have changed. In *Lynch* Justice O’Connor suggests that nonadherents are “ordinary citizens,” actual flesh and blood human beings, who are the recipients of the government’s message. In a subsequent case, *Wallace v. Jaffree*, she proposes a type of “reasonable person standard,” suggesting that the nonadherent is an objective observer fully informed of all the facts: “[t]he relevant issue is whether an objective observer, acquainted with the text, legislative history, and implementation of the statute, would perceive it as a state endorsement of prayer in public schools.”⁷⁷ Thus, a law may pass or fail the endorsement test depending on who (or what) counts as a nonadherent.

After offering a survey of the history of the endorsement test and how it developed over time, Judge Jones moves on to “ascertain whether the ID Policy ‘in fact conveys a message of endorsement or disapproval’ of religion, with the reasonable, objective observer being the hypothetical construct to consider this issue.”⁷⁸ Accepting Justice O’Connor’s more abstract definition of a reasonable, objective observer (or ROO) from her *Wallace* opinion,⁷⁹ Judge Jones defines the ROO for the purposes of the Dover policy as one “who knows the policy’s language, origins, and legislative history, as well as the history of the community and the broader social and historical context in which the policy arose.”⁸⁰ Judge Jones then offers an extensive presentation of what the ROO would have to know in order to conclude that the Dover policy violates the endorsement test.⁸¹ Although such an exercise in juridical imagination may be worth exploring, there is a deeper, more philosophical, question to be investigated here: what precisely is a rational, objective observer, and why is it apparently so useful to jurists?

The ROO is a sort of person who, if he really existed, would exhibit ideal epistemological excellence. He would not be limited by biases, prejudices, or ignorance. His reasoning powers would not only be functioning properly, but the environment in which he would issue his judgment would

76. *Id.* O’Connor’s endorsement test and versions of it defended by legal scholars have been criticized as well. See, e.g., Steven D. Smith, *Symbols, Perceptions, and Doctrinal Illusions: Establishment Neutrality and the “No Endorsement” Test*, MICH. L. REV. 86 (1987); Derek H. Davis, *Equal Treatment: A Christian Separationist Perspective*, in EQUAL TREATMENT IN A PLURALISTIC SOCIETY, 136–157 (Stephen V. Monsma & J. Christopher Soper eds., 1998).

77. *Wallace v. Jaffree*, 472 U.S. 38, 67, 76 (1985) (O’Connor, J., concurring).

78. *Kitzmiller*, 400 F. Supp. 2d at 707, 715 (quoting *Lynch* 465 U.S. at 690, *supra* note 75).

79. *Wallace*, 472 U.S. at 76, *supra* note 77.

80. *Kitzmiller*, 400 F. Supp. 2d at 715 (internal citations omitted).

81. *Id.* at 716–46.

contribute to, rather than, interfere with this judgment. And it would be a judgment that could never be wrong, for not only would he not have any internal or external impediments or limitations, he would have inerrant knowledge of all the relevant facts—e.g., legislative history, policy’s cultural context—required to make a just ruling. The ROO, of course, is a hypothetical construct and not a real person. But its explanatory power depends on the judge taking the finite, ordinary, and limited abilities, powers, and knowledge that human beings possess, and suggesting to his readers a hypothetical person who possesses perfect versions of these attributes. These perfections, apparently, are not the deliverances of direct empirical observation, since there is no person on earth who possesses or has possessed these attributes at their highest levels.⁸² Oddly enough, this exercise of predicating perfected attributes of the ROO is similar to how St. Thomas suggests Christians ought to predicate the attributes of God.⁸³ And even more strangely, the ROO would seemingly possess what the philosopher Hilary Putnam calls a “God’s Eye point of view.”⁸⁴ Thus, in order to expunge the divine, or at least allusions to it, from the public schools, Judge Jones requires the divine’s assistance, or at least the assistance of a hypothetical deity.

82. Of course, Christians believe that Jesus of Nazareth did in fact exemplify the perfection of human attributes. So, if you, as I do, accept this view about Jesus, then simply include that exception in your reading.

83. St. Thomas writes:

Inasmuch as every perfection of the creature may be found in God, although in another and a more excellent way, it follows that whatever names absolutely denote perfection without defect, are predicated of God and of other beings, as for instance, ‘goodness,’ ‘wisdom,’ ‘being,’ and the like. But whatever names denote such perfection with the addition of a mode proper to creatures, cannot be predicated of God except by way of similitude and metaphor, whereby the attributes of one thing are wont to be adapted to another, as when a man is called a ‘block’ for the denseness of his understanding. Of this sort are all names imposed to denote the species of a created thing, as ‘man,’ and ‘stone’: for to every species is due its own proper mode of perfection and being. In like manner also whatever names denote properties that are caused in things by their proper specific principles, cannot be predicated of God otherwise than metaphorically. But the names that express such perfections with that mode of supereminent excellence in which they appertain to God, are predicated of God alone, as for instance, ‘Sovereign Good,’ ‘First Being,’ and the like. I say that some of the aforesaid names imply perfection without defect, if we consider that which the name was imposed to signify.

Thomas Aquinas, *Summa Contra Gentiles*, I:30 (Joseph Rickaby, S.J. trans., 1905), available at http://www2.nd.edu/Departments/Maritain/etext/gc1_30.htm.

84. HILARY PUTNAM, REASON, TRUTH, AND HISTORY 49 (1981). In his discussion on two philosophical perspectives on the question of what we can know about the world and of what that world actually consists, Philosopher Hilary Putnam writes:

One of these perspectives is the perspective of metaphysical realism. On this perspective, the world consists of some fixed totality of mind-independent objects. There is exactly one true and complete description of “the way the world is.” Truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things. I shall call this perspective the *externalist* perspective, because its favorite point of view is a God’s Eye point of view.

B. THE PURPOSE OR END OF EDUCATION

A portion of Judge Jones' opinion concerns the purpose or end of education and how the Dover school board's policy is inconsistent with that end or purpose. But such a criticism—though certainly legitimate—seems to entail an understanding of the human person and mind that presupposes a robust view of the human person's intrinsic purpose that requires final and formal causality (i.e., Thomistic Design). In order to better grasp how Judge Jones commits this philosophical faux pas, it is instructive to see how someone far more adept at critiquing ID, Dawkins, commits the same mistake.

*1. Richard Dawkins: Peeping Thomist?*⁸⁵

In his book *The God Delusion*, Dawkins laments the career path of Harvard-trained paleontologist Kurt Wise.⁸⁶ At the time Dawkins published his book, Wise was an associate professor of science at Bryan College, a small Protestant Evangelical college in Dayton, Tennessee.⁸⁷ After a brief stint at the Southern Baptist Theological Seminary in Louisville, Kentucky (2006-2009), Professor Wise took a position at Truett-McConnell College in Cleveland, Georgia, where he serves as professor of natural sciences and director of the college's Creation Research Center.⁸⁸

Dawkins writes that Wise was at one time a promising young scholar who had earned an undergraduate degree in geology from the University of Chicago as well as advanced degrees in geology and paleontology from Harvard University, where he studied under the highly acclaimed paleontologist Stephen Jay Gould.⁸⁹ Wise, surprisingly, is a Young Earth creationist, which means that he embraces a literal interpretation of the first chapters of Genesis, and maintains that the Earth is less than 10,000 years old. It is not a position I hold, and for that reason I am sympathetic to Dawkins' bewilderment of why Wise has embraced what appears to many Christians as a false choice between one controversial interpretation of Scripture (Young Earth creationism) and abandoning Christianity altogether.

85. Portions of the following section (III.B.1) are adapted from portions of Francis J. Beckwith, *The Courts, Natural Rights, and Religious Claims as Knowledge*, 49.2 SANTA CLARA L. REV. 429-45 (2009). The term "Peeping Thomist" comes from the subtitle of the book RALPH MCINERNEY, A FIRST GLANCE AT ST. THOMAS AQUINAS: A HANDBOOK FOR PEEPING THOMISTS (1990).

86. DAWKINS, DELUSION, *supra* note 14, at 284-86.

87. Dawkins notes that, coincidentally, the school is named after William Jennings Bryan, three-time Democratic presidential candidate and prosecutor in the 1925 Scopes "Monkey Trial." *Id.* at 284.

88. See "Creation Research Center Established at TMC," *available at* http://www.truett.edu/index.php?option=com_content&view=article&id=553:creation-research-center-established-at-tmc&catid=50:front-page-news.

89. DAWKINS, DELUSION, *supra* note 14, at 284.

In any event, at one point in his career Wise began to understand that his reading of Scripture was inconsistent with the dominant scientific understanding of the age of the Earth and the cosmos. Instead of abandoning what many of us believe is a false choice, he continued to embrace it and had a crisis of faith. Wise writes:

Either the Scripture was true and evolution was wrong or evolution was true and I must toss out the Bible It was there that night that I accepted the Word of God and rejected all that would ever counter it, including evolution. With that, in great sorrow, I tossed into the fire all my dreams and hopes in science.⁹⁰

So, Wise abandoned the possibility of securing a professorship at a prestigious research university or institute.

Dawkins is disturbed by Wise's theological judgment and its consequence on his obvious promise as a scholar, researcher, and teacher. Dawkins writes:

I find that terribly sad [T]he Kurt Wise story is just plain pathetic—pathetic and contemptible. The wound, to his career and his life's happiness, was self-inflicted, so unnecessary, so easy to escape I am hostile to religion because of what it did to Kurt Wise. And if it did that to a Harvard educated geologist, just think what it can do to others less gifted and less well armed.⁹¹

It goes without saying that some religious believers, including many devout Christians, may be just as troubled as Dawkins. Thus, one does not have to be an atheist to suggest that Professor Wise's faith may have been better served by embracing an alternative understanding of theology and science that did not require that he either reject the deliverances of modern science or the authority of Scripture.

However, given Dawkins' atheism, there is something odd about his lament, for it seems to entail that Dawkins accepts something about the nature of human beings that his atheism seems to reject. Dawkins harshly criticizes Wise for embracing a religious belief that results in Wise not treating himself and his talents, intelligence, and abilities in a way appropriate for their full flourishing. That is, given the opportunity to hone and nurture certain gifts—e.g., intellectual skill—no one, including Wise, should waste them as a result of accepting a false belief. The person who violates, or helps violate, this norm, according to Dawkins, should be condemned and we should all bemoan this tragic moral neglect on the part of our fellow(s). But the issuing of that judgment on Wise by Dawkins makes sense only in light of Wise's particular talents and the *sort of being* Wise is by nature, a

90. *Id.* at 285. According to Dawkins, this quotation from Wise is from an essay he wrote in *IN SIX DAYS: WHY 50 BELIEVE IN CREATION* (ed. J. E. Ashton, 1999).

91. DAWKINS, *DELUSION*, *supra* note 14, at 285–86.

being that Dawkins seems to believe possesses certain intrinsic capacities and purposes that if prematurely disrupted results in an injustice. So, the human being who wastes his talents is one who does not respect his natural gifts or the basic capacities whose maturation and proper employment make possible the flourishing of many goods. That is, the notion of “proper function,”⁹² coupled with the observation that certain perfections grounded in basic capacities have been impermissibly obstructed from maturing, is assumed in the very judgment Dawkins makes about Wise and the way by which Wise should treat himself. That is, Dawkins’ judgment of Wise depends on Dawkins knowing a human being’s final and formal causes.

But Dawkins, in fact, does not actually believe that living beings, including human beings, have final and formal causes. Dawkins denies that human beings have intrinsic purposes or are designed so that one may conclude that violating one’s proper function amounts to a violation of one’s duty to oneself. Dawkins has maintained for decades that the natural world only *appears to be* designed: “Darwin and his successors have shown how living creatures, with their spectacular statistical improbability and appearance of design, have evolved by slow, gradual degrees from simple beginnings. We can now safely say that the illusion of design in living creatures is just that—an illusion.”⁹³ He writes elsewhere: “[t]he universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil, and no good, nothing but blind pitiless indifference.”⁹⁴ Thus, if we are to take Dawkins seriously, his view of design means that his lament for Wise is misguided! For Dawkins is lamenting what only *appears to be* Wise’s dereliction of his duty to nurture and employ his gifts in ways that result in his happiness and an acquisition of knowledge that contributes to his own good as well as the common good. Because there are no formal or final causes, and thus no intrinsic purposes, and thus no natural duties that we are obligated to obey, the intuitions that inform Dawkins’ judgment of Wise are illusory since they depend on the design he explicitly rejects.⁹⁵ But that is precisely one of the grounds by which Dawkins suggests that theists are irrational and ought to abandon their belief in God.⁹⁶ So, if the theist is irrational for believing in God based on what turns out to be pseudo-design, Dawkins is irrational in his judgment of Wise and other creationists he targets for reprimand and correction. For Dawkins’ judgment rests on a premise that he has uncompromisingly maintained throughout his career that only *appears to be* true.

92. See ALVIN PLANTINGA, WARRANT AND PROPER FUNCTION (1993).

93. DAWKINS, DELUSION, *supra* note 14, at 158.

94. RICHARD DAWKINS, RIVER OUT OF EDEN: A DARWINIAN VIEW OF LIFE 133 (1995).

95. One, of course, may reject Wise’s creationism and Dawkins’ atheism and embrace a point of view that offers a theistic-friendly account of design in the universe. As we have already seen, the options include ID, CFT, and TD.

96. See generally DAWKINS, DELUSION, *supra* note 14, at chapter 3.

In an earlier work, *The Blind Watchmaker*, Dawkins claimed that Darwin had “made it possible to be an intellectually fulfilled atheist.”⁹⁷ But given his embracing of pseudo-design as the ontological truth of a human being’s final and formal causes, that there are no intrinsic ends or purposes in nature including the intellectual powers of human beings, why does Dawkins suppose that it is good for one to be “intellectually fulfilled”? If, of course, the mind, including its intellectual powers, has a proper function intrinsic to its nature, then one would be within one’s intellectual rights in issuing a condemnation to anyone who violated that proper function. But this would also mean that a person has a responsibility to care for her mental life, and it would be a vice inconsistent with one’s good to intentionally neglect such care. Thus, for Dawkins to assess the morality of his or another’s acts, including acts that lead or do not lead to intellectual fulfillment, he must not only know how the parts of a human being function and for what end (for example, that the brain helps facilitate the acquisition of knowledge for the good of the whole person), he must also account for cases in which proper function is employed for the wrong end. So without final and formal causality, Dawkins has no rational basis by which to declare himself intellectually fulfilled or Dr. Wise intellectually impoverished. Thus, we may ask rhetorically a question once asked straightforwardly by Gilson: “[f]inal causes have disappeared from science but have they disappeared from the mind of scientists?”⁹⁸

2. Education: What’s the Point?

No one expects a federal district court judge to be conversant with the intricacies of issues that overlap a variety of subdisciplines in philosophy—including metaphysics and ethics. But no one expected, prior to its publication, that *Kitzmiller*’s Judge Jones would suggest that his opinion would be the final word on the contentious philosophical and scientific issues that came before his court.⁹⁹ Because it is rare that one finds such Olympian aspirations in the opinion of a federal district court judge (I will pass on saying anything about appellate judges), I want to focus on those issues that

97. DAWKINS, BLIND, *supra* note 15, at 6.

98. GILSON *supra* note 3, at 127.

99. *Kitzmiller*, 400 F. Supp. 2d at 734–35. Judge Jones writes:

[W]e find it incumbent upon the Court to further address an additional issue raised by Plaintiffs, which is whether ID is science. To be sure, our answer to this question can likely be predicted based upon the foregoing analysis. While answering this question compels us to revisit evidence that is entirely complex, if not obtuse, after a six week trial that spanned twenty-one days and included countless hours of detailed expert witness presentations, the Court is confident that no other tribunal in the United States is in a better position than are we to traipse into this controversial area. Finally, we will offer our conclusion on whether ID is science not just because it is essential to our holding that an Establishment Clause violation has occurred in this case, but also in the hope that it may prevent the obvious waste of judicial and other resources which would be occasioned by a subsequent trial involving the precise question which is before us.

Judge Jones, like Dawkins, never seemed to entertain. Consider just these scathing comments about the Dover School Board:

Although Defendants attempt to persuade this Court that each Board member who voted for the biology curriculum change did so for the secular purpose[sic] of improving science education and to exercise critical thinking skills, their contentions are simply irreconcilable with the record evidence. Their asserted purposes are a sham, and they are accordingly unavailing, for the reasons that follow.

We initially note that the Supreme Court has instructed that while courts are “normally deferential to a State’s articulation of a secular purpose, it is required that the statement of such purpose be sincere and not a sham.” Edwards, 482 U.S. at 586-87. Although as noted Defendants have consistently asserted that the ID Policy was enacted for the secular purposes of improving science education and encouraging students to exercise critical thinking skills, the Board took none of the steps that school officials would take if these stated goals had truly been their objective. The Board consulted no scientific materials. The Board contacted no scientists or scientific organizations. The Board failed to consider the views of the District’s science teachers. The Board relied solely on legal advice from two organizations with demonstrably religious, cultural, and legal missions, the Discovery Institute and the TMLC [Thomas More Legal Center]. Moreover, Defendants’ asserted secular purpose of improving science education is belied by the fact that most if not all of the Board members who voted in favor of the biology curriculum change conceded that they still do not know, nor have they ever known, precisely what ID is. To assert a secular purpose against this backdrop is ludicrous.

Finally, although Defendants have unceasingly attempted in vain to distance themselves from their own actions and statements, which culminated in repetitious, untruthful testimony, such a strategy constitutes additional strong evidence of improper purpose under the first prong of the *Lemon* test.¹⁰⁰

There are at least two claims in these paragraphs that are worth assessing for the purposes of this article. First, Judge Jones correctly assumes that it would have been good if the school board had in fact passed a policy with “the secular purposes of improving science education and encouraging students to exercise critical thinking skills.”¹⁰¹ Setting aside the fact that the judge brings this to our attention because it involves the constitutional re-

100. *Kitzmiller*, 400 F. Supp. 2d at 762–63.

101. *Id.*

quirement that the policy have a “secular purpose,”¹⁰² one may ask why improving science education and encouraging critical thinking are in fact good things for any society, including a secular one, to support as a matter of educational policy. Although virtually everyone believes these are noble ideals, the more interesting question is what sort of philosophical anthropology best grounds them. If, for example, one were to embrace Dawkins’ point of view, that human beings have no final or formal causes, it would be difficult to know precisely what makes scientific knowledge and critical thinking skills goods that human beings ought to acquire. (“Because we desire them” is not a “reason,” since there are some people who desire ignorance and we know that they ought not to desire it.) On the other hand, for the Thomist, scientific knowledge and critical thinking skills are goods because they contribute to a human being’s flourishing. It is because human beings have a certain nature (i.e., rational animal) that entails certain normative ends (e.g., the purpose to acquire knowledge both for its own sake and for the sake of other goods) that a human being ought to, in the course of his intellectual formation, obtain certain types of knowledge including scientific knowledge and critical thinking skills. That is, without the resources of final and formal causes (i.e., Thomistic Design), Judge Jones, like Dawkins, cannot ground his correct observations about the scope and meaning of a human being’s obligations to his own ends and why these ends should ground the policies of the secular state.

Second, Judge Jones is surely correct that it was wrong that most if not all of the school board members had voted on the ID policy without knowing ID’s true nature. Voting out of ignorance is indeed appalling. But why is ignorance not an appropriate ground for human action, unless knowledge is a necessary condition for human action? But if so, then there is a normative end to a human being’s active power for self-movement to engage in free acts initiated and/or accompanied by thought and reflection. That is, a human being has the power to act consistently or inconsistently with her own good, a good that we can only know if we know the sort of being she is. So, again, final and formal causes come into play.

Moreover, for the Darwinian materialist, such as Dawkins, there are only efficient causes in nature. But the justification of an act—that is, the

102. Judge Jones refers to the famous “*Lemon Test*,” a standard that the U. S. Supreme Court has employed in a variety of cases to assess the constitutionality of statutes that are claimed to be violations of the Establishment Clause:

Every analysis in this area [church/state cases] must begin with consideration of the cumulative criteria developed by the Court over many years. Three such tests may be gleaned from our cases. First, the statute must have a secular legislative purpose; second, its principle or primary effect must be one that neither advances nor inhibits religion, *Board of Education v. Allen*, 392 U.S. 236, 243 (1968); finally, the statute must not foster “an excessive government entanglement with religion.” *Walz v. Tax Comm’r of the City of New York*, 397 U.S. 664, 668 (1970).

Lemon v. Kurtzman, 403 U.S. 602, 612–13 (1971).

reason why one may act—is not an efficient cause. If it were, then once a person became aware of the reason to act, she would automatically act, just as a billiard ball would automatically move once struck by another billiard ball moving at the correct velocity. As the comedian Steven Wright once joked: “I once got pulled over and the cop said, ‘Why were you going so fast?’ I said, ‘Why? Because I had my foot to the floor. Sends more gas through the carburetor. Makes the engine go faster. The whole car just takes off like that.’”¹⁰³ This is funny because Wright mentions an efficient cause when we all know that the cop requested to know the purpose, the final cause, of his speeding.¹⁰⁴

Consequently, reasons are not efficient material causes, like the moving billiard ball or the heavy foot in the examples above. Reasons are immaterial ideas that are believed and/or offered by agents in order to support a conclusion (and in this case, a conclusion that serves as a justification to act). They have a logical, not a material or spatial, relation to each other. Reasons are not *in* the billiard ball or *in* the foot, they are in the mind of the agent that acts, and they are employed to explain or justify one’s act, as in the movement of the billiard ball (e.g., “Fred is trying to defeat Minnesota Fats in a game of pool”) or in the pressing of the foot to the floor (e.g., “Steve is rushing his bleeding child to the hospital”). And these reasons are clearly not identical to anything material, such as the electrical impulses in the brain. For if they were, their relation to one another would be spatial, such as the spatial relationship between the wine glass on my desk that is to the left of my computer monitor. But the relation between thoughts, such as reasons, is not at all spatial. For when I come to believe that my reasons for acting justify my acting, the relationship between the reasons and the conclusion is logical, not spatial. As J. P. Moreland puts it, “reasons are irreducibly teleological goals/ends for the sake of which agents act.”¹⁰⁵

CONCLUSION

We have learned several things about Darwinism, Creationism, design, and the law. First, Intelligent Design (ID) is not the same as Creationism, and not all forms of design are ID or products of the ID Movement. Second,

103. Quote Geek, available at <http://www.quotegeek.com/index.php?action=viewcategory&categoryid=9>.

104. The final cause in this scenario is like the one imposed on pieces of wood by the bed maker in Aristotle’s example. It is not like the final cause of a living organism, something that is intrinsic to the entity. For the driver, Wright, is imposing his end (whatever that may be) on the automobile so that he may achieve his end. The point of the illustration is not to defend final causes in nature, but to bring to the reader’s attention that Darwinian materialism has a difficult time accounting for something as ordinary and commonplace as offering reasons for one’s actions.

105. J. P. MORELAND, *THE RECALCITRANT IMAGO DEI: HUMAN PERSONS AND THE FAILURE OF NATURALISM* 65 (2009).

the question of ID's status as "science" is a red herring. Third, some forms of design are consistent with Darwinian evolution, including cosmic fine-tuning (CFT) and Thomistic Design (assuming that one does not abandon final and formal causes). Fourth, and ironically, CFT tends to undermine the ID advocates' claim that necessity and chance are non-design causal alternatives to a design inference. Fifth, in some very important ways ID and Darwinian materialism share certain assumptions that the Thomistic Design (TD) advocate maintains may be deleterious to the rationality of theism.¹⁰⁶ Sixth, if you are a Darwinian materialist critic of ID (like Dawkins), your project requires formal and final causes (i.e., Thomistic Design) to establish your own fulfillment as well as to admonish those who have not achieved their potential. And seventh, in order for a judge to declare a pro-ID school board policy unconstitutional, he must employ a "God's eye point of view," a hypothetical equivalent of the omniscient designer of the universe, as well as assume that public school pedagogy requires that we think of both students and public officials as beings who have final and formal causes—which is the TD position.

So, now it's time to answer the question this article is supposed to answer: "What must one believe to be an anti-Intelligent Design advocate?" It's simple: believe in design.¹⁰⁷

106. Based on this fifth point (as well as other reasons), I am not an ID advocate. (And for the record, *I have never been an ID advocate*). Nevertheless, I have maintained and continue to maintain that ID may be taught in public schools without violating the Establishment Clause. See *supra* note 5. But I sincerely hope that no public school teaches it. For I think that ID advances an inadequate philosophy of nature that suggests a philosophical theology that is inconsistent with classical Christian theism. In other words, I reject Intelligent Design because I accept Thomistic Design. Nevertheless, a public school that privileges the Darwinism of the New Atheists should be resisted as well, since it pronounces on metaphysical matters that Darwinism, rightly understood, does not and cannot pronounce.

107. Those who are philosophically astute may think that the title of this article, "How to Be An Anti-Intelligent Design Advocate," is reminiscent of a 1982 paper by Alvin Plantinga, *How to Be an Anti-Realist* 56 PROCEEDINGS AND ADDRESSES OF THE AMERICAN PHILOSOPHICAL ASSOCIATION 47-70 (1982). And they would be right.

I began working on this article in early 2009 while I was serving on the faculty at the University of Notre Dame as the 2008-2009 Mary Ann Remick Senior Visiting Fellow in the Notre Dame Center for Ethics & Culture. This article is part of a larger project about which I was doing research and writing while in South Bend. For this reason, I would like to thank Professor W. David Solomon, Director of the Center for Ethics & Culture, for his generosity and friendship. I would like to also thank two of my Baylor colleagues: my department chair, Professor Michael Beaty, for supporting my application for research leave; and Professor Byron Johnson, Director of Baylor's Institute for the Studies of Religion, which awarded me a grant to supplement my Notre Dame fellowship.