



Chapter 2

Understanding Design Arguments

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Introduction

IN MY EXPERIENCE, Catholics face many challenges when it comes to thinking about evolution and intelligent design. Many of us somewhere along the way had a priest or teacher tell us not to trouble ourselves about this issue; whatever “science” says is fine. In addition, there is even some confusion over the very meaning of the terms *evolution* and *intelligent design*.

In this chapter, I aim to help us think more carefully and critically about these ideas. Without worrying yet about whether design arguments are sound, we must first figure out what these arguments claim — and, just as importantly, what they do not claim. To this end, I will provide some background, attempt to define our terms, discuss the form of such arguments, and consider common Catholic misconceptions. My hope is that we will then be in a better place to evaluate the success of such arguments in the following chapters.

An Ancient Dialectic

For many American Catholics, discussions of evolution and intelligent design dredge up images of the “Scopes Monkey Trial” or Fundamentalist Christians attempting to have literal six-day creationism taught in public schools.¹ While

¹ Creationism begins with the biblical text and attempts to reconcile scientific information with a certain understanding of the biblical narrative. Intelligent design begins with the scientific data and argues that it is far more likely the product of intelligence than unplanned accident. Also, note that the Scopes Trial is actually much more historically complicated than popular mythology suggests; see Edward J. Larson, *A Summer for the Gods: The Scopes Trial and*

most of us Catholics are uncomfortable with the aggressive evolutionary atheism of Richard Dawkins and the New Atheists, we don't feel that we have much of a dog in such fights. Yet we can be too hasty in this regard. The fundamental debate is not of recent vintage. The West has long had two dominant narratives about where our world's astonishing and beautiful creatures come from: accidental events or intelligent foresight. These narratives not only predate Fundamentalist Christianity but Christianity itself. This issue pushes all the way down to fundamental metaphysics: What is the self-existent ultimate reality — impersonal matter or a personal Creator?

As far back as Socrates in the fifth century BC, we see the father of Western philosophy making an explicit design argument. His student Xenophon records Socrates's view that we have been most favored by the supreme deity. We are uniquely arranged in body and mind. All other things appear to be here for our benefit. And nature itself seems consistently arranged in the best or finest way. All of this, Socrates argues, bears witness to divine providence.² Variations on this basic theme appear in his successors Plato and Aristotle and beyond.

The opposing narrative came from the Greek atomists like Democritus, Leucippus, and Epicurus. Humans, they claimed, are intelligent of course. But this intelligence is a late arrival on the scene. Ultimate reality isn't intelligent. What fundamentally exists are atoms and empty space in which the atoms collide. Just as you hear many today saying silly things like, "Love is just a chemical reaction in the brain," so too did the atomists believe that all phenomena really reduce down to the properties of material bodies. For the atomists, highly organized beings like ourselves self-organize by accident. There are an infinite number of worlds. So with an infinite amount of time, every combination of atoms must manifest itself somewhere! Sure, organisms look intelligently designed, but poor accidental designs disappeared while good accidental designs survived.³

There is truly nothing new under the sun. There are differences, to be sure, but the atomist narrative clearly anticipates not only Darwin's theory but multiverse scenarios as well. The fundamental issue, all the way back, is whether

America's Continuing Debate of Science and Religion (Cambridge, MA: Basic Books, 1997).

² Xenophon, *Memorabilia* 1.4 and 4.3.

³ David Sedley, *Creationism and Its Critics in Antiquity* (Berkeley, CA: University of California Press, 2007), 133-166.

the apparently designed features of our world are truly intelligently designed or whether they can be accounted for by lucky accidents with no intelligence involved. As even Richard Dawkins recognizes, “Biology is the study of complicated things that give the appearance of having been designed for a purpose.”⁴ Like the atomists before him, of course, he thinks this design is only apparent and not real.

What Intelligent Design Is

With this classical dialectic in view, intelligent design (ID) proponents typically define *intelligent design* as the view that certain features of the universe and of living things are best explained by an intelligent cause rather than an undirected process. Note that this doesn’t mean that no evolution has occurred, or that natural processes and forces don’t have their place. It is rather the minimal claim that it’s not natural processes and forces all the way down — a claim to which we Catholics are dogmatically committed, believing as we do that all things originate in God.

Design proponents have made arguments for real rather than apparent design at different levels. For instance, they’ve argued that the beginning of the universe requires an intelligent cause (William Lane Craig and James Sinclair),⁵ that the laws of physics are designed (Robin Collins),⁶ that our planet is uniquely designed (Guillermo Gonzalez and Jay W. Richards),⁷ that chemistry as we know it is designed for life (Michael Denton; Benjamin Wiker and Jonathan Witt),⁸

⁴ Richard Dawkins, *The Blind Watchmaker: Why the Evidence of Evolution Reveals a Universe without Design*. (New York: W. W. Norton, 1996), 1.

⁵ William Lane Craig and James D. Sinclair, “The Kalam Cosmological Argument,” in *The Blackwell Companion to Natural Theology*, ed. William Lane Craig and J. P. Moreland (Malden, MA: Blackwell Publishing, 2012), 101–201.

⁶ Robin Collins, “The Teleological Argument: An Exploration of the Fine-Tuning of the Universe,” in *The Blackwell Companion to Natural Theology*, ed. Craig and Moreland (Malden, MA: Blackwell Publishing, 2012), 202–281.

⁷ Guillermo Gonzalez and Jay W. Richards, *The Privileged Planet: How Our Place in the Cosmos Is Designed for Discovery* (Washington, DC: Regnery Publishing, 2004).

⁸ Michael J. Denton, *Nature’s Destiny: How the Laws of Biology Reveal Purpose in the Universe* (New York: The Free Press, 1998); Benjamin Wiker and Jonathan Witt, *A Meaningful World: How the Arts and Sciences Reveal the Genius of Nature* (Downers Grove, IL: InterVarsity Press, 2006).

that the building blocks of living things cannot be found by blind searches but must be designed (Douglas Axe),⁹ that the first living creature and the fossil record give evidence of design (Stephen Meyer),¹⁰ and that both macro- and micro-features of living things give evidence of intelligent design (Michael Denton; Michael Behe).¹¹

Note three quick things about these arguments. First, contrary to stereotypes, these arguments are not “god-of-the-gaps” arguments.¹² None of these arguments claims, “I don’t know what caused this, so God musta done it.” Rather, the standard mode of argumentation for design proponents is an inference to the best explanation — a common form of reasoning in general and in the historical sciences (like evolutionary biology) in particular. They argue that there are *positive* signs of intentional design in nature and that non-intentional explanations are weak by comparison. This is highly consonant with the Catholic Faith. The Scriptures (e.g., Ps. 19 and Rom. 1), the Church Fathers (e.g., St. Gregory of Nazianzen), and the councils (e.g., Vatican I) all declare that God’s handiwork in nature is detectable by human reason and not just by faith.¹³

⁹ Douglas Axe, *Undeniable: How Biology Confirms Our Intuition that Life Is Designed* (New York: HarperOne, 2016).

¹⁰ Stephen C. Meyer, *Signature in the Cell: DNA and the Evidence for Intelligent Design* (New York: HarperOne, 2009); Stephen C. Meyer, *Darwin’s Doubt: The Explosive Origin of Animal Life and the Case for Intelligent Design* (New York: HarperOne, 2013).

¹¹ Michael J. Denton, *Evolution: A Theory in Crisis* (Chevy Chase, MD: Adler and Adler, 1986); Michael J. Behe, *Darwin’s Black Box: The Biochemical Challenge to Evolution* (New York: The Free Press, 1996).

¹² However, it is worth considering what exactly is supposed to be wrong with gaps-style argumentation. See David Snoke, “In Favor of God-of-the-Gaps Reasoning,” *Perspectives on Science and Christian Faith* 53, no. 3 (2001): 152–158.

¹³ Gregory of Nazianzus, *Second Theological Oration*, in *Nicene and Post-Nicene Fathers*, second series, vol. 7, ed. Philip Schaff and Henry Wace, trans. Charles Gordon Browne and James Edward Swallow (Buffalo, NY: Christian Literature, 1894; online ed. Kevin Knight), 22–30, <https://www.newadvent.org/fathers/310228.htm>; Vatican Council I, session 3, *Dogmatic Constitution on the Catholic Faith*, chapter 2, no. 1, in “Decrees of the First Vatican Council,” *Papal Encyclicals Online*, <https://www.papalencyclicals.net/councils/ecum20.htm>.

Second, detecting design does not entail that we have detected divine “intervention” in nature. Design can be detected whether or not there was any direct action. One can tell that a field of corn was intentionally planted even if intermediate causes such as drones were used to plant the seeds. Similarly, design arguments need not imply unmediated divine action. More on this below.

Third, these arguments have clear theological implications, but ID proponents attempt to stick to the publicly available scientific evidence and do not argue from religious texts. Most intelligent design proponents are Christians, but an argument that the designer is the Christian God would require more than just the scientific evidence. ID proponents are not being coy about their belief in God but being careful about their conclusions. Aquinas does the same thing.¹⁴

What Intelligent Design Isn't

Many Catholic intellectuals labor under the false impression that intelligent design theorists propose a false dilemma: either there is an intelligent designer or else natural laws are responsible for these designed looking features of our world — as though God cannot be responsible for the natural laws themselves or that natural causes cannot be instruments of God (i.e., secondary causes).¹⁵ This would indeed be an unfortunate dilemma. Fortunately, this is a misunderstanding. ID does not imply a zero-sum game where if God is responsible for something then He must act directly and nature cannot be a true cause as

¹⁴ St. Thomas Aquinas, *Summa contra Gentiles*, 3.38.

¹⁵ See Stephen M. Barr, “The End of Intelligent Design?” *First Things*, February 9, 2010, <https://www.firstthings.com/web-exclusives/2010/02/the-end-of-intelligent-design>. This misimpression stems from an uncharitable reading of the explanatory filter of William Dembski, set forth in *The Design Inference: Eliminating Chance through Small Probabilities* (Cambridge: Cambridge University Press, 1998). Dembski does not oppose law and design per se; he notes that they are not mutually exclusive categories. See Dembski, *The Design Revolution: Answering the Toughest Questions about Intelligent Design* (Downers Grove, IL: InterVarsity Press, 2004), 93. One could, for instance, make an argument that the bacterial flagellum is the product of an intelligent cause, rather than only laws and natural causes, without at all denying that those laws or material forces are themselves designed. The claim would only be that certain laws and natural causes are, in this case, insufficient to produce flagella given their known causal powers. The laws themselves could still be designed to accomplish other purposes. ID arguments cannot assume that the laws themselves are designed without begging the question.

well. Rather, the minimal claim is only that some features of our world give very good evidence of having been intelligently designed somewhere in their origin story.¹⁶ What ID denies is that every feature of nature is the product of natural forces all the way down. Given that this commitment is necessarily shared by Catholics, Catholic hostility to ID on this point is surprising, to put it mildly.

In truth, the critics should have known better from the fact that ID proponents have long made ID arguments from the fine-tuning of the laws of physics. Notice, however, that while physical constants appear to be the product of intelligent design, this manifestly does not automatically imply that everything in nature has been produced through natural laws. We Catholics are already committed to the propositions that God freely created the world out of nothing and that He creates each and every human soul at the moment of conception.¹⁷ In other words, humans as we know them would not exist if even God-created natural forces were the only things at play. Catholics already reject a causally closed cosmos. Aquinas even claims that God purposefully acts apart from the natural laws and forces in order to show that He acts freely and is not bound of necessity by such laws.¹⁸ Suffice it to say that the view that God *only* acts in nature through natural laws is not the view of St. Thomas Aquinas or the Church.¹⁹

Further, Catholics are committed to the reality of a number of miracles, as well as regular “interventions” of God, such as in the Holy Eucharist. It is strange, given all this, to see many Catholic intellectuals (e.g., Michael Tkacz), decrying the supposed “interventionism” of intelligent design.²⁰ Nevertheless,

¹⁶ This, I think, separates ID from many forms of theistic evolution, where there is a Creator behind life but He's empirically undetectable.

¹⁷ Pope Pius XII, Encyclical Letter on Some False Opinions Threatening to Undermine the Foundations of Catholic Doctrine *Humani Generis* (August 12, 1950), no. 36.

¹⁸ Aquinas, *Summa contra Gentiles*, 3.99, 2.3.

¹⁹ According to Aquinas, God “can cause an effect to result in anything whatsoever independently of middle causes.” St. Thomas Aquinas, *Summa contra Gentiles*, ed. Laurence Shapcote, O.P., rev. online ed., The Aquinas Institute, 3.99, <https://aquinas.cc/la/en/~SCG3>. Nor was he in principle opposed to God “intervening” in nature after the production of the first life forms (Aquinas, *Summa contra Gentiles*, 3.100).

²⁰ Michael Tkacz, “Aquinas vs. Intelligent Design,” *Catholic Answers*, November 1, 2008, <https://www.catholic.com/magazine/print-edition/aquinas-vs-intelligent-design>.

notice that nothing in the definition of ID commits it automatically to the idea that the designer intervenes in nature rather than works only through natural processes. Critics should know better, since leading ID proponents, such as the Catholic biochemist Michael Behe, have expressed the view that God may have front-loaded all of His design into the big bang rather than act directly at discrete points in life's history.²¹ As far as ID is concerned, this is an empirical matter that shouldn't be decided a priori. Regardless, as Catholics we should be wary of those decrying "interventionism." Certainly God ordinarily works through many natural processes. But He is not an invader into this universe but, rather, the constant sustainer of its being at every moment. It is Catholicism, and not ID, that is necessarily committed to direct divine action.

As Catholics, we know that God can of course use laws and even *apparently* accidental events.²² We believe that He is provident over all things; nothing is outside His control. The only thing that *can't* be the case, here, is that God intends to create by truly accidental or unguided events, for that involves a logical contradiction: God can't guide an unguided process. Yet while many Catholics have been told that God simply uses natural selection to create and thus say that they have no beef with Darwin, notice two things.

First, it isn't at all clear that natural selection has the power to produce many of the complex and beautiful features of living things. This is an empirical question, and so scientifically minded Catholics should just want to know the truth of the matter; they should carefully examine the evidence. Second, leading Darwinians have always defined natural selection as an unguided process. Darwin's own exposition of natural selection in *The Origin of Species* defines natural selection as distinct from intelligently guided selection (i.e., artificial selection). More recently, thirty-nine Nobel laureates signed a letter to the Kansas State

²¹ Michael Behe, *The Edge of Evolution: The Search for the Limits of Darwinism* (New York: Free Press, 2007), 231; cf. William Dembski, *No Free Lunch: Why Specified Complexity Cannot Be Purchased without Intelligence* (Lanham, MD: Rowman and Littlefield, 2002), 326, 335.

²² Note, however, that "in reference to God nothing is by chance, nothing unforeseen, either in human life or anywhere else in creation." St. Thomas Aquinas, *Summa contra Gentiles*, 3.92, in Joseph Rickaby, S.J., *Of God and His Creatures* (St. Louis, MO: B. Herder, n.d.), 253–254, <https://ccel.org/ccel/aquinas/gentiles/gentiles.i.html>; cf. Aquinas, *Summa Theologica* I, q. 22, art. 2).

Board of Education explaining that “evolution is understood to be the result of an unguided, unplanned process of random variation and natural selection.”²³

We Catholics cannot simply create our own private definition of *Darwinian evolution*. Guided natural selection simply seems to be a contradiction in terms, given how it has been defined by Darwin and leading Darwinians. Whatever the truth of evolution in general, Darwinian evolution — as it is understood by its leading proponents — cannot be true. The Faith teaches that God loves us, intended us and our environment to be here, and, whether directly or indirectly, created all things.²⁴ *Evolution* can mean anything from change over time, to teleological development, to common ancestry, to a completely unguided process of development (Darwinian evolution). Given such variable meanings, it does no good to bury our heads in the sand and just say, “Catholics are fine with *evolution*. It’s only a Fundamentalist problem.” Perhaps this is why Pope St. John Paul II and Pope Benedict XVI have both hinted that while evolution in some sense may be true, materialistic versions of evolution are false.²⁵

Thomistic Troubles

Due to the influence of some recent and otherwise excellent Thomist philosophers, many Catholics have been under the mistaken impression that intelligent design presupposes a mistaken philosophy of nature.²⁶ The charge is often vague, but the concern is that in describing many machine-like features of the living world, intelligent design proponents view organisms as simply machines

²³ The September 9, 2005 letter to the Kansas Board is preserved on the Wayback Machine at https://web.archive.org/web/20061209120655/http://media.ljworld.com/pdf/2005/09/15/nobel_letter.pdf.

²⁴ St. Thomas Aquinas, for one, thought that God made Adam from the dust of the earth and Eve from Adam’s rib (Aquinas, *Summa Theologica* I, q. 92, art. 4). Other life forms came immediately from God as well (Aquinas, *Summa Theologica* I, q. 65, art. 4).

²⁵ See Pope St. John Paul II, Address to the Pontifical Academy of Sciences (October 22, 1996), available at http://www.newadvent.org/library/docs_jp02tc.htm, and Pope Benedict XVI’s “In the Beginning . . .”: A Catholic Understanding of the Story of Creation and the Fall (Grand Rapids, MI: Eerdmans, 1995), 56–57.

²⁶ Edward Feser, *Aristotle’s Revenge: The Metaphysical Foundations of Physical and Biological Science* (Neunkirchen-Seelscheid, Germany: Editiones Scholasticae, 2019), 36–38.

or artifacts rather than organisms with their own formal and final causes. Yet Aquinas himself maintained that the distinction between artifacts and natural things is not as absolute as Aristotle thought since natural things are artifacts of God.²⁷ He was not at all averse to describing God as analogous to a human artificer.²⁸

Regardless, there simply *are* many natural things that resemble human artifacts and function according to mechanically describable principles. The true problem, I believe, is not so much the admission of mechanical explanations in nature. To deny this would be to deny huge swaths of good science. The problem is a kind of reductionism that emerged out of early modern mechanical philosophy. It tended to treat organisms as nothing but the sum of their parts. ID theorists do not do this. Even if ID proponents thought that certain components of organisms are literal machines, it would be fallacious to infer that they are reductionists who think that whole organisms are machines.²⁹ In truth, there is no general philosophy of nature presupposed in ID arguments, let alone a mechanistic Cartesian one.

Some of these Thomistic philosophers are simply convinced that we already have good arguments for God's existence and don't require any more. In fact, they complain that while there might be merit to ID arguments, by their very nature as inferences to the best explanation, these arguments can never produce the certainty of, say, Thomas's five ways.³⁰ I think this a grave mistake.

It is true that the five ways are demonstrative rather than inductive or abductive arguments. But the strength of an argument can be measured in many ways. St. Thomas himself acknowledges that few are able to know God's existence in this demonstrative way. But we all have access to the beauty, order, and clear purpose of nature. In this sense, the conclusions of intelligent design — which do not require years of immersion in Thomistic jargon to understand — are closer to us and more certain. It is a telling sign that today's most prominent atheists don't trouble themselves much about complicated ancient and medieval demonstrations but are all hot under the collar about intelligent design. I believe

²⁷ Aquinas, *Summa contra Gentiles*, 3.100.

²⁸ Aquinas, *Summa Theologica* I, q. 13, art. 2.

²⁹ Dembski, *Design Revolution*, 152.

³⁰ Edward Feser, *Five Proofs of the Existence of God* (San Francisco: Ignatius Press, 2017), 305–307.

this is because they rightly perceive how effective such arguments are. When an ordinary person (i.e., one without Darwinian blinders) becomes aware of the incredible design within every cell, the conclusion is obvious. In a culture that thinks there are no rational reasons for theistic belief, why not let a thousand flowers bloom and welcome any and all good theistic arguments?

As a result of what I think are very misguided objections — none of which ever get into the specifics of ID arguments — many good people in Thomistic philosophy and traditionalist Catholic circles have come to hold an unwarranted prejudice against ID. Such philosophical objections have made them overly critical of ID and unduly accepting of Darwinism.³¹ They would do well to dive into the nitty-gritty details with an open mind and consider the arguments carefully.

Conclusion

Even if one is able to overcome these Catholic-specific prejudices, however, the hard truth is that we live in an intellectual culture that says that those doubting the dominant Darwinian view of evolution are automatically rubes — no matter how excellent their scholarly credentials. Catholics in particular have been browbeaten by false claims that the Church has been at the forefront of opposition to science. Yet Catholics resist similarly false claims in other areas, and they should resist them here. When we are told that our pro-life stance is “anti-science,” we easily see such nonsense as a transparent attempt to wield the authority of science in the service of an anti-Christian worldview. I suggest that we would think much better about evolution and intelligent design if we similarly refuse to be bullied here. We must have courage. If we do, we might just reclaim some important truths about God, the natural world, and even ourselves.

³¹ I have written more about Thomistic criticisms of ID elsewhere. See Robert C. Koons and Logan Paul Gage, “St. Thomas Aquinas on Intelligent Design,” *Proceedings of the American Catholic Philosophical Association* 85 (2011): 79–97. See also Jay W. Richards’s important contributions in *God and Evolution: Protestants, Catholics, and Jews Explore Darwin’s Challenge to Faith* (Seattle: Discovery Institute Press, 2010).