

# 10. CAN A THOMIST BE A DARWINIST?

*Logan Paul Gage*

IN A LITTLE-RECOUNTED EPISODE OF THE 2005 *KITZMILLER v. DOVER* intelligent design trial, the plaintiffs (objecting to a four-paragraph statement read in biology class) summoned a curious expert witness: John F. Haught, former chairman of Georgetown University's theology department. Asked to identify the antecedents of intelligent design Professor Haught pointed to Thomas Aquinas' five arguments for the existence of God, "one of which was to argue from the design and complexity and order and pattern in the universe to the existence of an ultimate intelligent designer."<sup>1</sup>

Intelligent design (ID) was on trial because (in biology at least) it conflicts with Darwin's theory as taught in the classroom: modern Darwinian evolution claims that random mutation and natural selection, defined as purposeless and unguided processes, are sufficient to explain the stunning features of living things, while intelligent design claims there is evidence that at least some things are better explained by an intelligent cause.<sup>2</sup>

Haught slightly mischaracterized Thomas' argument, which says nothing about complexity *per se*. But Thomas certainly made a design argument by appealing to features of the natural world, as do contemporary ID theorists. Despite these similarities, however, some modern Thomists claim that Thomism is compatible with Darwinian evolution and *incompatible* with intelligent design. So which is it? Are Thomas' writings a precursor to intelligent design as even such design-critics as Haught claim? Or is Darwin compatible with—and ID irreconcilable with—Thomas' philosophical and theological framework? Or is there some third possibility? For the Catholic, these are important questions, because St. Thomas is the gold standard of Catholic thought—not infallible, to be sure, but trustworthy.

## THOMISM AND DARWINISM

IN A TYPICAL DISCUSSION of Darwinian evolution, Christian philosophy, and intelligent design one is likely to hear that St. Thomas had no problem with secondary causes operating in nature and that St. Augustine knew that the Bible is “not a science textbook.” Both of these are true, as far as they go. Unfortunately, such platitudes only obscure deeper sources of tension between Darwinism and Thomistic thought. Here I would like to explore three intimately related sources of tension: the problem of essences, the problem of transformism, and the problem of formal causation.

### The Problem of Essences

First, the problem of essences. G. K. Chesterton once quipped: “Evolution ... does not especially deny the existence of God; what it does deny is the existence of man.”<sup>3</sup> It might appear shocking, but in this one remark the ever-perspicacious Chesterton summarized a serious conflict between classical Christian philosophy and Darwinism.

In Aristotelian and Thomistic thought, each particular organism belongs to a certain universal class of things. Each individual shares a particular nature—or essence—and acts according to its nature. Squirrels act squirrelly and cats catty. We know with certainty that a squirrel is a squirrel because a crucial feature of human reason is its ability to abstract the universal nature from our sense experience of particular organisms.

Think about it: How is it that we are able to recognize different organisms as belonging to the same group? The Aristotelian provides a good answer: It is because species really exist—not as an abstraction in the sky, but they exist nonetheless. We recognize the squirrel’s form, which it shares with other members of its species, even though the particular matter of each squirrel differs. So each organism, each unified whole, consists of a material and immaterial part (form). (“Species” here is a more encompassing concept than in modern biological definitions. For example, wolves and domesticated dogs might share a common essence.)

One way to see this form-matter distinction is as Aristotle’s solution to the ancient tension between change and permanence debated so vigorously in the pre-Socratic era. Heraclitus argued that change is the underlying real-

ity. Everything constantly changes, like fire which never stays the same from moment to moment. Philosophers like Parmenides (and Zeno of “Zeno’s paradoxes” fame) argued exactly the opposite; there is no change. Despite appearances, reality is permanent. How else could we have knowledge? If reality constantly changes, how can we know it? What is to be known?

Aristotle solved this dilemma by postulating that while matter is constantly in flux—even now some somatic cells are leaving my body while others arrive—an organism’s form is stable. It is a fixed reality, and for this reason it is a steady object of our knowledge. Organisms have an essence which can be grasped intellectually.

Enter Darwinism. Recall that Darwin sought to explain the origin of “species.” Yet as Darwin pondered his theory he realized that it destroyed species as a reality altogether. For Darwinism suggests that any matter can potentially morph into any other arrangement of matter without the aid of an organizing principle. He thought cells were like simple blobs of Jell-O, easily rearrangeable. For Darwin, there is no immaterial, immutable form. In *The Origin of Species* he writes:

I look at the term species as one arbitrarily given, for the sake of convenience, to a set of individuals closely resembling each other, and that it does not essentially differ from the term variety, which is given to less distinct and more fluctuating forms. The term variety, again, in comparison with mere individual differences, is also applied arbitrarily, for convenience’s sake.<sup>4</sup>

Statements like this should make card-carrying Thomists shudder. This is an extreme expression of the anti-Aristotelian (and anti-Thomist) philosophy of nominalism. Nominalism (stemming from the Latin “nomen,” or “name”) suggests that the individual is the only reality—not the universal, form, or essence. The mind invents universals in order to group together similar objects. But the universal is not a reality in which the individual in some way participates.

But Thomas embraced form and, following Augustine, even maintained that a creature’s form reflects the second member of the Trinity. For, “as it [the creature] has a form and species, it represents the Word as the form of the thing made by art is from the conception of the craftsman.”<sup>5</sup>

The first conflict between Darwinism and Thomism, then, is the denial of true species or essences. For the Thomist, this denial is a grave error, because the essence of the individual (the species in the Aristotelian sense) is the true object of our knowledge. As Benjamin Wiker observes in *Moral Darwinism*, Darwin reduced species to “mere epiphenomena of matter in motion.”<sup>6</sup> What we call a “dog,” in other words, is really just an arbitrary snapshot of the way things look at present. If we take the Darwinian view, Wiker suggests, there is no species “dog” but only a collection of individuals, connected in a long chain of changing shapes, which happen to resemble each other today but will not tomorrow.

Now we see Chesterton’s point. Man, the universal, does not really exist. According to the late Stanley Jaki, Chesterton detested Darwinism because “it abolishes forms and all that goes with them, including that deepest kind of ontological form which is the immortal human soul.”<sup>7</sup> And if one does not believe in universals, there can be, by extension, no human nature—only a collection of somewhat similar individuals.

Classical notions of ethics were radically dependent upon this notion of a real, knowable human nature. Aristotle and others often argued for what is ethical in terms of what leads to human flourishing and fulfillment. Yet if there is no human nature, how can we know what human fulfillment looks like in general? Tim and Tom might, then, flourish under different moral codes. Lack of a human nature may leave us with “different strokes for different folks.”

As philosopher Alasdair MacIntyre showed in *After Virtue*, the way out of this modern dilemma is to recognize that if something’s nature includes purposes or proper functions, then “oughts” follow from that which “is.”<sup>8</sup> For if man is a certain sort of being, if he has a certain formal nature, then there are facts about how man ought to behave. There are objective criteria by which we can judge a human being good or bad. This kind of *telos*-infused nature cannot be sustained by Darwinism, however, for Darwinism denies that organisms have formal natures or are purposefully made.

But the Darwinian will say, “We believe in function, too!” True, the Darwinian knows of function—that ears hear, for example. But to say in the

Darwinian sense that the function of ears is to hear, notes philosopher Lydia McGrew, is only to say that the information encoding ears was passed to progeny because ears happened to hear—and that hearing, presumably, gave these organisms some survival advantage. If in 10,000 years humans walk on their hands because this somehow aids survival, the Darwinian cannot claim that hands are meant for walking, only that hands in fact *do* walk at this time.<sup>9</sup> That is, the Darwinian cannot support the notion of *proper* function.

This is not a mere abstract point. The dilemma is playing itself out in contemporary debates in bioethics. Who are bioethicists like Leon Kass (neo-Aristotelian and former chairman of the President's Council on Bioethics) sparring with today if not thoroughgoing Darwinians like Princeton's Peter Singer who deny that humans, qua humans, have intrinsic dignity? Singer even calls those who prefer humans to other animals "speciesist," which in his warped vocabulary is akin to racism.<sup>10</sup>

So what justifies the excessive expense and effort required to keep a Down's syndrome baby alive? For the traditionalist, it is the baby's membership in the human species. This gives the baby intrinsic value. For the utilitarian like Singer such expense is not justified; one would do better to contribute to the World Wildlife Fund, for species' differences are not essential but accidental. As Singer notes:

All we are doing is catching up with Darwin.... He showed in the 19th century that we are simply animals. Humans had imagined we were a separate part of Creation, that there was some magical line between Us and Them. Darwin's theory undermined the foundations of that entire Western way of thinking about the place of our species in the universe.<sup>11</sup>

If one must choose between saving an intelligent, fully developed pig or the Downs Syndrome baby, Singer thinks we should opt for the pig. Perhaps this is why natural law theorist J. Budziszewski writes, "If any contemporary scientific movement holds promise for the furtherance of the natural law tradition, it is not the stale dogma of natural selection, but frank recognition of natural design."<sup>12</sup>

### The Problem of Transformism

The second conflict is very similar to the first. The Thomist, as we have seen, is committed to the reality of universals, for universals are the objects of higher knowledge. But it is not only the existence of species which Darwinism destroys; it is also their stability.

Darwinian Theory posits that all living things are related through one or very few ancestors (referred to as “Universal Common Ancestry”) *via* solely material processes. But if living things have unchangeable essences, how can these living things change (or “transform”) into other living things through mere material causes?

One Thomist recently put it this way to a gathering of the American Maritain Association: “For those defending at least some aspects of the classical idea of essences, the problem can be stated as follows: how can one kind of living substance with its own unique essence change into another kind? And beyond the how, why would this happen in the natural world? What intrinsic end or ends would it serve?”<sup>13</sup>

For Darwin, there was no problem to solve, for there are no *essential* differences between living things. We see this assumption at work in every new primatological study finding that apes have an inner mental life, use sign language, or form hierarchical social structures “just like we do!” The Thomist should see this as hyperbolic, for his starting point is our everyday experience of the world. And as David Berlinski sardonically observes, the first and most obvious fact about apes is that they are “behind the bars of their cages and we are not.” Put plainly, “Beyond what we have in common with the apes, we have nothing in common, and while the similarities are interesting, the differences are profound.”<sup>14</sup>

We should not be too flippant about this, however. Supporters of Darwin’s theory are no doubt right that apes’ capacities are more similar to ours than are, say, alpacas’. But sometimes these similarities serve to hide real transitional difficulties. British literary critic A. N. Wilson gives a fine example from his atheist days:

A materialist Darwinian was having dinner with me a few years ago and we laughingly alluded to how, as years go by, one forgets names.

Eager, as committed Darwinians often are, to testify on any occasion, my friend asserted: "It is because when we were simply anthropoid apes, there was no need to distinguish between one another by giving names."

This creedal confession struck me as just as superstitious as believing in the historicity of Noah's Ark. More so, really.

Do materialists really think that language just "evolved," like finches' beaks, or have they simply never thought about the matter rationally? Where's the evidence? How could it come about that human beings all agreed that particular grunts carried particular connotations? How could it have come about that groups of anthropoid apes developed the amazing morphological complexity of a single sentence, let alone the whole grammatical mystery which has engaged Chomsky and others in our lifetime and linguists for time out of mind? No, the existence of language is one of the many phenomena—of which love and music are the two strongest—which suggest that human beings are very much more than collections of meat.<sup>15</sup>

For the Darwinian, complex biological realities exist for the sake of their smaller units of composition. Richard Dawkins has gone so far as to suggest that we are the pawns of our selfish genes. In this view, biological reality is a continuum, and the smallest units of composition run the show. Species' differences—indeed, even individual organisms—are mere accidents of environment and mutation.

But for Thomas, "the elements are for the sake of the compounds, the compounds for the sake of living things."<sup>16</sup> That is, reality is decidedly discontinuous, hierarchical, top-down. The entire point of essences is that they are stable realities; they cannot change and thus can provide real knowledge. The differences between species (intelligible essences) are differences of *kind*. Thus those defending the tradition of natural philosophy found in Aristotle and St. Thomas simply cannot accept transformism—at least not without introducing teleological conceptions of change, which would transform Darwinian Theory itself.

### The Problem of Formal Causation

Finally, before moving to consider intelligent design, there is the problem of formal causation. It is here that we find St. Thomas' unique contribution, illuminating the insights of Aristotle with the light of Christian knowledge.

St. Thomas argued against the Islamic scholars of his day who held that God is the direct cause of everything in nature, a view known as occasionalism. Put negatively, occasionalism denies that creatures exercise their own causal powers. It is God who always acts as the *only* cause; creatures only appear to cause effects. "On the contrary," as Thomas is fond of saying, God created creatures with real natures that have real powers. Thus, ants act in an ant-like fashion. Ants themselves cause effects.

God is, of course, also a true cause of ant behavior: He created ants, he sustains ants in being, and he concurs (co-operates) with every ant action. According to Notre Dame philosopher Alfred Freddoso, this last aspect was extremely important to medieval Aristotelians: "It cannot be emphasized enough that the position being rejected here (*viz.*, that God's action in the world is exhausted by creation and conservation) is regarded as too weak by almost all medieval Aristotelians."<sup>17</sup> These medieval thinkers would be scandalized by the claims of those modern Christian thinkers who exclude God from nature except as the First Cause and a merely bureaucratic role as sustainer of the universe.

So Thomas believed in true secondary causes. In a certain sense it is true that God causes everything. But in the act of creation God *also* delegates to creatures the power to act as true causes of their creaturely behavior, according to their natures. Because Aristotle is so well known for recognizing teleology *intrinsic* to living things, and because Thomas is so well known for this view of secondary causation, some of today's Thomists think that their tradition can whole-heartedly embrace Darwinian evolution. After all, Darwin just claimed nature is due to secondary causes, right? Nature just "does its own thing." It is this drastic over-simplification which lies at the heart of the casual acceptance of Darwinism among some classically thinking people today. We must dig deeper.



Recall that for Thomas, creatures are a combination of form and matter. The question that must be answered, then, in any version of Thomistic evolution, is where form comes from. Darwin, denying Aristotelian essentialism, saw organisms' traits as accidental properties of living things that change with the winds of time. Not so St. Thomas.

In his recent book *Aquinas on the Divine Ideas as Exemplar Causes*, Catholic University philosophy professor Gregory T. Doolan gives the most extensive treatment to date of Thomas' notion of "exemplar causation."

Exemplar causes are an integral part of Thomas' metaphysics. An exemplar cause is a type of formal cause—a sort of blueprint; the idea according to which something is organized. For Thomas, these ideas exist separately from the things they cause. For instance, if a boy is going to build a soap-box derby car, the idea in his mind is separate from the form of the car; yet the car's form expresses the idea, or exemplar cause, in the boy's mind. Exemplar causes actually do something. They are "practical ideas," writes Doolan.<sup>18</sup>

For Thomas (and here is the important point) a creature's form comes from a similar form *in the divine intellect*. In other words, the cause of each species's form is extrinsic. In fact, writes Thomas, "God is the first exemplar cause of all things."<sup>19</sup> Creatures do possess the causal powers proper to the nature God granted them, but creatures most certainly do not possess the power to create the form of their or any other species.

For instance, frog parents have the proper ability to generate tadpoles. They are able to bring out the natural form that is present in the potentiality of matter. However, the frog parents cannot create the form "frog." After all, Thomas reasons, if frog parents could create the form "frog" they would be the creators of their own form, and this is clearly a contradiction. Natural things can *generate* forms of the same species, but they cannot *create* the form of a species in general.

Thus natural agency is not eliminated, yet God is still actively involved in nature. Specific forms originate and reside in his mind, though God allows creatures the dignity of acting in this creative drama. Still, Thomas is careful to note that while secondary causes are real, "God ... can cause an effect to result in anything whatsoever independently of middle causes."<sup>20</sup>

By now it should be clear how different Thomas' philosophy of nature is from Darwinism. For Thomas, form is not merely an apparent reality that can be molded into any other form. Rather, a natural form originates in God's mind. He directly create it. It is a forethought, so to speak, not an afterthought. Species, then, come to be because of his will and power (either successively or all at once). They are neither the product of a trial and error process of natural selection nor the mere intrinsic unfolding of secondary causes. Secondary causes have their place, but they are inherently impotent to create novel form.

Let's face it: Thomas Aquinas was not evolutionist, let alone a Darwinist, in any sense.

### **THOMISM AND INTELLIGENT DESIGN**

GIVEN THE ACTIVE ROLE of God in nature in Thomas' system, one might think today's Thomists would encourage the pursuit of signs of intelligent design in nature. Yet in recent years, some Thomists have shied away from ID. They do so not only because of lax scrutiny of the tensions just discussed but also because of three common misperceptions of ID: First, that ID is "mechanistic" and even embraces a "modernist" view of science; second, that ID is a "God of the gaps" theory; and third, that ID is inherently "interventionist." While many Thomists harbor doubts about the more extravagant claims of Darwinian science, taken together these three factors make it difficult for some Thomists to embrace intelligent design. That is as unnecessary as it is unfortunate.

#### **Is ID Mechanistic and Modernist?**

One of the defining hallmarks of modern Thomism is its strong rejection of early modern philosophy as seen in René Descartes and Francis Bacon. To simplify, modernists reduce Aristotle's four causes down to only two causes, and, as a result, reduce all knowledge to empirical knowledge. Both moves strike directly at Thomistic philosophy, so it is no surprise that they have aroused Thomists' ire.

"Causes" in Aristotle's sense explain why something is the way it is, and as Thomas explains, "there are four kinds of cause, namely, the material, ef-

ficient, formal and final.”<sup>21</sup> Aristotle and Thomas would explain a marble statue by reference to its material cause (the marble), its efficient cause (the sculptor), its formal cause (the shape of the statue), and its final cause (the purpose of honoring Athena). A modernist, in contrast, sees only material man and marble at work. Ultimately, all is explained by atoms in motion—not by immaterial ideas, forms, or purposes. Thus for the modernist, knowledge is necessarily and exclusively knowledge of the empirical.

Some Thomists insist that ID is methodologically flawed because they think that ID, like modernism, rejects formal and final causation. This is incorrect. Far from rejecting final causation, ID theorists argue that there is empirical evidence of purpose or teleology in nature. They argue that at least some features of nature are best explained by intelligent activity, since such features exhibit evidence of foresight and planning.

By reintroducing intelligent causes as a legitimate scientific pursuit, and by rejecting the Darwinian notion that material and efficient causes suffice to explain nature, ID theorists may well open the door for renewed attention to formal and final causes. Thomists should welcome ID as a partner.

Still, some Thomists insist that ID inherently views nature mechanistically. Those who say this consistently have in mind Michael Behe’s argument for the “irreducible complexity” of what are referred to in the scientific literature as “molecular machines.” They seem to forget that Thomas repeatedly used analogies between living objects and man-made artifacts. So they should hardly be offended that Behe would compare some aspects of microbiological structures to machines.

Besides, ID arguments propose the very opposite of mechanism—agency. Consider Stephen Meyer’s argument concerning the informational content of DNA. In *Signature in the Cell*, Meyer argues that blind material causes are insufficient to produce the *immaterial* information content of DNA. An *immaterial* mind, Meyer claims, is a better explanation than any mindless, material cause.<sup>22</sup>

Some Thomist critics go one step further and claim that ID concedes a modernist, Enlightenment view of science. Perhaps this is because ID proponents insist that ID arguments fall within the domain of natural science.

But this criticism has things precisely backward: ID theorists challenge the Enlightenment notion that only matter matters, that science cannot take immaterial concepts like mental causation seriously. ID challenges this directly, noting that while materialist science may have seemed plausible in the age of steam, it is hardly plausible in today's world of the information super-highway—run on the power of the invisible and the immaterial. According to ID theorists, accounting for nature in all its richness requires that we appeal not just to material but to personal causes as well.

Moreover, the claim that design is empirically detectable concedes nothing to the modernist idea that reason is limited to the empirical realm. Nor does anything in ID imply that only science can provide real knowledge. One can argue for empirical evidence of design and also defend, say, knowledge of divine revelation, moral knowledge, knowledge of abstract essences and knowledge derived from philosophical arguments for the existence of God.

### Does ID Promote the “God of the Gaps”?

The second confusion regards the claim that intelligent design is a “God of the gaps” argument. As Thomist Edward Feser writes, “Aquinas does not argue in this lame ‘God of the gaps’ manner.... Paley did, and ‘Intelligent Design’ theorists influenced by him do as well.”<sup>23</sup> Expressed more formally, a “gaps” argument is known as an argument from ignorance. These arguments base claims upon what one *does not* know rather than upon what one *does* know. Critics misconstrue contemporary ID arguments (and perhaps Paley's as well) as, “I do *not* know how this feature of the natural world arose via material causes; therefore God did it!”

Yet this too is simply a misunderstanding. ID is not an argument for God's existence. Rather, it is an inference to an intelligent cause. Some people think ID theorists are being coy, but they just want to avoid overstating their argument. Thomas drew the same distinction in *Summa contra Gentiles*:

For seeing that natural things run their course according to a fixed order, and since there cannot be order without a cause of order, men, for the most part, perceive that there is one who orders the things that we see. But who or of what kind this cause of order may be, or whether there be but one, cannot be gathered from this general consideration.<sup>24</sup>

So there's certainly nothing anti-Thomistic in distinguishing between a generic argument for design and an argument for God's existence—even if the former might provide evidence for the latter.

Furthermore, ID—whether true or false—is not an argument from ignorance. ID proponents argue from the known features of natural objects, the *known* causal capacities of agents in our everyday experience and the known limits of certain material causes. In fact, this is the same method that makes Thomism so appealing. Experience teaches us that some effects in our everyday observation of the cause-and-effect structure of the world always come from intelligent agents. Material causes simply do not suffice to explain some things.

If, for instance, I come home and find that the magnetic letters on the refrigerator say “I love Daddy,” I know that a mind rather than material causes alone (e.g., strong winds blowing through the kitchen window) produced the message. I already have numerous experiences with written language; I know the limits of material causes in this arena. ID merely formalizes this common experience with analytic rigor.

Take Stephen Meyer's argument mentioned previously. Meyer argues that DNA, which contains the same semantic quality as human language, also comes from a mind. He surveys today's most prominent materialistic theories for the origin of DNA's specified complexity and concludes they lack the causal resources to explain this salient property of DNA. But intelligent agency does not. Thus, judged by standard modes of reasoning in the historical sciences, intelligent agency is a better explanation. The form of Meyer's argument is precisely the same as Darwin's. (Darwin learned it from Sir Charles Lyell, the founder of modern geology.) The method involves looking to presently operating causes to explain past events in natural history. DNA is often called a “code,” and if Meyer is correct the metaphor runs deeper than materialist philosophy ever dreamt.

### Is ID Interventionist?

Finally, as we have already seen, in arguing against the occasionalists St. Thomas affirmed that God has given nature causal capacities of its own. They are bounded, of course, by certain actions of which only God is capable,

but nature has its role nonetheless. And this fact has led certain Thomists to an aesthetic preference for scientific theories that do not involve God's "interference" in nature. They are wary of ID's seeming "interventionism."

Whereas materialists must be non-interventionists, theists have more explanatory resources at their disposal. Thus it seems that the evidence should decide the matter for theists. Perhaps it is logically possible that God limited himself to secondary causes in natural history, but we cannot deduce that beforehand. If the fossil record remains discontinuous despite the occasional media hype of a new "missing link,"<sup>25</sup> and if field studies of natural selection continue to show that natural selection merely keeps populations healthy, then so be it.<sup>26</sup> Maybe God acted as a primary cause at different periods in life's history.

Christians *already* believe this. They recite it in every creed. As Avery Cardinal Dulles—an advocate for teleological evolution—wrote:

Christian Darwinists run the risk of conceding too much to their atheistic colleagues. They may be over-inclined to grant that the whole process of emergence takes place without the involvement of any higher agency. Theologians must ask whether it is acceptable to banish God from his creation in this fashion.... [God] raised Jesus from the dead. If God is so active in the supernatural order, producing effects that are publicly observable, it is difficult to rule out on principle all interventions in the process of evolution. Why should God be capable of creating the world from nothing but incapable of acting within the world he has made?<sup>27</sup>

For Christians this is surely a needed warning against swallowing popular prejudices. But even so, is the intelligent design proponent necessarily committed to God's repeated intervention in the natural world? Absolutely not. Postulating intelligent agency as a necessary causal ingredient for certain features of nature does not commit one to exactly when or how this feature arrived on the scene. Just recall the letters on my refrigerator: I cannot be certain who put them there, or how, or when, but I surely know the arrangement is intelligently designed.

Catholic biochemist and ID proponent Michael Behe, for one, thinks it unlikely that God intervened directly in the development of the biological realm. Rather, he speculates that God may have front-loaded the informa-

tion and laws necessary to humanity's development into the beginning of the universe. Behe thinks

... the assumption that design unavoidably requires "interference" rests mostly on a lack of imagination. There's no reason that the extended fine-tuning view ... necessarily requires active meddling with nature.... One simply has to envision that the agent who caused the universe was able to specify from the start not only laws, but much more.<sup>28</sup>

Intelligent design by natural laws and initial specifications is still intelligent design, and it may be detectable in the same way as the "fine-tuning" of the laws of physics. The detectable effects of intelligent design could be the same, however that design was implemented.

Thomas himself, far from being worried about intervention, thought there was good reason to think that God purposefully "intervenes" in nature, writing that

the divine power [can] at times work apart from the order assigned by God to nature, without prejudice to His providence. In fact He does this sometimes to manifest His power. For by no other means can it better be made manifest that all nature is subject to the divine will, than by the fact that sometimes He works independently of the natural order: since this shows that the order of things proceeded from Him, not of natural necessity, but of His free will.<sup>29</sup>

Thomas' way of speaking here is more helpful than speaking of "intervention," which is often used pejoratively. In Thomas' view, when God acts directly in nature he is not invading foreign territory, tampering with something he should have fixed earlier, or violating natural laws established in opposition to his will. He is acting within the world that he created and that he sustains from moment to moment. If he sometimes chooses to act independently of the natural order, to bring about results that would not have happened if nature were left to its own devices, that is his prerogative. Thus those Thomists who decry "interventionism" may not be as Thomistic as they think.

## CONCLUSION

STILL, ST. THOMAS' ARGUMENTATION differs at times from modern design arguments. For one thing, Thomas is more concerned with ontology than

biology or other natural sciences. His chief concern is why something should exist at all, not, say, the intricate features of particular biological organisms or the fine-tuning of physical constants. For another, Thomas preferred deductive arguments. ID proponents prefer newer forms of argumentation, especially “inference to the best explanation”—the method common in the historical sciences whereby one must not only weigh the strengths and weaknesses of a given hypothesis but also compare hypotheses with each other. In this fashion a scientist can decide which theory currently explains the data better than all rivals and yet remain open to new data or hypotheses which might change the equation.

While they don't provide the certainty of deductive conclusions, one advantage to these arguments is that they recognize that this finite world often requires tradeoffs: One cannot sit satisfied having raised questions about an ID argument; rather, he must show that his own hypothesis is *better* at explaining relevant data.

As Alexander Pruss, an analytical Thomist and former Georgetown colleague of John Haught, writes:

On the compatibility between Thomism and ID, the answer is surely positive. Thus, one might think that the irreducible complexity types of arguments provide a strong probabilistic case for design *and* that the existence of teleology provides a sound deductive argument for a first cause.”<sup>30</sup>

Nevertheless, despite the different subject matter and styles of argumentation, Thomists and ID theorists have, as we have seen, *much* in common. The dismissal of intelligent design by some contemporary Thomists is unfortunate. For if reality is a unified whole, that is, if it stems from the divine mind as Thomas believed, would it not be odd if good philosophy concluded that life is designed but good science concluded that life was not?



62. Some argue that information can never be lost from the universe, but they are referring to a highly technical definition of information. But within the human context, it can be lost for all practical purposes. If a person's great-grandfather's letters from the trenches in World War I perished in a house fire, the information is lost to that family. This problem is similar to the problem around the origin of life. Even producing life from scratch in a laboratory would not show that life actually originated that way on the early Earth.
63. Gregory W. Graffin and William B. Provine, "Evolution, Religion, and Free Will," *American Scientist* (September 2, 2008).
64. My blog, *Mindful Hack*, has featured many searchable entries on the amazing discoveries of the pseudoscience of evolutionary psychology.
65. George Sim Johnston, *Did Darwin Get It Right?: Catholics and the Theory of Evolution*, p. 16.
66. The usual time frame given is about 4.5 billion years from the formation of Earth to the present. Life started here shortly afterward, despite the extreme difficulties.
67. Mark Steyn, "Obamacare worth the price to Democrats," *Orange County Register* (March 5, 2010), at: <http://www.ocregister.com/articles/health-237719-care-government.html>.
68. See here, for example: Denyse O'Leary, "Polls: In Darwin's birthday year, people want to hear alternatives," *Post-Darwinist* (March 4, 2009), at: <http://post-darwinist.blogspot.com/2009/03/polls-in-darwins-birthday-year-people.html#links>.
69. See, for example, Susan Mazur, "Altenberg Summit," *Darwin Then and Now*, at: <http://www.darwinthenandnow.com/altenberg-summit/>.
70. See report on 2009 Zogby poll, "Report on 2009 Zogby Poll about Evolution and Academic Freedom," at: <http://tinyurl.com/yd5qne5>.

### *10. Can a Thomist Be a Darwinist? by Logan Paul Gage*

1. *Kitzmiller v. Dover Area School District*, trial transcript Day 5 (September 30, 2005), PM Session, part 1.
2. Of course the Thomist likely denies the existence of fundamentally unguided, or purposeless processes in nature. This may be the most basic conflict between Thomism and Darwinism. While some have tried, it accomplishes nothing (except equivocation) to simply re-define Darwinism as a teleological process. It has never been seen as such by its main proponents. To take but one example among many, in 2005 thirty-eight Nobel laureates sent an open letter to the Kansas State Board of Education decrying any criticism of Darwinism in the classroom. They maintained that Darwinian "evolution is understood to be the result of an unguided, unplanned process of random variation and natural selection." See: [http://media.ljworld.com/pdf/2005/09/15/nobel\\_letter.pdf](http://media.ljworld.com/pdf/2005/09/15/nobel_letter.pdf).
3. Alzina Stone Dale (ed.), *Collected Works of G. K. Chesterton*, volume XV (San Francisco: Ignatius, 1989), p. 196.
4. Charles Darwin, *The Origin of Species: By Means of Natural Selection or the Preservation of Favored Races in the Struggle for Life* (New York: The Modern Library, 1993), pp. 78–79.
5. Thomas Aquinas, *Summa Theologica*, First Part, Question 45, Article 7.
6. Benjamin Wiker, *Moral Darwinism: How We Became Hedonists* (Downers Grove: InterVarsity Press, 2002), p. 218.
7. Stanley L. Jaki, *Chesterton, A Seer of Science* (Champaign: University of Illinois Press, 1986), p. 76.
8. Alasdair C. MacIntyre, *After Virtue: A Study in Moral Theory*, 2nd edition (South Bend: University of Notre Dame Press, 1984).
9. Personal correspondence with Lydia McGrew (June 30, 2009; July 1, 2009).

10. See Leon R. Kass, *Life, Liberty and the Defense of Dignity: The Challenge for Bioethics* (San Francisco: Encounter Books, 2002) and Peter Singer, *Animal Liberation: A New Ethics for our Treatment of Animals* (New York: Random House, 1975).
11. Johann Hari, "Peter Singer—on Killing Disabled Babies, Saving Animals, and the Dangers of Superstition," June 30, 2004, at: <http://www.johannhari.com/2004/07/01/peter-singer-on-killing-disabled-babies-saving-animals-and-the-dangers-of-superstition>.
12. J. Budziszewski, *The Line Through the Heart: Natural Law as Fact, Theory, and Sign of Contradiction* (Wilmington: ISI Books, 2009), p. 95. Some non-traditional Thomists have retreated to the position that there are only three kinds of form or essence in living things: vegetative, sensitive, and rational. These Thomists necessarily part ways with Darwinists regarding the formal and ontological discontinuity between these broad categories, and as such they face a similar trouble with Darwinism over essences.
13. Mark Ryland, "Applying Natural Philosophy to a Modern Controversy: The Surprisingly Difficult Case of Darwinism, Transformism, and Intelligent Design." Presentation at the 2006 American Maritain Association, November 2, 2006. It should be noted that Ryland is not an ID proponent.
14. David Berlinski, *The Devil's Delusion: Atheism and Its Scientific Pretensions* (New York: Crown Forum, 2008), pp. 155–156.
15. A. N. Wilson, "Why I Believe Again," *New Statesman* (April 2, 2009).
16. Thomas Aquinas, *Summa contra Gentiles*, Part 3, Chapter 22, quoted in Brother Benignus Gerrity, *Nature, Knowledge and God: An Introduction to Thomistic Philosophy* (Milwaukee: Bruce Publishing Company, 1947), p. 501.
17. Alfred J. Freddoso, "Medieval Aristotelianism and the Case against Secondary Causation in Nature," in Thomas V. Morris (ed.), *Divine and Human Action: Essays in the Metaphysics of Theism* (Ithaca: Cornell University Press, 1988), p. 77.
18. Gregory T. Doolan, *Aquinas on the Divine Ideas as Exemplar Causes* (Washington, DC: Catholic University of America Press, 2008), p. 43.
19. Thomas Aquinas, *Summa Theologica*, First Part, Question 44, Article 3.
20. Thomas Aquinas, *Summa contra Gentiles*, Part 2, Chapter 99.
21. Thomas Aquinas, On the Principles of Nature, chapter 3, in Ralph M. McInerney, *A First Glance at St. Thomas Aquinas: A Handbook for Peeping Thomists* (South Bend: University of Notre Dame Press, 2008), pp. 88–89.
22. Stephen C. Meyer, *Signature in the Cell: DNA and the Evidence for Intelligent Design* (San Francisco: HarperOne, 2009). Meyer does not argue, incidentally, that organisms can be reduced to their DNA, that DNA fully specifies an organism or that genetic information is the only evidence for the design of living organisms. His argument is simply that the specified complexity in the coding regions of DNA is one clear sign of intelligent design.
23. Edward Feser, *The Last Superstition: A Refutation of the New Atheism* (Huntington: St. Augustine's Press, 2008), p. 81.
24. Thomas Aquinas, *Summa contra Gentiles*, Book 3, Chapter 38, quoted in Anton C. Pegis (ed.), *Introduction to Saint Thomas Aquinas* (New York: Modern Library, 1948), pp. 454–455.
25. The fossil known as *Ida* is the most recent example. In a media alert, *Ida* was originally touted as a "revolutionary scientific find that would change everything" known about human evolution. Michael D. Lemonick, "Ida: Humankind's Earliest Ancestor! (Not Really)," *Time* (May 21, 2009). Now it appears that *Ida* may have left no descendants at all. See Erik R. Seiffert, Jonathan M. G. Perry, Elwyn L. Simons and Doug M. Boyer, "Convergent

- evolution of anthropoid-like adaptations in Eocene adapiform primates," *Nature* 461, no. 7267 (October 22, 2009): pp. 1118–1121.
26. See J. G. Kingsolver, et al., "The Strength of Phenotypic Selection in Natural Populations," *The American Naturalist*, vol. 157, no. 3 (March 2001): pp. 245–261.
  27. Avery Cardinal Dulles, "God and Evolution," *First Things* (October 2007).
  28. Michael J. Behe, *The Edge of Evolution: The Search for the Limits of Darwinism* (New York: Free Press, 2007), p. 231.
  29. Thomas Aquinas, *Summa contra Gentiles*, Part 2, Chapter 99.
  30. Alexander R. Pruss (November 15, 2008), at: [http://www.whatswrongwiththeworld.net/2008/11/dembski\\_frank\\_beckwith\\_finally.html#comment-40782](http://www.whatswrongwiththeworld.net/2008/11/dembski_frank_beckwith_finally.html#comment-40782). Note that Pruss is not an ID proponent.

### 11. *Straining Gnats, Swallowing Camels* by Jay W. Richards

1. "Contra Gentes, Part III," in William A. Dembski, Wayne J. Downs, and Fr. Justin B.A. Frederick, *The Patristic Understanding of Creation* (Riesel: Erasmus Press, 2008), p. 197. This volume contains hundreds of pages of the writings of the Churches Fathers on creation and design.
2. "Oration XXVIII—The Second Theological Oration," in *Ibid.*, p. 277.
3. *Ibid.*, p. 278.
4. "Intelligent Design: A Brief Introduction," in *Evidence for God*, edited by William A. Dembski and Michael R. Licona (Grand Rapids: Baker Books, 2010), p. 104.
5. In *The Privileged Planet: How Our Place in the Cosmos is Design for Discovery* (Washington, DC: Regnery, 2004).
6. See the text of the Pope's inaugural address online at: [http://www.boston-catholic-journal.com/inaugural\\_address\\_of\\_Pope\\_Benedict\\_XVI.htm](http://www.boston-catholic-journal.com/inaugural_address_of_Pope_Benedict_XVI.htm).
7. Pope Benedict XVI, "In the Beginning ...": *A Catholic Understanding of Creation and the Fall* (Grand Rapids: Eerdmans Pub., 1995), pp. ix–x. In this book he observes that the creation itself is the subject of constant attention due to the environmental debate, and yet, paradoxically, "the creation account is noticeably and nearly completely absent from catechesis, preaching, and even theology." In response to what he called "the practical abandonment of the doctrine of creation on influential modern theology," he calls for renewed attention to the doctrine.
8. *Ibid.*, p. xi.
9. Online at: [http://www.newadvent.org/library/docs\\_jp02tc.htm](http://www.newadvent.org/library/docs_jp02tc.htm).
10. *Creation and Evolution: A Conference with Pope Benedict XVI in Castel Gandolfo*, translated by Michael Miller (San Francisco: Ignatius Press, 2008).
11. "Actus" and "potentia" in Latin. *The Catholic Encyclopedia* explains the distinction this way:
 

In general, *potentia* means an aptitude to change, to act or to be acted upon, to give or to receive some new determination. *Actus* means the fulfilment of such a capacity. So, *potentia* always refers to something future, which at present exists only as a germ to be evolved; *actus* denotes the corresponding complete reality. In a word, *potentia* is the determinable being, *actus* the determined being.
12. C. Dubray, "Actus et Potentia," *The Catholic Encyclopedia* (New York: Robert Appleton Company, 1907), at: <http://www.newadvent.org/cathen/01124a.htm>.
12. David Sedley, *Creationism and Its Critics in Antiquity* (Berkeley: University of California Press, 2007), p. xvi.