# Existential Inertia and the Five Ways

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Abstract. The "existential inertia" thesis holds that, once in existence, the natural world tends to remain in existence without need of a divine conserving cause. Critics of the doctrine of divine conservation often allege that its defenders have not provided arguments in favor of it and against the rival doctrine of existential inertia. But in fact, when properly understood, the traditional theistic arguments summed up in Aquinas's Five Ways can themselves be seen to be (or at least to imply) arguments against existential inertia and in favor of divine conservation. Moreover, they are challenging arguments, to which defenders of the existential inertia thesis have yet seriously to respond.

I.

Introduction. The Doctrine of Divine Conservation (DDC) holds that the things that God has created could not continue in existence for an instant if He were not actively preserving them in being. DDC is a standard component of classical philosophical theology. St. Thomas Aquinas holds that:

Now, from the fact that God rules things by His providence it follows that He preserves them in being. . . . [T]o be is not the nature or essence of any created thing, but only of God. . . . Therefore, no thing can remain in being if divine operation cease.<sup>1</sup>

Both reason and faith bind us to say that creatures are kept in being by God. . . . [T]he being of every creature depends on God, so that not for a moment could it subsist, but would fall into nothingness were it not kept in being by the operation of the Divine power, as Gregory says.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Summa Contra Gentiles 3:65 in Saint Thomas Aquinas, Summa Contra Gentiles, Book Three: Providence, Part I, trans. Vernon J. Bourke (Notre Dame: University of Notre Dame Press, 1975).

<sup>&</sup>lt;sup>2</sup>Summa Theologiae I.104.1. All quotes from the Summa Theologiae (ST) are taken from St. Thomas Aquinas, Summa Theologica, trans. Fathers of the English Dominican Province (New York: Benziger Brothers, 1948).

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The Gregory referred to is Pope St. Gregory the Great, like Aquinas a Doctor of the Church. A third such Doctor to advocate DDC was St. Augustine, who writes:

Wisdom, when It governs created things graciously, gives them a motion beyond our powers to comprehend or describe. . . . And if this motion is withdrawn and Wisdom ceases from this work, creatures will immediately perish.<sup>3</sup>

Let us, therefore, believe and, if possible, also understand that God is working even now, so that if His action should be withdrawn from His creatures, they would perish.<sup>4</sup>

That "faith binds us" to affirm DDC (as Aquinas puts it) is indicated by various biblical passages. Wisdom 11:25 asks: "How would anything have endured if thou hadst not willed it?" Hebrews 1:3 speaks of Christ "upholding the universe by his word of power," and Colossians 1:17 says that "in him all things hold together." Especially within the Catholic tradition, DDC is regarded as essential to Christian orthodoxy. The *Catechism of the Council of Trent* (or Roman Catechism) teaches that:

[A]s all things derive existence from the Creator's supreme power, wisdom, and goodness, so unless preserved continually by His Providence, and by the same power which produced them, they would instantly return into their nothingness.<sup>7</sup>

The first Vatican Council declares that "God protects and governs by His providence all things which He created," which theologians typically interpret as teaching that God keeps created things from lapsing into nonexistence. (Cf. the passage from the *Summa Contra Gentiles* quoted above, wherein Aquinas links conservation to divine providence.)

These citations should suffice to establish the theological importance of DDC, and thus the significance of any challenge to the doctrine, such as that posed by what Mortimer Adler called the "principle of inertia in being" and what,

<sup>&</sup>lt;sup>3</sup>De Genesi ad litteram 4:12 in St. Augustine, The Literal Meaning of Genesis, vol. 1, trans. John Hammond Taylor (New York: Paulist Press, 1982), 118.

<sup>&</sup>lt;sup>4</sup>De Genesi ad litteram 5:20.

<sup>&</sup>lt;sup>5</sup>Revised Standard Version throughout.

<sup>&</sup>lt;sup>6</sup>It is classified as *de fide* in Ludwig Ott's *Fundamentals of Catholic Dogma* (Cork: Mercier Press, 1955), 87.

<sup>&</sup>lt;sup>7</sup>Part I, Article I.

<sup>&</sup>lt;sup>8</sup>Denzinger, *Sources of Catholic Dogma*, trans. Roy J. De Ferrari (Fitzwilliam, NH: Loreto Publications, 2002), sec. 1784.

<sup>&</sup>lt;sup>9</sup>Mortimer Adler, *How to Think About God: A Guide for the 20th-Century Pagan* (New York: Collier/Macmillan, 1980), 125, 132.

following John Beaudoin's more elegant formulation, we will call the Doctrine of Existential Inertia (DEI). 10 According to DEI, the world of contingent things, once it exists, will tend to continue in existence on its own at least until something positively acts to destroy it. It thus has no need to be conserved in being by God.

Beaudoin asserts that "despite its centrality to the orthodox view about God's relationship to his creation . . . attempts to *prove* that the world could not endure but for God's conserving activity are scarce."11 Similarly, Robert Pasnau and Christopher Shields claim that Aquinas, when defending DDC, "does not offer anything like a decisive refutation" of DEI. 12 If accurate, such claims would be surprising given that, as we have seen, Aquinas holds that reason as well as faith "binds us" to affirm DDC. But such claims are not accurate. For one thing, the very passages from Aquinas quoted above, wherein he affirms DDC, occur in contexts in which he presents arguments for that doctrine and against DEI. But more importantly, the main arguments for God's existence within classical philosophical theology are, when properly understood, themselves arguments for DDC and against DEI. In particular, this is precisely how Aquinas's famous Five Ways (which are really just summaries of traditional arguments Aquinas did not claim to have invented himself) should be understood, or so I will argue. DDC is not regarded by Aquinas and other defenders of the arguments in question as some additional thesis that must be established separately, after God's existence has first been demonstrated via the theistic proofs. Rather, the proofs are intended to establish God's existence precisely by showing that the world could not exist even for an instant, or at least could not exist in the specific ways it actually does exist, were it not for the continual conserving action of God. And if the proofs succeed (as Aquinas obviously thinks they do), then DEI would by implication be thereby "decisively refuted" (as Pasnau and Shields put it).

In sections II through VII, I will develop and defend the suggestion that the traditional theistic proofs represented by the Five Ways are best read as defenses of DDC and, consequently, as implicit critiques of DEI. That they are challenging critiques, deserving the attention of contemporary philosophers, is something

<sup>&</sup>lt;sup>10</sup>John Beaudoin, "The World's Continuance: Divine Conservation or Existential Inertia?," *International Journal for Philosophy of Religion* 61 (2007): 83–98. The expression "existential inertia" is used by other writers too. See, e.g., Norman Kretzmann, *The Metaphysics of Theism* (Oxford: Clarendon Press, 1997), 98. Cf. Robert Pasnau and Christopher Shields, *The Philosophy of Aquinas* (Boulder, CO: Westview Press, 2004), 144–5, which speaks of "the principle of inertia for existence." Jonathan Kvanvig and Hugh McCann characterize the rival to DDC as the doctrine of the world's "self-sustenance," and regard talk of existential inertia as one possible construal of self-sustenance. See their article "Divine Conservation and the Persistence of the World," in *Divine and Human Action: Essays in the Metaphysics of Theism*, ed. Thomas V. Morris (Ithaca: Cornell University Press, 1988), 13–49.

<sup>&</sup>lt;sup>11</sup>Beaudoin, "The World's Continuance," 84.

<sup>&</sup>lt;sup>12</sup>Pasnau and Shields, Philosophy of Aquinas, 144.

I hope will be evident from the discussion, as well as from VIII through XI, where I will explore how the traditional proofs so interpreted might form the basis of a response to recent defenses of DEI. Section XII will attempt to make explicit the core metaphysical disagreements which, as the preceding discussion will have indicated, underlie the dispute over DDC and DEI. It will be argued that a proper understanding and resolution of the latter dispute is impossible without a proper understanding and resolution of the former, more fundamental metaphysical disagreements. While the paper does not pretend to resolve either of these disputes, I hope it will contribute to the understanding of both.

II.

DDC, DEI, and the Five Ways. How to interpret the Five Ways, and whether and how they might be defended against the standard objections, are, of course, large questions that I cannot address in any detail here. I have done so elsewhere. 13 Here I will ignore exegetical questions, borrowing freely from the history of Thomistic interpretation of the proofs rather than sticking closely to Aquinas's texts. I will focus on what I take to be the nerve of each of the arguments, treating them (somewhat anachronistically) as representative of the five main traditional Thomistic approaches to arguing from the world to the existence of a divine conserver of the world (some of the details of which are not explicit in Aquinas but suggested in the work of later Thomists). 14 These approaches can be summarized as follows: The first argues that the existence, even for an instant, of composites of act and potency presupposes the simultaneous existence of that which is pure act; the second argues that the existence, even for an instant, of composites of essence and existence presupposes the simultaneous existence of that which is being or existence itself; the third argues that the existence, even for an instant, of composites of form and matter presupposes the simultaneous existence of an absolutely necessary being; the fourth argues that the existence, even for an instant, of things which are many and come in degrees of perfection presupposes the simultaneous existence of something one and absolutely perfect; and the fifth argues that the existence, even for an instant, of finality or directedness toward an end presupposes the simultaneous existence of a supreme ordering intellect. Let us examine each of these in turn.

<sup>&</sup>lt;sup>13</sup>See Edward Feser, Aquinas (Oxford: Oneworld, 2009), especially chap. 3.

<sup>&</sup>lt;sup>14</sup>I am in this regard merely treating the Five Ways as the Thomistic tradition has always treated them, as living arguments rather than museum pieces. What matters ultimately is not whether Aquinas himself explicitly said such-and-such in the course of stating the proofs, but rather whether such-and-such in fact follows from what he did say, or at least whether it is the sort of thing one could or should say if one is committed to the same principles Aquinas was. Hence the arguments to be examined here are certainly *Thomistic* arguments, whether or not they are in every respect *Aquinas's* arguments.

#### III.

The First Way. The First Way is otherwise known as the argument from motion to an Unmoved Mover, where by "motion" Aquinas means change of any sort and where by "change" he means the reduction of potency to act (or potentiality to actuality). Given the details of Aquinas's presentation of the argument in the Summa Theologiae and elsewhere, contemporary discussions of it tend, understandably, to focus on a myriad of questions about whether its treatment of local motion is vitiated by Newton's law of inertia, whether the cause of something's actually having some feature F must itself actually be F, and so forth. But I would suggest that the heart of the argument is actually much more straightforward than it might at first appear, or at least that the argument suggests a more straightforward argument that can be expressed exclusively in the language of act and potency, leaving to one side questions about local motion and the like. Moreover, while it is natural and useful to introduce the notion of the reduction of potency to act using events as examples—like Aquinas's example of wood being heated by fire—I would suggest also that the thrust of the argument is best understood in terms of substances rather than events. For the occurrence of an event ultimately presupposes (for an Aristotelian like Aquinas, certainly) the existence of a substance or substances;<sup>15</sup> and the existence of a natural substance involves, no less than the events it enters into does, the reduction of potency to act. Accordingly, we might present a "streamlined" reconstruction of the argument as follows:

- 1. That the actualization of potency is a real feature of the world follows from the occurrence of the events we know of via sensory experience.
- 2. The occurrence of any event E presupposes the operation of a substance.
- 3. The existence of any natural substance *S* at any given moment presupposes the concurrent actualization of a potency.
- 4. No mere potency can actualize a potency; only something actual can do so.
- 5. So any actualizer *A* of *S*'s current existence must itself be actual.
- 6. A's own existence at the moment it actualizes S itself presupposes either (a) the concurrent actualization of a further potency or (b) A's being purely actual.

<sup>&</sup>lt;sup>15</sup>"It is evident that anything whatever operates so far as it is a being" (*Quaestiones disputatae de anima*, article 19 in St. Thomas Aquinas, *The Soul*, trans. John Patrick Rowan [St. Louis: B. Herder, 1949]). See Feser, *Aquinas*, 74–6, for discussion and defense of the suggestion that the argument from motion is ultimately concerned to explain the existence of the things which move no less than the fact of their motion.

- 7. If *A*'s existence at the moment it actualizes *S* presupposes the concurrent actualization of a further potency, then there exists a regress of concurrent actualizers that is either infinite or terminates in a purely actual actualizer.
- 8. But such a regress of concurrent actualizers would constitute a causal series ordered *per se*, and such a series cannot regress infinitely.
- 9. So either *A* itself is purely actual or there is a purely actual actualizer which terminates the regress of concurrent actualizers.
- 10. So the occurrence of E and thus the existence of S at any given moment presupposes the existence of a purely actual actualizer.

The argument is, admittedly, highly abstract compared to Aquinas's own presentation. Again, I am not putting forward textual exegesis here, but something more like "rational reconstruction" (if such positivist jargon can be forgiven in this context) in light of the history of Thomistic interpretation of the argument. But the reduction of potency to act—the explanation of which, as I have indicated, is Aquinas's ultimate concern in the argument—is itself a highly abstract notion in any event. And the point of focusing on it is to make as evident as possible the relevance of the argument from motion to the dispute between DDC and DEI.

All the same, the reader might reasonably ask what sort of potency it is the actualization of which premise (3) tells us is presupposed by the existence at any moment of a natural substance S. The answer is that there are several possible answers. In an Aristotelian vein, one might hold that any natural substance S must be a composite of prime matter and substantial form, and that since prime matter is of itself purely potential, S cannot exist unless some actualizer A conjoins (and keeps conjoined) to its prime matter the substantial form of S. Or, in a more distinctively Thomistic vein, one might hold that any natural substance S must be a composite of an essence and an act of existence, and that since an essence is of itself purely potential, S cannot exist unless some actualizer A conjoins (and keeps conjoined) to its essence S's act of existence. Or, in a more Neo-Platonic vein, one might hold that any natural substance S will be in some respect or other composite so that its parts only potentially constitute the whole unless conjoined (and kept conjoined) by some actualizer A which is incomposite or One. Indeed, among the rest of the Five Ways are arguments which deploy precisely these sorts of analyses of natural substances. The argument from motion to an Unmoved Mover—or what we might more fittingly (if less elegantly) call the argument from the actualization of potency to that which is Actus Purus—can be understood, then, as holding that whatever the metaphysical details turn out to be vis-à-vis the structure of events and substances, they will

involve the actualization of potency, and that this presupposes the operation of that which is pure act.<sup>16</sup>

The rest of the argument will be familiar to those acquainted with the literature on the Five Ways. For example, the notion of a causal series ordered per se, to which premise (8) appeals, is the notion of a series all but one of whose members have no independent causal power, but derive their efficacy from an uncaused cause to whom they are related as instruments. (Recall Aquinas's example of the stick which can move the stone only insofar as it is being used by the hand to move it.) That Aquinas has this sort of series in mind (rather than a series ordered *per accidens*, of the sort which might trace back infinitely into the past) is well known to serious students of the argument, even if not to some of its popular critics and defenders. And the idea (at least as some commentators would interpret or extend Aquinas's argument) is that if A's existence depends on the concurrent existence and actualizing activity of some further actualizer B, and B's existence depends on the concurrent existence and actualizing activity of some further actualizer C, then we clearly have a series ordered per se which can terminate only in that which can actualize without itself requiring actualization—something that just is, already, purely actual.

As I have said, a more detailed discussion and defense of the argument is not something I can get into here, though I have done so elsewhere and I will make some general remarks in the final section of the present paper. The point for now is to note that the argument clearly constitutes a defense of DDC and a critique of DEI. For, if successful, it would show that no natural substance could exist at any given moment without a purely actual actualizer either directly or indirectly maintaining it in existence. And the notion of *Actus Purus* or pure act is the philosophical core of at least the Aristotelian-Thomistic conception of God.

<sup>&</sup>lt;sup>16</sup>An anonymous referee objects that in the First Way Aquinas is concerned only with explaining motion and not with explaining the existence of things. But whether this is so is a matter of dispute among Thomists; and in any event (and as I have emphasized already) I am not putting forward exegesis of Aquinas's own texts here, but rather considering the Five Ways as they have been developed within the Thomistic tradition as a whole. For the view that the argument from motion is implicitly concerned with existence (or that it can at least plausibly be developed in that direction), see: Etienne Gilson, The Christian Philosophy of St. Thomas Aquinas (South Bend, IN: University of Notre Dame Press, 1994), 77-83; Kretzmann, The Metaphysics of Theism, 111-2; D. Q. McInerny, Natural Theology (Elmhurst, PA: Priestly Fraternity of St. Peter, 2005), 89–91; Joseph Owens, An Elementary Christian Metaphysics (Houston: Center for Thomistic Studies, 1985), 343-6; Henri Renard, The Philosophy of God (Milwaukee: Bruce Publishing Company, 1951), 31; and Stephen Weber, "Concerning the Impossibility of A Posteriori Arguments for the Existence of God," Journal of Religion 53 (1973): 83-98. A critical discussion of the views of Gilson, Owens, and Weber can be found in William Lane Craig, The Cosmological Argument from Plato to Leibniz (New York: Harper and Row, 1980), 162-72. Again, I have defended the idea that the argument from motion is ultimately concerned with the existence of things that move no less than their motion in my Aquinas, 74-6.

#### IV.

The Second Way. The Second Way is also known as the argument from efficient causality to an Uncaused Cause. As is often noted, the argument can seem at first glance to differ from the First Way only verbally. But several commentators have suggested (correctly, in my view) that there is a substantive difference between them insofar as the Second Way takes as its *explanandum* the existence or being of things, whereas the First Way seeks to explain their motion or change (even if it, too, as I have suggested, must account for their existence in the course of explaining their motion). In this respect, the Second Way is reminiscent of what is sometimes called the "existential proof" of Aquinas's *De ente et essentia*, and since the point of the Five Ways is to survey what Aquinas takes to be the main arguments for God's existence, it is natural to wonder whether the former argument was intended as a summary of the latter. The suggestion is controversial but, I think, correct, and I will take it for granted in my discussion here.<sup>17</sup>

Now, the existential proof presupposes Aquinas's famous doctrine (alluded to above) of the real distinction between essence and existence in everything other than God. The proof seeks to show that nothing in which essence and existence are distinct could exist even for an instant unless there is something in which essence and existence are identical—something which just is *ipsum esse subsistens*, Subsistent Being Itself—conjoining its essence to an act of existence and thereby maintaining it in being. Reading the Second Way in light of this approach suggests the following reconstruction:

- 1. That efficient causation is a real feature of the world is evident from sensory experience.
- 2. Nothing can be the efficient cause of itself.
- 3. The existence of any natural substance *S* at any given moment presupposes that its essence is concurrently being conjoined to an act of existence.
- 4. If *S* itself were somehow conjoining its own essence to an act of existence, it would be the efficient cause of itself.
- 5. So there must be some concurrent efficient cause *C* distinct from *S* which is conjoining *S*'s essence to an act of existence.
- 6. C's own existence at the moment it conjoins S's essence to an act of existence presupposes either (a) that C's essence is concurrently being

<sup>&</sup>lt;sup>17</sup>William Lane Craig, who agrees that the Second Way is concerned to explain the existence or being of things, nevertheless resists any assimilation of it to the argument of *De ente et essentia*. See his *The Cosmological Argument from Plato to Leibniz*, 177. I defend the assimilation and reply to Craig in my *Aquinas*, 84–7.

conjoined to an act of existence, or (b) that in *C* essence and existence are identical.

- 7. If *C*s existence at the moment it conjoins *S*'s essence to an act of existence presupposes that *C*s own essence is concurrently being conjoined to an act of existence, then there exists a regress of concurrent conjoiners of essences and acts of existence that is either infinite or terminates in something whose essence and existence are identical.
- 8. But such a regress of concurrent conjoiners of essence and existence would constitute a causal series ordered *per se*, and such a series cannot regress infinitely.
- 9. So either *C*'s own essence and existence are identical, or there is something else whose essence and existence are identical which terminates the regress of concurrent conjoiners of essences with acts of existence.
- 10. So the existence of *S* at any given moment presupposes the existence of something in which essence and existence are identical.

There are obvious parallels between this argument and the argument for a purely actual actualizer. The notion of a causal series ordered per se plays a similar role in both, and that which initiates the potential regress is similar too. In the first argument, the idea was that the existence of any natural substance S at any given moment presupposes the actualization at that moment of a potency, and that whatever does the actualizing must itself already be actual. We saw that this actualizing might be conceived of more concretely in terms of S's prime matter having conjoined to it the substantial form of S, or in terms of S's essence being conjoined to an act of existence. The argument for an Uncaused Cause, as I have interpreted it, essentially makes a separate argument of this second more concrete conceptualization of the actualizing of S. It holds that S's essence, and thus S itself, is merely potential until that essence is conjoined with an act of existence. But if S or S's essence did this conjoining, then S would be the cause of itself, which is impossible. Hence the conjoining must be done by some cause C distinct from S. But the distinction between S's essence and existence that this presupposes is as real after S first comes into existence as it was before; and for S or S's essence to conjoin S's essence to an act of existence even after S first comes into existence would be for S to cause itself, which is no less impossible after S already exists than before. 18 Hence the conjoining of S's essence and existence by a cause distinct from S must be maintained at any moment S exists.

<sup>&</sup>lt;sup>18</sup>Obviously the temporal language here ("until," "after," "before") is to be understood metaphorically, as implying relations of *ontological* rather than temporal priority or posteriority.

As with the argument for a purely actual actualizer, there is much more to be said about the argument, and as with the former argument, a completely general treatment is beyond the scope of this paper, while some of the specific issues germane to the theme of the paper will be addressed in the later sections. The point to emphasize for the moment is that here too we have an argument for DDC and against DEI. For if *S* cannot cause its own continuance in existence any more than its coming into being, then DEI is false. And if what does cause its continuance in existence must ultimately be something in which essence and existence are identical, then since this just is the core of the Thomistic conception of God, DDC is true.

V.

The Third Way. The Third Way is otherwise known as the argument from the contingency of the world to the existence of an absolutely Necessary Being. It would be a serious mistake to read into the argument themes of the sort familiar from contemporary discussions of contingency and necessity, such as appeals to the "conceivability" of this or that, or to possible worlds, or the assimilation of metaphysical necessity to logical necessity. For Aquinas, as for Aristotelians generally, possibility and necessity are grounded in what is actual. We do not determine the essence of a thing by first considering what it would be like in various possible worlds; rather, we determine what it would be like in various possible worlds only after first determining its essence, which means determining what it is like in the actual world. Hence, when in the Third Way Aquinas says that the things our senses reveal to us are "possible not to be," he doesn't mean that we can "conceive" of them going out of existence or that there is at least one possible world in which they do so. He means that there is something in their nature that makes them inherently incapable of persisting indefinitely. And when he goes on to say that "that which is possible not to be at some time is not," he is not fallaciously arguing that if some event is possible in some completely abstract way—in the sense that we can conceive of it without contradiction, say, or that there is a possible world where it occurs—then it will happen in the actual world. He is saying rather that if a thing has an inherent tendency to go out of existence, then eventually that tendency will be manifested in its actually going out of existence.

The basis of this tendency in the things of our experience is their form/matter composition, for "a possibility of non-being is in the nature of those things . . . whose matter is subject to contrariety of forms." But even if one

<sup>&</sup>lt;sup>19</sup>Quaestiones disputatae de potentia Dei 5.3 in Thomas Aquinas, On the Power of God, trans. Lawrence Shapcote (Westminster, MD: The Newman Press, 1932).

concedes that material things have and will realize such a tendency, and even if one concedes too Aquinas's further claim that if everything is "possible not to be" then at one time there would have been nothing, might one not argue that the underlying matter out of which the things of our experience are made is itself not "possible not to be," that it is a kind of necessary being? Indeed, some critics of the Third Way make precisely this suggestion.<sup>20</sup> Where they go wrong is in assuming that Aquinas would disagree with them. For in fact, Aquinas himself holds that while individual material things are generated and corrupted, matter and form themselves are (apart from special divine creation, to which he would not appeal for the purposes of the argument at hand lest he argue in a circle) not susceptible of generation and corruption.<sup>21</sup> So, Aquinas is happy to concede, at least for the sake of argument, that matter might be a kind of necessary being. Moreover, he recognizes the existence of other non-divine necessary beings as well, such as angels and even heavenly bodies (which, given the astronomical knowledge then available, the medievals mistakenly regarded as not undergoing corruption). This should not be surprising when we keep in mind that getting to the existence of a necessary being is only the first half of the Third Way. The second half is devoted to showing that any necessary being that does not have its necessity of itself must ultimately derive it from a necessary being which does have its necessity of itself. In particular, it is Aquinas's view that even if matter and form, angels and heavenly bodies count as necessary beings of a sort, they do not have their necessity of themselves but must derive it from an absolutely necessary being, namely God.<sup>22</sup>

That the matter which persists throughout the generations and corruptions of particular material objects cannot have its necessity of itself should be obvious when we consider that for Aquinas such matter is just prime matter or pure potentiality, which by itself and apart from the forms it takes on has no actuality nor indeed any reality at all, necessary or otherwise. And for Aquinas the forms in question have (apart from the postmortem souls of human beings) no existence apart from matter, so that they cannot be said to have their necessity of themselves either. Nor will it do to suggest that any particular form/matter composite might have its necessity of itself, even apart from the fact that such composites have an inherent tendency to go out of existence. For since in purely material substances matter depends on form and form depends on matter, we

<sup>&</sup>lt;sup>20</sup>See, e.g., J. L. Mackie, *The Miracle of Theism* (Oxford: Clarendon Press, 1982), 91; and Bede Rundle, *Why There Is Something Rather Than Nothing* (Oxford: Clarendon Press, 2004), 96–7.
<sup>21</sup>De principiis naturae 2.15.

<sup>&</sup>lt;sup>22</sup>That angels and the like are "necessary" in this derivative sense does not entail for Aquinas that they cannot go out of existence, only that they cannot do so in the way material things do, i.e., via corruption. Such a derivatively necessary being could go out of existence via annihilation, if God ceased conjoining its essence to an act of existence.

would have a vicious explanatory circle unless there was something outside the form/matter composite which accounts for its existence.<sup>23</sup> Then there is the fact that material objects are composites of essence and existence as well, as are disembodied human souls and angels; and for reasons already stated, such composites must be sustained in being by something in which essence and existence are identical. In this way, then, necessary beings other than God must derive their necessity from God.<sup>24</sup>

With this interpretive background in place, we can propose the following reconstruction of the basic thrust of the argument from contingency:

- 1. That the particular substances revealed to us in sensory experience are contingent is evident from the fact that they are generated and corrupted.
- 2. Their generation and corruption presuppose matter and form, which are neither generated nor corrupted and are thus necessary.
- 3. But matter of itself is pure potency and material forms of themselves are mere abstractions, so that neither can exist apart from the other; and even when existing together they cannot depend on each other alone on pain of vicious circularity.
- 4. So matter and form do not have their necessity of themselves but must derive it from something else.
- Material substances are also composites of essence and existence, as are non-divine necessary beings like angels, and any such composite must have its essence and existence conjoined by something distinct from it.
- 6. So these other necessary beings too must derive their necessity from something else.
- 7. But a regress of necessary beings deriving their necessity from another would constitute a causal series ordered *per se*, which of its nature cannot regress infinitely.
- 8. So there must be something which is necessary in an absolute way, not deriving its necessity from another and (therefore) not a composite of form and matter or essence and existence.

Note that prime matter cannot at any moment exist without form and a material form cannot at any moment exist without prime matter; they depend on each other at every moment in which they are conjoined together in a material substance. Hence the circularity inherent in explaining the existence of a material substance's form in terms of its matter and the existence of its matter in terms of

<sup>&</sup>lt;sup>23</sup>Cf. Christopher F. J. Martin, *Thomas Aquinas: God and Explanations* (Edinburgh: Edinburgh University Press, 1997), 166–7.

<sup>&</sup>lt;sup>24</sup>For a detailed defense of this reading of the Third Way, see Feser, *Aquinas*, 90–9.

its form holds at any moment at which the substance exists, so that they require an external cause of their conjunction at any moment it exists. Something similar holds of any composite of essence and existence, for reasons already explained. So, we have in the present argument too an argument against DEI and, since the ultimate explanation arrived at is an absolutely necessary being which is not a compound of essence and existence but that in which essence and existence are identical, an argument for DDC as well.

#### VI.

The Fourth Way. The Fourth Way is sometimes described as an argument from grades of perfection to a divine Exemplar, and sometimes as a henological argument from the multiplicity of things to a divine Unity. Like the Five Ways in general, it is very widely misunderstood, perhaps even more so than the other arguments. For example, it is often assumed that Aquinas is arguing that every attribute that comes in degrees must have its fullest exemplar in God; and it is then objected that this entails such absurdities as that God must be the supreme exemplar of smelliness. But in fact Aquinas is concerned only with what the Scholastics called the transcendentals—being, one, good, true, and the like which, unlike smelliness, sweetness, heat, cold, red, green, etc., are predicable of everything without exception. And it is because the transcendentals are (as the Scholastics held) "convertible" with one another that Aquinas takes what is most true, most good, and so forth to be one and the same thing, and to be identical in turn with what is "uttermost being." The argument is also often read in Platonic terms, and while this is not an egregious misunderstanding, it is also not quite right. Aquinas is indeed committed to a doctrine of "participation," but he does not understand participation in terms of purely formal causation, and he does not regard the being, goodness, unity, and truth in which things participate as abstract objects à la Plato's Forms. Rather, he takes the transcendentals participated in to be the efficient causes of things' being good, true, one, etc., to the extent that they are, where what this ultimately entails is that the Subsistent Being Itself with which all the transcendentals are identical is the one efficient cause of their being, goodness, truth, unity, etc., at any given moment.<sup>25</sup>

In short, we can think of the Fourth Way as a kind of extension, via the doctrine of the transcendentals, of the basic thrust of the earlier argument for an Uncaused Cause whose essence and existence are identical. That in which essence and existence are distinct, and which is thus limited in being, depends

<sup>&</sup>lt;sup>25</sup>This is not to deny that there is also a sense in which they are formal causes. As an anonymous referee notes, "Aquinas also takes them to be *formal causes* as *exemplars*" and thereby "proves that God is both the formal exemplar cause of the being (*esse*) of all beings as well as their efficient cause."

upon that which just is pure existence or being. But being is convertible with goodness, unity, truth, etc. Hence that which is good only in some limited way must depend on that which is pure goodness, that which has unity only in some limited way must depend in on that which is absolutely one, and so forth.<sup>26</sup> This suggests the following reconstruction of the argument from grades of perfection:

- 1. The things of our experience exhibit goodness, unity, and the other transcendentals only to some limited degree.
- 2. But they can do so only insofar as they participate in that which is good, one, etc., without limitation.
- 3. Moreover, the transcendentals are convertible with one another, and ultimately with Being Itself.
- 4. So there is some one thing which is being itself, goodness itself, unity itself, and so forth, in which the things of our experience participate to the degrees they do.
- 5. But that in which things participate is their efficient cause.
- 6. So the one thing which is being itself, goodness itself, unity itself, etc., is the efficient cause of the things of our experience.

Keep in mind that for Platonism, things participate in the Forms at every moment in which they exist at all, and otherwise would not exist at all. For instance, a dog is a dog only insofar as it participates in the Form of Dog, and if it were to cease participating in that Form even for an instant, it would cease to exist *qua* dog. And though Aquinas's notion of participation is not identical to Plato's, it has that much in common with it. Just as that in which essence and existence are distinct—that is to say, that which has being only in a limited way—could not in Aquinas's view exist for an instant if it were not sustained in being by that which just is Being Itself, so too he thinks that that which has goodness, unity, etc., only in a limited way could not exist (or at least not exist *qua* good, one, and so forth) even for an instant if it were not sustained by that which just is supreme goodness, unity, etc. So, once again we have an implicit argument against DEI and (given that that which is being itself, goodness itself, unity itself, etc., is God) an implicit argument for DDC.

## VII.

The Fifth Way. The Fifth Way is also known as the argument from finality to a supreme ordering intelligence. It might also be described as a teleological

<sup>&</sup>lt;sup>26</sup>Once again, see my *Aquinas* for a detailed defense of my proposed reading of the Fourth Way, especially 99–109.

argument, but it has nothing to do with the "design argument" of William Paley. Paley and other defenders of the latter sort of argument take for granted a mechanistic conception of the natural order on which it is devoid of anything like Aristotelian substantial forms or final causes. While they argue that certain natural phenomena are teleological, the teleology in question is understood to be extrinsic or imposed from outside rather than immanent or "built in," as Aristotelian natures and final causes are. The basis for a Paleyan inference to design is a judgment to the effect that certain natural phenomena are too complex plausibly to have arisen through natural processes and are thus probably the artifacts of a superior intelligence. Aquinas's argument is nothing like this. He regards teleology as immanent to the natural order, as manifest in even the simplest causal processes rather than only in complex phenomena, and as something that leads us conclusively to the existence of a supreme intellect rather than merely as a matter of probability.

Take a simple causal regularity, such as a match's tendency to generate flame and heat when struck, or ice's tendency to cool the air or liquid surrounding it, or some even more basic causal regularity at the micro level.<sup>27</sup> Why is it that it is flame and heat specifically that a match will tend to generate when struck? It will not always actually generate it, of course, for it might be impeded in some way from doing so—oxygen might be absent, or it might have been water damaged, or it might have simply gotten so old that the chemicals in the match head have lost their potency. But unless impeded in such ways, it will produce its characteristic effects, and only those effects, rather than generating frost and cold, say, or the smell of lilacs, or a thunderclap. Again, why? Aquinas's answer is that "every agent acts for an end: otherwise one thing would not follow more than another from the action of the agent, unless it were by chance."28 By "agent" he means an efficient cause, and by "acting for an end" he means that such a cause is as it were "directed toward" the production of its characteristic effect or effects as to an end or goal. In this way, efficient causality presupposes final causality: If we do not suppose that some cause A of its nature "points to" or is "directed at" the generation of some effect or range of effects B, specifically—rather than to C, D, or no effect at all—then we have no way of making intelligible why it does in fact regularly generate B rather than these other effects. Notice that this does not involve attributing anything like a biological function to such causes—biological functions are, contrary to a common misconception, only one, relatively rare kind of finality in nature, and do not exhaust final causality—and that it has

<sup>&</sup>lt;sup>27</sup>Nothing hinges on the specific examples. If a reductionist insists that the causal properties of matches, or ice, or any macro-level object can be reduced without remainder to the causal properties of some micro level entities, the defender of the Fifth Way can simply re-state the point in terms of those more basic regularities.

<sup>&</sup>lt;sup>28</sup>Summa Theologiae I.44.4.

nothing to do with complexity. Furthermore, the end-directedness in question is inherent to causes, something they have by virtue of their natures or essences. At least in the case of natural causes (such as ice's tendency to cool surrounding water or air) we can determine from the regularity of their behavior alone what their causal tendencies and thus "final causes" are, and do not need to advert to the intentions of a designer. (Indeed, Aristotle, who believed both in final causes and in God, did not think that the former needed to be explained in terms of the latter.)

This essentially Aristotelian, anti-mechanistic conception of the world as immanently teleological is what Aquinas means to affirm in the first half of the Fifth Way, when he writes:

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 always, 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.

By "designedly" (*ex intentione*), he does not mean "because of a designer," à la Paley. Rather, he means, as Aristotle would, "because of the teleology or end-directedness inherent in things, rather than by chance." Whether this teleology must itself be explained in terms of intelligence is a further question, one Aquinas gets to only in the next sentence, when he writes that "whatever lacks intelligence cannot move towards an end, unless it be directed by some being endowed with knowledge and intelligence." The claim is peremptory; there is no question here of "weighing probabilities" or the like. Why?

The basic idea is this. A cause cannot be efficacious unless it exists in some way. But in the case of the final cause of some unintelligent causal process, the cause in question does not exist in the natural order. For instance, the oak is the end or final cause of the acorn, and yet until the acorn develops into the

<sup>&</sup>lt;sup>29</sup>Christopher F. J. Martin translates *ex intentione* as "in virtue of some tendency" (*Thomas Aquinas: God and Explanations*, 179), which is, I think, to be preferred both to the widely used Fathers of the English Dominican Province translation quoted above and to the common alternative translation "by intention." "Designedly" and "by intention," while not incorrect, can be misleading given the way "design" and "intention" are typically used in contemporary philosophical discussion of these issues, which differs from the way they are used in Scholastic philosophy. As Bernard Wuellner explains in his *Dictionary of Scholastic Philosophy* (Milwaukee: Bruce Publishing Company, 1956), in Scholastic metaphysics "intention" can mean "the direction or application of causal power to an effect; the influence of the primary cause on the instrument" (63). (For the first "of," Wuellner's text actually reads "or," but this is evidently a typographical error.) Wuellner adds: "This may be the primary meaning of intention as it best shows the notion of directing or tending on the part of a being or power." Again, what is in view is the Aristotelian notion of *immanent* teleology, rather than the *extrinsic* teleology in terms of which Paley and his contemporary successors frame their "design argument."

oak, the oak does not actually exist in the natural world. Now with artifacts, the final cause can be efficacious because it exists (or rather its form exists) in the mind of the artificer. For example, a building is the final cause of the actions of a builder, and it serves as a genuine cause despite its not yet existing in the natural order by existing at least as an idea in the builder's intellect. Now unless there is some third alternative, this is how the final causes operative in the order of unintelligent natural things must exist, for they have to exist somehow in order to be efficacious. But there is no third alternative, given Aquinas's rejection of Platonism. If the oak does not exist in a Platonic third realm and it does not yet exist either in the natural world, the only place left for it to exist, as it must if it is to have any efficacy vis-à-vis the acorn, is as a form or idea in an intellect. And the same thing is true of all the other final causes operative in the order of unintelligent natural processes, which means it is true of the entire order of efficient causes making up the natural world, since all efficient causality presupposes final causality.

So, there must be an intellect outside the natural order directing things to their ends, where these ends pre-exist as ideas in said intellect. And notice that this must be the case at any moment at which natural substances exist at all, for they retain their inherent causal powers and thus their immanent finality or end-directedness at every moment at which they exist. Notice too that precisely since this finality or end-directedness is immanent, "built into" things given their natures or essences, that which directs natural things to their ends must be what gives them their natures or essences, and thus what conjoins their essences to an act of existence. Since for reasons already stated this must ultimately be something in which essence and existence are identical, we are led by yet another route to the existence of God, and not merely to a finite designer (which Paleystyle arguments cannot rule out).<sup>30</sup>

<sup>&</sup>lt;sup>30</sup>An anonymous referee objects that this goes beyond what Aquinas himself says in his statement of the Fifth Way. But again, what we are concerned with here is how the Five Ways have been interpreted and developed in the Thomistic tradition, not with exegesis of Aquinas's own texts. For one statement of the view that the Fifth Way leads to a supreme intellect which not only orders things to their ends but is also their creator, see Maurice Holloway, *An Introduction to Natural Theology* (New York: Appleton-Century-Crofts, 1959), 142. For the view that the Fifth Way leads to a supreme intellect in which essence and existence are identical, see Reginald Garrigou-Lagrange, *God: His Existence and His Nature*, vol. 1 (St. Louis: B. Herder, 1939), 370; and Renard, *The Philosophy of God*, 45–8. (Cf. also the works by Gilson and Owens cited earlier, which regard all of the Five Ways as ultimately concerned with explaining the existence of that in which existence and essence are distinct in terms of that in which essence and existence are identical.) For my own more detailed defense of the reading of the Fifth Way proposed in the text, see Feser, *Aquinas*, 110–20. For further discussion of the differences between a Paleyan conception of teleology and an Aristotelian one, see Edward Feser, "Teleology: A Shopper's Guide," *Philosophia Christi* 12 (2010): 142–59.

We are led, then, to the following reconstruction of the overall thrust of the argument from finality:

- 1. That unintelligent natural causes regularly generate certain specific effects or ranges of effects is evident from sensory experience.
- Such regularities are intelligible only on the assumption that these efficient causes inherently "point to" or are "directed at" their effects as to an end or final cause.
- 3. So there are final causes or ends immanent to the natural order.
- 4. But unintelligent natural causes can "point to" or be "directed at" such ends only if guided by an intelligence.
- 5. So there is such an intelligence.
- 6. But since the ends or final causes in question are inherent in things by virtue of their natures or essence, the intelligence in question must be the cause also of natural things having the natures or essences they do.
- 7. This entails its being that which conjoins their essences to an act of existence, and only that in which essence and existence are identical can ultimately accomplish this.
- 8. So the intelligence in question is something in which essence and existence are identical.

Once again we have an implicit argument against DEI, since the claim is that a natural substance could not have the final cause or end it has even for an instant without some intelligence distinct from it ordering it to that end, which (it is argued) entails in turn that this intelligence must be keeping its essence conjoined to an act of existence at every such instant. And since that intelligence would have to be something in which essence and existence are identical, we also have an implicit argument for DDC.

The reference, yet again, to the essence/existence distinction is likely to raise in many readers' minds a thought that has no doubt occurred to them already, viz., that the Five Ways as I (and other Thomists historically) have interpreted them overlap significantly. That impression is not entirely misleading. The Aristotelian-Thomistic metaphysical framework upon which the arguments rest—comprising the act/potency, form/matter, and essence/existence distinctions, the notions of the transcendentals, of causal powers, finality, causal series ordered *per se*, and so on and so forth—constitutes a tightly integrated structure which offers several avenues of approach to what is ultimately one and the same summit. Still, the avenues *are* different, at least at their beginning points. And even where they overlap, there is value in considering the proofs individually. If we might borrow Wittgenstein's description of his own (admittedly very different!) method, in

order fully to grasp the theological implications of the Aristotelian-Thomistic system, "the very nature of the investigation . . . compels us to travel over a wide field of thought criss-cross in every direction," making "a number of sketches of landscapes . . . in the course of these long and involved journeyings," and with "the same or almost the same points . . . always being approached afresh from different directions, and new sketches made."<sup>31</sup>

## VIII.

Recent Debate over DDC and DEI. If I am right, then, each of the traditional theistic arguments represented by the Five Ways embodies, or at least suggests, an argument for DDC and against DEI. Let us turn now to some recent defenses of DEI and critiques of DDC and consider how a defender of the Five Ways as I have interpreted them might respond.

#### IX.

Radical Versus Superficial Contingency. One of the more noteworthy defenses of DEI comes, somewhat surprisingly, from Mortimer Adler, who was himself something of a Thomist.<sup>32</sup> Adler presents two arguments, a negative argument intended to undermine what he takes to be the main grounds for rejecting DEI, and a positive argument from Ockham's razor for preferring DEI to its rejection. I will address the positive argument in a later section. Let's consider for the moment the negative argument, which appeals to a distinction between radical and superficial contingency. The reason the opponent of DEI maintains that a natural substance will go out of existence without a divine sustaining cause, Adler says, is because such substances are contingent in the sense of being generated and corrupted, and thus have no tendency of their own to continue in existence. But the contingency in question, objects Adler, is only superficial. When natural substances go out of existence, they are merely broken down into their material components, which persist in another form. They are not radically contingent in the sense of being utterly annihilated. If they were, we would have grounds for saying that they have no inherent tendency to remain in existence, but since their contingency is only superficial—they don't really go out of existence, but merely change form—such an inference is blocked. And with the inference to the falsity of DEI blocked, so too is the inference to DDC.

Adler attributes to Etienne Gilson an acknowledgment that generation and corruption are not the same thing as exnihilation (coming into being

<sup>&</sup>lt;sup>31</sup>Ludwig Wittgenstein, *Philosophical Investigations*, 3rd ed., trans. G. E. M. Anscombe (New York: Macmillan, 1968), v.

<sup>&</sup>lt;sup>32</sup>Adler, *How to Think About God*, especially chap. 13.

out of nothing) and annihilation, but says that he cannot find an explicit acknowledgment of this distinction in Aquinas.<sup>33</sup> This is odd, given that (as I noted above when discussing the Third Way) Aguinas explicitly affirms in De principiis naturae that it is only particular individual material substances that are generated and corrupted, while matter and form themselves are not. It is also odd that Adler does not take account of the fact that Aquinas explicitly acknowledges in the Third Way that there can be non-divine beings which are necessary—that is to say, beings which have no inherent tendency to go out of existence—while maintaining that such beings nevertheless require a divine sustaining cause insofar as they do not have their necessity of themselves. Had he taken account of it, he might have seen that a thing's having no tendency to go out of existence is *in itself* no evidence at all that the thing possesses existential inertia. For everything depends on why it lacks such a tendency. If there is something in a thing's own nature that explains why it lacks that tendency, then DEI would indeed be vindicated. But if there is nothing in its nature that could account for the lack of such a tendency, then DEI is false and we have to appeal to something external to the thing to account for it.

Unfortunately, Adler never addresses the question of what there might be in a thing's nature that could either give it, or prevent it from possessing, existential inertia. But that question is at the heart of the dispute between Aquinas and the defender of DEI. Adler mistakenly assumes that Aquinas's position has to do fundamentally with contingency *as such*, that Aquinas is saying something like:

If *S* is contingent, then *S* lacks existential inertia.

Adler's objection is that, at least in the case where the contingency in question is superficial rather than radical, the conditional is false. But Aquinas is not saying that, or rather not *merely* saying that. He is saying instead something like:

If *S* has feature *F*, then *S* lacks existential inertia *whether S is contingent or necessary*.

And what F is, specifically, is *being metaphysically composite*—being, that is to say, a compound of form and matter, or of essence and existence, or, more generally, of act and potency. This is explicitly what is at issue in the first three Ways as I have proposed interpreting them, and it is implicit in the Fourth and Fifth Ways as well insofar as they too ultimately infer to something which maintains its effect in existence by conjoining an essence to an act of existence.<sup>34</sup>

<sup>33</sup>Ibid., 127.

<sup>&</sup>lt;sup>34</sup>That it is being composite that ultimately makes a thing dependent for its continued existence upon a sustaining cause is emphasized in David Braine, *The Reality of Time and the Existence of God: The Project of Proving God's Existence* (Oxford: Clarendon Press, 1988). See especially 177–96 and 342–45. That whatever is composite must ultimately be explained in terms of that which just is existence itself is also more or less the thrust of the arguments of Barry Miller, *From Existence to* 

Adler's failure to see that it is compositeness rather than contingency that lies at the heart of Aquinas's objection to DEI is related to a muddle in his distinction between radical and superficial contingency. Adler holds that a cat, say, is only superficially rather than radically contingent because its parts remain after the cat dies; and this is meant to support the claim that the cat possesses existential inertia. This at least gives the impression that the cat is no more than the sum of its parts—that something of the cat in fact remains after its death insofar as its parts persist, which is at least a natural way to read the claim that its contingency is only "superficial." Alternatively, D. Q. McInerny suggests that Adler thinks of a radically contingent being as one which depends on something else for its very existence, but of a superficially contingent being as one which depends on something else only for a "mode of being." 35 And if so, then (now to go beyond what McInerny himself says) it would seem to follow that for Adler, being a cat—or being a tree, or a stone, or a car, or any other of the ordinary objects of our experience—is really only a mode of the material world itself, which persists as a substance throughout the acquisition and loss of these modes. Whichever of these readings we adopt, from the point of view of the Aristotelian hylemorphism informing Aquinas's position, Adler simply misunderstands the nature of material substances, or at least begs the question against Aquinas. For the hylemorphist, a cat is neither an aggregate of material parts nor a mode of some material substance, but rather is itself a substance composed of prime matter and substantial form. Its going out of existence consists in its prime matter losing the substantial form of a cat and taking on some other substantial form or forms, such as the forms of the chemical elements that existed in the cat virtually while it was still alive. And because the substantial form of the cat is lost, there is absolutely nothing of the cat left after its death. The "parts" which carry on are not really cat parts in the strict sense—they cannot be, since there is no substantial form of a cat left to inform them—but rather new substances which came into being when the prime matter acquired new substantial forms. (A dead cat is not a kind of cat, but rather, as Monty Python might put it, an "ex-cat.")36

Even if Adler insisted that a cat or any other natural object was really just an aggregate of material parts or a mode of a substance constituted by the material world as a whole, the hylemorphist could respond that the fundamental material

God (London: Routledge, 1992), and William F. Vallicella, A Paradigm Theory of Existence: Onto-Theology Vindicated (Dordrecht: Kluwer Academic Publishers, 2002).

<sup>&</sup>lt;sup>35</sup>McInerny, Natural Theology, 137.

<sup>&</sup>lt;sup>36</sup>Accordingly, McInerny says that in the relevant sense, and contrary to what Adler claims, a material substance qua substance *is* "annihilated" when it goes out of existence; for the *substance* really is completely gone even if its prime matter persists under another substantial form (ibid., 138). But it seems to me less misleading to reserve the description "annihilation" for the case where neither the substance nor its prime matter persist in any way.

parts themselves—basic particles, or whatever—or the world considered as one gigantic substance, would still be composed of prime matter and substantial form. And *if* the material world is susceptible of a hylemorphic analysis at *some* level of description (a question we'll return to in the last section of the paper), we have an argument from the nature of material substances against DEI. That argument is already implicit in what was said in the previous section about the Third Way, but it will be worthwhile to make it explicit at this point, adding as a first premise a familiar principle of Scholastic metaphysics:

- 1. A cause cannot give what it does not have to give.
- 2. A material substance is a composite of prime matter and substantial form.
- 3. Something has existential inertia if and only if it has of itself a tendency to persist in existence once it exists.
- 4. But prime matter by itself and apart from substantial form is pure potency, and thus has of itself no tendency to persist in existence.
- 5. And substantial form by itself and apart from prime matter is a mere abstraction, and thus of itself also has no tendency to persist in existence.<sup>37</sup>
- 6. So neither prime matter as the material cause of a material substance, nor substantial form as its formal cause, can impart to the material substance they compose a tendency to persist in existence.
- 7. But there are no other internal principles from which such a substance might derive such a tendency.<sup>38</sup>
- 8. So no material substance has a tendency of itself to persist in existence once it exists.
- 9. So no material substance has existential inertia.

X.

Nothing to Explain? This argument, as well as the readings of the Five Ways I have proposed, also constitute an obvious response to an objection sometimes

<sup>&</sup>lt;sup>37</sup>I ignore for present purposes the special case of the rational soul.

<sup>&</sup>lt;sup>38</sup>This premise reflects the Aristotelian thesis that among the four causes of a thing, its formal and material causes are intrinsic to it while its final and efficient causes are extrinsic. See Aquinas, *De principiis naturae* III.20. To be sure, that a natural substance *has* such-and-such a final cause is something intrinsic to it, but that is true by virtue of its *formal* cause. To take an example from earlier, the tendency of ice to cool what surrounds it is intrinsic to it, something determined by the substantial form of the water that it is composed of. It is part of its nature to have the generation of this outcome as an "end." But the end *itself*—coolness in the surrounding environment—is obviously something extrinsic to the ice.

raised against DDC to the effect that it is an answer to a question that we shouldn't bother asking in the first place. For instance, Bede Rundle holds that "no form of causation, divine or otherwise, is in general required to ensure persistence in being. . . . [M]any things in the universe, as indeed the universe itself, do not have to fight for their survival, but, in the absence of forces which would bring them to an end, their continuation from moment to moment is in no need of explanation." But if the composite act/potency or form/matter or essence/existence structure of natural substances entails that they cannot persist in existence on their own, then the fact of their persistence does require explanation, and the arguments in question purport to show that DDC is that explanation.

Other critics of DDC do not deny that the persistence of natural substances requires explanation, but claim that DEI suffices to explain it. Adler takes this approach himself, as does Beaudoin. The trouble is that for this strategy to work, the defender of DEI has to provide some account of natural substances that is both consistent with what we know about them and does not entail rejecting DEI, and no such account has been offered. For instance, as Beaudoin acknowledges, a plausible version of DEI will have to acknowledge that natural substances are contingent. But *why* are they contingent? As we saw when discussing Adler, Aquinas's answer is that they are composite in various ways, and it is this compositeness that entails that they cannot enjoy existential inertia. Only something non-composite, and thus something necessary (indeed something divine) can in his view have that. So, to defend his proposal Beaudoin would have to provide some account of natural substances on which their contingency does not derive from their being composite, or on which it does but where this compositeness somehow does not entail a rejection of DEI. Yet he gives no such account.

What he does tell us is merely that DEI is committed to the minimal claim that there exist some fundamental constituents of the natural world—whether they are conceived of as particles, or superstrings, or some continuous evermorphing kind of stuff is irrelevant, he says—which are contingent but which nevertheless given their nature have no inherent tendency to go out of existence. He acknowledges that it will not do to suggest that it is simply a "brute fact" that things have existential inertia, and that it would be a "metaphysical muddle" to think of existential inertia as an active power a thing exerts on itself. At the

<sup>&</sup>lt;sup>39</sup>Rundle, Why There Is Something Rather Than Nothing, 93.

<sup>&</sup>lt;sup>40</sup>Beaudoin, "The World's Continuance," 86–7. Beaudoin says that a stronger version of DEI would assert that the everyday objects composed of arrangements of these fundamental constituents also enjoy existential inertia, but that this is not essential to countering DDC and that such a stronger thesis is in any event implausible in light of "radioactive decay and some other quantum-level events."

<sup>&</sup>lt;sup>41</sup>Ibid., 88 and 93. Beaudoin agrees with Kvanvig and McCann that it would be incoherent to suggest that the continued existence of a thing can be explained in terms of an "active

same time, he never explains *how it is* that the basic constituents he speaks of would have existential inertia despite being contingent. He merely puts forward the suggestion that they could have it as a claim that is not obviously incoherent, and suggests also that "it is far from clear that the proponent of DDC will fare better" in explaining why God's existence is not a brute fact.<sup>42</sup>

But it is obvious from the foregoing that the DDC proponent *does* fare better, for he can say that the reason God's existence is necessary is that He is Pure Act, Subsistent Being Itself, something absolutely One. The DDC proponent has—in the Aristotelian-Thomistic theories of act and potency, form and matter, essence and existence, final causality, the transcendentals, and so forth—a worked-out general metaphysics that both explains why natural substances lack existential inertia and provides an account of the divine nature. And as we will see in the final section of the paper, this general metaphysics is independently motivated, put forward as a way of accounting for basic features of the natural world and of our scientific knowledge of it that are acknowledged by the theist and the atheist alike. By contrast, Beaudoin offers little more than the bare assertion that at least at some, fundamental level, the natural world of contingent things enjoys existential inertia, where the assertion seems to have no theoretical motivation other than as a means of blocking an inference to DDC. It would be tempting to accuse Beaudoin of putting forward a "dormitive power" explanation of why things have existential inertia, except that this would be unfair to "dormitive power" explanations. For to say that opium puts people to sleep because of its dormitive power is (contrary to the stock dismissal of such explanations as tautologous) at least minimally informative: It tells us that the fact that opium puts people to sleep is no accident, but is rooted in some active power opium has by nature. But Beaudoin explicitly eschews the suggestion that existential inertia involves the operation of an active power, and offers no other explanation of why a thing might have it.

For this reason, it will not do to suggest, as both Adler and Beaudoin appear to, that an appeal to Ockham's razor or the principle of parsimony favors DEI over DDC. For this would be so only if both views offered equally good explanations of the relevant facts—such as the contingency of the natural world—where DEI did so without postulating as many entities as DDC. But DEI does not offer any *explanation* at all. It simply amounts to the denial of the DDC explanation. DEI proponents do not say: "Yes, given an Aristotelian-Thomistic analysis of natural substances in terms of act and potency, form and matter, essence and existence, and so forth, no such substances can have existential inertia; but here

power" of self-sustenance, since the operation of such a power would itself *presuppose* the thing's continued existence.

<sup>&</sup>lt;sup>42</sup>Ibid., 89.

is an alternative analysis of the nature of such substances on which they do have it." Rather, they offer no analysis at all. True, they do not affirm the Aristotelian-Thomistic conceptual apparatus, but neither do they put anything in its place. And merely to refrain from describing a phenomenon in some particular way is not to provide an alternative description of it.

## XI.

The Mythology of Inertia. To reason from the premise that material substances are governed by Newton's law of inertia with respect to motion to the conclusion that they therefore enjoy existential inertia as well would be a gross non sequitur, and Beaudoin explicitly rejects any such argument. He also follows Jonathan Kvanvig and Hugh McCann in rejecting the suggestion that the principle of the conservation of mass-energy entails DEI. He Still, both principles hover like specters over the debate about DEI and DDC, and defenders of DEI clearly believe that these findings of modern science at least lend plausibility to DEI and to that extent pose a difficulty for DDC. The idea seems to be that since the principles in question "explain" the phenomena of motion, mass, and energy, so too might a further inertial principle plausibly "explain" the continuance of the world. David Braine characterizes this sort of thinking as beholden to what he aptly labels "the mythology of inertia," and he quotes the following lines from Wittgenstein to indicate what is wrong with it:

The whole modern conception of the world is founded on the illusion that the so-called laws of nature are the explanations of natural phenomena.

Thus people today stop at the laws of nature, treating them as something inviolable, just as God and Fate were treated in past ages.

And in fact both are right and both wrong: though the view of the ancients is clearer in so far as they have a clear and acknowledged terminus, while the modern system tries to make it look as if everything were explained.<sup>45</sup>

Of course, Wittgenstein was not endorsing the Thomistic arguments for God's existence, or any other such arguments. But those arguments are indeed "clearer" than is the scientism Wittgenstein is criticizing, not only about what their proposed terminus is but also (and contrary to what Wittgenstein implies) about how that proposed terminus really does "explain everything." For if there really is

<sup>43</sup>Ibid.

<sup>&</sup>lt;sup>44</sup>Ibid., 90–1, and Kvanvig and McCann, "Divine Conservation," 31–4.

<sup>&</sup>lt;sup>45</sup>Braine, *The Reality of Time and the Existence of God*, 14–5. The Wittgenstein passage is from *Tractatus Logico-Philosophicus*, trans. D. F. Pears and B. F. McGuinness (London: Routledge and Kegan Paul, 1961), at 6.371 and 6.372.

something that just is Pure Act, Subsistent Being Itself, absolute simplicity, and so forth, then there is no mystery about why this something requires no further explanation. But the same cannot be said for "laws of nature," inertial or otherwise. As Kvanvig and McCann emphasize, "laws, after all, are descriptive in import. They do not *operate* at all, despite our figures of speech, and they do not do anything in or to the world. If they are true, it is because things themselves have features the laws describe."46 But neither will it do to appeal to these "things themselves," to some basic material entities which by their nature operate in accordance with the laws, as if they would constitute a plausible explanatory terminus. For we need to know why these entities exist—not merely how they got here in the first place, but why they persist in existence. And as Braine emphasizes, it would be incoherent to suggest that their natures *explain* their persistence in being, since their having natures in the first place *presupposes* that they persist in being. <sup>47</sup>

It is worth reemphasizing that the DEI proponent has no *tu quoque* escape available here, no way of stalemating the defender of DDC by accusing him of a similar failure of explanation. For, to repeat, the difficulty arises from the *composite* nature of any explanans posited by DEI, and the whole point of DDC, at least as understood by thinkers like Aquinas, is to end the explanatory regress by concluding to something *non*-composite.<sup>48</sup>

## XII.

Metaphysical Issues Underlying the Debate. Obviously, whether the Aristotelian-Thomistic critique of DEI and defense of DDC that I have been developing here succeeds is a question that cannot be settled apart from a more detailed evaluation of the family of theistic arguments represented by the Five Ways. (As I have said, I have presented such an evaluation elsewhere, in my Aquinas.) Equally obviously, there are more fundamental metaphysical considerations to be evaluated as well. In particular, as my discussion has made clear, the dispute between the proponent of DEI on the one hand and at least Thomistic defenders of DDC on the other crucially hinges on whether something like a general Aristotelian-Thomistic metaphysics and philosophy of nature is correct. If the correct analysis of natural substances entails recognizing something like the

<sup>&</sup>lt;sup>46</sup>Kvanvig and McCann, "Divine Conservation," 34.

<sup>&</sup>lt;sup>47</sup>Braine, The Reality of Time and the Existence of God, 10.

<sup>&</sup>lt;sup>48</sup>Though Beaudoin eschews an active power construal of DEI, he does regard existential inertia as part of the essence or nature of whatever fundamental material elements turn out to have it (94). But here as elsewhere, he never considers, much less answers, the question of how something composed of act and potency, or form and matter, or essence and existence could possibly have existential inertia, despite the Thomist's claim to have shown that it cannot have it.

traditional distinctions between act and potency, form and matter, essence and existence, and so forth, then as we have seen, this would entail at the very least a powerful case against DEI and in favor of DDC. But if such an analysis is fundamentally in error, then the basis for the Thomistic position on these issues would seem to collapse.

There can be no question that the prevailing attitude among modern philosophers has been that the Aristotelian-Thomistic metaphysics and philosophy of nature *is* in error. Indeed, this attitude can plausibly be seen as *definitive* of modern philosophy. When Galileo, Descartes, Boyle, Locke, and the other early moderns replaced the Scholastics' conception of nature with a "mechanistic" one, what this entailed, essentially, was a rejection of substantial forms and final causes. Other elements too were part of the original mechanistic project (corpuscularianism, a push-pull model of causation, and so forth) but while these were all eventually either radically modified or dropped altogether, the negative, anti-Aristotelian element of the program—the resolve to avoid any appeal to *immanent teleology*, to the notion of an *end* to which a natural substance or process is directed given its *nature or essence*<sup>49</sup>—has remained, and remained definitive of a mechanistic approach to nature, down to the present day.<sup>50</sup>

From an Aristotelian-Thomistic point of view, it was this move to mechanism that effectively undermined the possibility of arguing from the world to God, especially to God as a conserving cause. For the various elements of the Aristotelico-Thomistic metaphysical system are tightly integrated; remove one and the rest could not fail to go with it. In particular, if things have no substantial forms or immanent final causes, then they cannot coherently be said to be

<sup>&</sup>lt;sup>49</sup>As noted earlier when discussing the Fifth Way, the Aristotelian conception of teleology as immanent to the natural order must be distinguished from the view of Newton, Boyle, Paley, and other proponents of the "design argument" to the effect that God imposes order on the world in the way an artificer re-works natural materials to serve an end they wouldn't otherwise have. Though committed to teleology, the latter sort of view is mechanistic precisely because it holds that final causes are not *immanent*, not in things by virtue of their *substantial forms*. For useful discussion of the differences between these two conceptions of teleology, see Margaret J. Osler, "From Immanent Natures to Nature as Artifice: The Reinterpretation of Final Causes in Seventeenth-Century Natural Philosophy," *The Monist* 79 (1996): 388–407; and André Ariew, "Platonic and Aristotelian Roots of Teleological Arguments," in *Functions: New Essays in the Philosophy of Psychology and Biology*, ed. André Ariew, Robert Cummins, and Mark Perlman (Oxford: Oxford University Press, 2002), 7–32. See also my "Teleology: A Shopper's Guide."

<sup>&</sup>lt;sup>50</sup>That what is essential to a "mechanistic" conception of nature is the eschewal of immanent teleology seems fairly widely recognized. For example, such an understanding of mechanism is expressed by the philosopher of science David Hull, in "Mechanistic Explanation" in *The Cambridge Dictionary of Philosophy*, ed. Robert Audi (Cambridge: Cambridge University Press, 1995), 476–7; by philosopher of mind Tim Crane, in his book *The Mechanical Mind*, 2nd ed. (London: Routledge, 2003), 2–4; and by philosopher of religion William Hasker, in his book *The Emergent Self* (Ithaca: Cornell University Press, 1999), 62–4.

compounds of act and potency either. A substantial form just is what actualizes a potency inherent in matter. A potency is a potency *for* some actuality, *toward which* it is directed as towards an end. Hence, if there are no substantial forms, there is no actualizing of potencies, and if there are no ends or final causes, there are no potencies either. The notion of substances as compounds of essence and existence goes out the window too, since from a Thomistic point of view an essence is in potency relative to an act of existence, which actualizes it.

With this conceptual apparatus abandoned, the foundations of the traditional theistic arguments summarized in the Five Ways were undermined. The elements composing the material world—no longer united organically into substances via immanent formal and final causes—came to seem essentially "loose and separate," having no more *inherent* unity than the parts of a machine do. Hence the regularities they did exhibit were reconceived on the model of the regularities a watch or some other mechanical artifact exhibits when its parts are arranged by an artificer. The "laws of nature"—as these regularities came to be described, displacing talk of the natures or substantial forms of things—were just the patterns the divine artificer had put into the bits of clockwork that make up the world. As a machine can operate in the absence of its maker, though, so too did the world come to seem something that could operate in the absence of the artificer. Thus did the doctrine of divine conservation give way to deism. And the sequel, naturally, was atheism, once it occurred to mechanists that if the "machine" of the world could operate here and now without a machinist, maybe it always has so operated—maybe the "machine" and the "laws" governing it are all that has ever existed.

Rationalist cosmological arguments of the sort associated with Leibniz were intended to counter this atheistic trend. But the notions of contingency and necessity they employ are no longer grounded in the natures of things—in the real composition of act and potency and essence and existence in contingent things, and in the pure actuality and identity of essence and existence in God. Instead, a thing's contingency is reduced to the logical possibility of its non-existence, and necessity is reduced to logical necessity. A "principle of sufficient reason" is deployed in place of the Scholastics' principle of causality, and where the latter is grounded in the objective impossibility of a mere potency actualizing itself, the former is put forward as a would-be "law of thought." The cosmological argument comes to seem little more than a demand that the world meet certain explanatory criteria which may (or may not) be built into the structure of the human mind, but which do not necessarily reflect any aspect of objective, extra-mental reality, and the door is thereby opened to the refutations of Hume and Kant.<sup>51</sup>

<sup>&</sup>lt;sup>51</sup>Though defending DEI with respect to the objects of our ordinary experience, Adler does in *How to Think About God* endorse a version of the cosmological argument that appeals to the

Whatever its consequences for philosophical theology have been, the anti-Aristotelian mechanistic revolution is often claimed to have been vindicated by the successes of modern science. But though it features prominently in the rhetoric of contemporary scientism, the inference is confused. Mechanism is not and never has been a "result" or "finding" of empirical science, but rather a methodological preference, a stipulation about what would be allowed to *count* as science. This seems to have been widely recognized by earlier generations of intellectuals, and not just those sympathetic to Aristotelianism or Thomism. According to Basil Willey, what the mechanistic revolution reflected was "a transference of interests rather than . . . the mere 'exantlation' [drawing out] of new truth or the mere rejection of error," and in particular a "wish for a new life-orientation" which required "a hitherto unthought-of degree of control over 'things." 52 "Galileo typifies the direction of modern interests," Willey says, "in this instance, not in refuting St. Thomas, but in taking no notice of him."53 According to W. T. Stace, final causes were abandoned "on the ground that inquiry into purposes is useless for what science aims at: namely, the prediction and control of events."54 What Willey and Stace are alluding to is, of course, the express desire of early modern thinkers to enhance "human utility and power" through the "mechanical arts" or technology (as Bacon put it) and to make us "masters and possessors of nature" (in the words of Descartes).<sup>55</sup> And the preference for a reductively mathematical theoretical description of the natural world that this entailed led in the view of E. A. Burtt to a "metaphysical barbarism" which only "wishful thinking" or "uncritical confidence" could support in face of the various difficulties afflicting it.<sup>56</sup>

Not the least of these difficulties is the Humean challenge to the intelligibility of efficient causality that followed in the wake of the early moderns' rejection of immanent final causality, together with the related problem of induction. For as we noted when discussing the Fifth Way, for Aquinas and other Scholastics, there is no way to make sense of the fact that some cause A regularly generates a specific effect or range of effects B unless we suppose that the generation of B is the "end" or "goal" toward which A is directed, as toward a final cause. The

contingency of the universe as a whole. But Adler's reason for judging the universe to be contingent is that it is one possible universe among others, which makes his argument more Leibnizian and rationalist in spirit than Aristotelian or Thomistic.

<sup>&</sup>lt;sup>52</sup>Basil Willey, *The Seventeenth Century Background* (New York: Doubleday, 1965), 23, emphasis in original.

<sup>&</sup>lt;sup>53</sup>Ibid., 25.

<sup>&</sup>lt;sup>54</sup>W. T. Stace, "Man against Darkness," *The Atlantic* 182 (1948): 530–8.

<sup>&</sup>lt;sup>55</sup>See Bacon's *The Great Instauration*, in *The New Organon and Related Writings*, ed. Fulton H. Anderson (New York: Liberal Arts Press, 1960), 3–32, at 8 and 16; and Descartes's *Discourse on Method*, trans. Donald A. Cress (Indianapolis: Hackett, 1980), 33.

<sup>&</sup>lt;sup>56</sup>E. A. Burtt, *The Metaphysical Foundations of Modern Physical Science* (Atlantic Highlands, NJ: Humanities Press, 1952), 305–6.

link between the anti-Scholastic revolution and Hume's puzzles was noted by Alfred North Whitehead, who judged that:

If the cause in itself discloses no information as to the effect, so that the first invention of it must be *entirely* arbitrary, it follows at once that science is impossible, except in the sense of establishing *entirely arbitrary* connections which are not warranted by anything intrinsic to the natures either of causes or effects. Some variant of Hume's philosophy has generally prevailed among men of science. But scientific faith has risen to the occasion, and has tacitly removed the philosophic mountain.<sup>57</sup>

The ironic consequence is that "the clergy were in principle rationalists, whereas the men of science were content with a simple faith in the order of nature." 58

From an Aristotelian-Thomistic point of view, then, not only does science not vindicate the move away from an Aristotelian philosophy of nature; the intelligibility of science in fact presupposes such a philosophy of nature. To focus only on those aspects of the world which can be quantified, predicted, and controlled is indeed methodologically useful if all one cares about are those particular aspects. But it simply does not follow from the success of this purely methodological decision that no other aspects exist, that one ought in Burtt's words to "make a metaphysics out of [one's] method." And the quantifiable aspects are in any event abstracted from substances, a complete characterization of which must include reference to essences and causal powers—and thus to something like substantial forms and final causes—if one is to account for the truth of the laws stated in quantificational terms.

Needless to say, this is a very large subject. Suffice it for now to point out that it is not only Thomists or those with a theological ax to grind who would defend a return to something like an Aristotelian conception of nature. Analytic metaphysicians like John Heil, C. B. Martin, and George Molnar have argued that to make sense of efficient causality we need to recognize the existence of dispositional properties inherently directed towards their manifestations—essentially a return to Aquinas's thesis that "every agent acts for an end." 60 "New

<sup>&</sup>lt;sup>57</sup> Alfred North Whitehead, *Science and the Modern World* (New York: The Free Press, 1967), 4.

<sup>&</sup>lt;sup>58</sup>Ibid., 51. For two useful accounts of the gradual transformation of the Scholastics' conception of causation in early modern philosophy, and of the philosophical problems this occasioned, see Kenneth Clatterbaugh, *The Causation Debate in Modern Philosophy 1637–1739* (London: Routledge, 1999); and Walter Ott, *Causation and Laws of Nature in Early Modern Philosophy* (Oxford: Oxford University Press, 2009).

<sup>&</sup>lt;sup>59</sup>Burtt, The Metaphysical Foundations of Modern Physical Science, 229.

<sup>&</sup>lt;sup>60</sup>John Heil, *From an Ontological Point of View* (Oxford: Clarendon Press, 2003); C. B. Martin, *The Mind in Nature* (Oxford: Clarendon Press, 2008); George Molnar, *Powers: A Study in Metaphysics* (Oxford: Oxford University Press, 2003).

essentialist" philosophers of science like Brian Ellis and Nancy Cartwright have proposed a neo-Aristotelian essentialist interpretation of the results of physics and chemistry. The biologist J. Scott Turner and philosophers of biology like Marjorie Grene and André Ariew propose that something like Aristotelian teleology must be acknowledged if we are to make sense of developmental processes. Examples could be multiplied of work in recent philosophy from outside the Thomistic orbit which is sympathetic to a reconsideration of various Aristotelian metaphysical themes. And then there is of course the work of writers like David Oderberg, James Ross, and other so-called "analytical Thomistic" metaphysics and philosophy of nature. And the science is a specifically Aristotelian Thomistic metaphysics and philosophy of nature.

So, the dispute between Aristotelianism and mechanism is very much a *live* one. That entails that the Thomistic critique of DEI and associated defense of DDC remains a live position as well. And as I have tried to show, it is a position that proponents of DEI and critics of DDC have yet seriously to deal with.<sup>64</sup>

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<sup>&</sup>lt;sup>61</sup>Brian Ellis, *The Philosophy of Nature: A Guide to the New Essentialism* (Chesham: Acumen, 2002); Nancy Cartwright, "Aristotelian Natures and the Modern Experimental Method," in *Inference, Explanation, and Other Frustrations: Essays in the Philosophy of Science*, ed. John Earman (Berkeley and Los Angeles: University of California Press, 1992), 44–71.

<sup>&</sup>lt;sup>62</sup>J. Scott Turner, *The Tinkerer's Accomplice: How Design Emerges from Life Itself* (Cambridge, MA: Harvard University Press, 2007); Marjorie Grene, "Biology and Teleology," in *The Understanding of Nature: Essays in the Philosophy of Biology* (Dordrecht: Reidel, 1974), 172–9; Ariew, "Platonic and Aristotelian Roots of Teleological Arguments."

<sup>&</sup>lt;sup>63</sup>See David S. Oderberg, *Real Essentialism* (London: Routledge, 2007) and James Ross, *Thought and World: The Hidden Necessities* (Notre Dame: University of Notre Dame Press, 2008). I have defended such a return in *Aquinas* and also, in a more polemical and semi-popular fashion, in *The Last Superstition: A Refutation of the New Atheism* (South Bend, IN: Saint Augustine's Press, 2008).

<sup>&</sup>lt;sup>64</sup>For comments on earlier versions of this paper, I thank Mark Anderson, David Clemenson, David Oderberg, Bill Vallicella, an anonymous referee, and audience members at the conference Metaphysics: Aristotelian, Scholastic, Analytic, held in Prague in July 2010.