

# Reflections on *The Last Superstition*

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I have been debating with Christian apologists ever since I got my first Internet account back in 1999. My adversaries have been almost exclusively Protestant evangelicals, though, and thus have rarely presented me with any serious intellectual challenges. Dealing with their arguments has usually been little more than a kind of philosophical target practice. That changed when I discovered [Strange Notions](#) a few years ago. Brandon Vogt, the site's creator and administrator, calls it "the central place of dialogue between Catholics and atheists." And most of the Catholics who hang out there are just a lot more intellectually savvy than the average Protestant apologist whom I've met online. I discovered in short order that if I was going to adequately defend my worldview against them, I was going to have to remedy a deficiency in my philosophical education. Specifically, I was going to have to get more familiar with Aristotle and Thomas Aquinas.

At about this same time I learned of a book called *The Last Superstition*, written by Edward Feser, a Christian philosopher who seemed to have some expertise in the Aristotelian-Thomistic basis of Roman Catholicism. Having already read some of his other work, I figured I would read it. What follows is my critique of it. It is a far longer essay than what I usually write, but I felt compelled to be as thorough as my time would permit.

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Several years ago, Edward Feser was mad as hell and wasn't going to take it anymore. So he wrote *The Last Superstition: A Refutation of the New Atheism*. He comments in the preface:

Yet atheist chic is now, out of the blue as it were, the stuff of best sellers, celebrity endorsements, and suburban reading groups. It is as if the urbane cocktail hour secularist liberalism of the twentieth century has, by way of the slow but sure inebriation produced by an unbroken series of social and judicial triumphs, now become in the twenty-first century fall-down-sloppy drunk and lost all inhibition, by turns blaspheming, whoring, and otherwise offending against all sane and decent sensibilities as the mood strikes it.<sup>1</sup>

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<sup>1</sup>Edward Feser, *The Last Superstition: A Refutation of the New Atheism*, South Bend, Indiana: St. Augustine's Press, 2008, p. 11. All citations herein are to a PDF version that was available online when I started this but has since been removed.

And why has this been happening? Feser seems to think it's because nobody takes Aristotle seriously anymore. Most Christian apologists blame a generic godlessness, and Feser does that, too, but he's more specific than that. Religion is still pretty popular in America, but not the kind of religion he thinks we all need.

“Only a (certain kind of) religious view of the world is rational, morally responsible, and sane; and an irreligious worldview is accordingly deeply irrational, immoral, and indeed insane,” he says,<sup>2</sup> and that rational religious view is based on Aristotelian metaphysics as interpreted by the Medieval philosopher Thomas Aquinas. More specifically, he assures us, his book will defend three propositions: (1) that what has been called the “war between science and religion” is actually a war between naturalism and “the classical worldview of Plato, Aristotle, Augustine, and Aquinas”; (2) reason and morality are impossible within a naturalistic worldview; and (3) “the religious vision enshrined in classical philosophical theism cannot fail to commend itself to every rational and morally decent human being who correctly understands it.”<sup>3</sup>

This critique will not be aimed at discrediting Aristotle in the way that Feser attempts to discredit naturalism. I will stipulate for the sake of this discussion that a person can be consistently rational and moral while accepting Aristotle's metaphysics. The position I will be defending is that a person can also be consistently rational and moral while accepting naturalism. Feser's primary argument is that this position is indefensible. Note his words: “reason and morality are impossible within a naturalistic worldview.” It is that assertion that I shall attempt to refute.

Of course, Feser says, “I do not deny for a moment that there are secularists, atheists, and naturalists of good will, who are (apart from their rejection of religion) reasonable and morally admirable.”<sup>4</sup> What Feser denies “is that they have or can have – whether they realize this or not – any *cogent rational grounds* for their trust in reason or morality.”<sup>5</sup> I'll get to morality when Feser does, which is late in the book, but let us ask here: How does anyone justify reason without using reason? The exercise of reason is, at the very least, the use of logic. Reason and logic are inseparable even if they aren't exactly the same thing. And to be sure, many philosophers have attempted to justify logic, but their arguments have been quintessentially circular, and necessarily so. It is bare necessity itself that justifies logic: We cannot do any thinking of any kind without it, because to deny logic is to deny that there is any distinction between truth and

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<sup>2</sup>p. 17.

<sup>3</sup>p. 26.

<sup>4</sup>p. 30.

<sup>5</sup>*Ibid.*

falsehood, and without that distinction, anything we could say would be literally nonsensical, void of any semantic content. If Aristotle and only Aristotle can justify reason, then we cannot justify Aristotle without arguing in a circle.

With just that observation, I could rest my case, but let's not assume that Feser was careless enough to overlook such an obvious counterargument. Perhaps he was just being rhetorically sloppy. Still, that is how he stated his proposition, and he restated it several times throughout the book in essentially the same terms. The critique that follows will be addressed to what he said, not to any guess I might make as to what he might have meant to say instead.

Feser begins his defense of Aristotle with some commentary on his predecessors, the pre-Socratics and Plato. He begins with the observation that "they were as much 'scientists,' as that term is understood today, as they were philosophers."<sup>6</sup> And that is quite so. Academic specialties had not been invented in their time, because there was no necessity to mother the invention. It was possible, as it remained possible until the modern age, for any person of average intelligence to learn everything that was known or thought to be known about practically every important subject. The Latin word from which the English *science* evolved was a generic term for knowledge in general. For a while, as during Newton's time, what we now call science was called natural philosophy, and it's why the highest academic degree a scientist can earn at most universities is still called the doctorate of philosophy.

The pre-Socratics, Feser informs us, "were fascinated by the question of what the basic principle is that underlies all reality and unifies all the diverse phenomena of our experience."<sup>7</sup> It certainly was one issue to which they gave some attention, and it's easy enough to understand why. They were the first people we know of who give the matter any thought at all. But our ignorance of what people in those and earlier days were thinking and conversing about is vast. People weren't doing much writing yet, and what few documents they did produce didn't usually survive long.

Thales, generally said to be the first philosopher known to history, thought the basic stuff of reality was water. Pythagoras thought it was number. Others had other proposals, but between Thales and Pythagoras, according to Feser, we see

two divergent approaches to discovering the principles underlying the universe that would continue on and compete with one another for the entire history of Western philosophy and science: Thales, as evidenced by his focus on a particular observable phenomenon as the key to all reality, tended to emphasize the *senses* as the source of our

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<sup>6</sup>p. 31.

<sup>7</sup>*Ibid.*

knowledge; Pythagoras, given his focus on mathematics and the unobservable entities that seem to be its domain of study, emphasized instead the *intellect* or pure reason. And while Thales posits a *material* basis to all reality, Pythagoras posits something *immaterial*.<sup>8</sup>

That is a pretty good précis of the distinction between empiricism and rationalism. And in most places at most times, one or the other has dominated the philosophical landscape—largely, it seems to me, because of a presupposition that one or the other must have priority. We shall reconsider that presupposition in due course.

A tangential comment may be in order here. We have no good reason to think that the ancient Greeks were uniquely gifted intellectually, or that there were no philosophers before their time. The questions that philosophers try to answer have certainly occurred to some people from the dawn of human history, and those to whom they occurred must have made some effort to answer them. The notion that philosophy began with the Greeks is almost certainly partly due to Western ethnocentrism, partly due to the Greeks' having coined the word *philosophy*, and partly also due to historiographical constraints. Like the biological fossil record, the historical paper trail is incomplete, and it becomes more so the farther back we try to follow it. Serious philosophy, for those not paid to do it, demands copious amounts of leisure time, which none but the very wealthiest people had until just yesterday, historically speaking. And wealthy people are generally more preoccupied with maintaining or increasing their wealth than with answering questions, if they even have any, about the ultimate nature of reality. That we even have a record of Aristotle's answers and have some idea of who he was, is due as much to several accidents of history as to the cogency of his arguments.

Back to Feser's account of pre-Socratic philosophy, he draws a particular distinction between the rationalists and the empiricists. The former emphasized "oneness and permanence as the fundamental features of reality" while the latter focused on "the diversity and changeability of things."<sup>9</sup> Maybe so. There isn't much that we know for certain about any of the pre-Socratics, because except for a few fragments, mostly in quotations by their successors, none of their writings has survived, and those successors had their own philosophical agendas to promote. Assuming the accuracy of Feser's analysis, though, the question remains whether we must regard rationalism and empiricism as mutually exclusive or must subordinate one to the other.

When reason contradicts our senses, then we naturally think that one of them must be wrong. But it is reason itself that says so, and so the default priority seems to go to reason, and

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<sup>8</sup>*Ibid.*

<sup>9</sup>p. 33.

thus we conclude that our senses have deceived us. However, we have no assurance that we always reason correctly, and most of us understand this, too, at least in the abstract. Most of us get it that some reasoning is fallacious and that fallacious reasoning is to be avoided. And in fairness to real rationalists, none of them suggests otherwise. They will say, “Of course, when we give priority to reason, we mean proper reason.” But then we must confront the problem that reasonable people have been known to disagree about what constitutes proper reasoning.

It is one thing to identify an obvious fallacy in some argument, but there are mistakes we all make that are not obvious, at least not to ourselves and sometimes not even to our adversaries. I haven’t the space in this work to include a treatise on proper reasoning or a catalogue of all possible errors in argumentation. I can only mention some of what I think are Feser’s mistakes as I come to them.

Before getting to Plato, Feser takes a moment to praise Socrates because

He insisted that there is an objective difference between truth and falsity and good and bad, and that bad actions corrupt one’s soul and thus harm the perpetrator whether or not they bring worldly success. He constantly challenged the people of the city with his questions – “What is justice?” “What is piety?” and so forth – exposing the inadequacy of their answers and seeking better ones, in the hope of finding the true *essences* of the things he was inquiring about.<sup>10</sup>

Actually, Socrates might or might not have been looking for essences as Aristotle thought about them, which is the way Feser thinks about them. It’s hard to know what the real Socrates thought about anything, for that matter, since none of his writings, if there even were any, have survived. It is customary to treat the Socrates of Plato’s earlier dialogues as an avatar of the historical Socrates, and this is not necessarily problematic. The ideas that Plato attributed to Socrates are defensible or not on their own merits, regardless of whether the real Socrates ever expounded them. There are some people who doubt that Socrates even existed. His nonexistence might or might not be a defensible historical thesis, but it has nothing to do with the credibility of the ideas attributed to him. If they’re true, they’re not true because he said them. They are true because they are rationally defensible no matter who said them. If they’re not rationally defensible, then we should not believe them no matter who said or still says they are true.

And now to essences. To simplify, perhaps to oversimplify, there are two kinds of essences, semantic and ontological, and the latter is the Aristotelian kind.<sup>11</sup> We can illustrate

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<sup>10</sup>*Ibid.*

<sup>11</sup>In most contexts, “essentialism” means the ontological kind. There seems to be some debate about the appropriateness of attributing it to Aristotle, but it has become the convention,

with a biological term, *mammal*. In the semantic sense, the essence of a mammal is just whatever precisely we mean when we call anything a mammal, and it is up to us, the users of our own language, to decide what our words mean. We have decided, for example, that a platypus is a mammal with some reptilian characteristics, but we could have decided that it was a reptile with some mammalian characteristics. The actual decision was made for basically utilitarian reasons. But in the ontological sense, the word *mammal* has a true meaning that somehow exists independently of any notion we have about what is or isn't a mammal, and it is only by the proper exercise of our reason that we discover what that true meaning is. On this view, there is an actual fact of the matter as to whether the platypus is a mammal or a reptile—or, conceivably, something else entirely, the existence of which has thus far escaped our intellectual notice. The platypus might not, as a matter of objective fact, really be a mammal, and if the scientific community says it is, then the scientific community is just wrong. And so it is with all other abstract notions, including *justice* and *morality*. On Aristotelian essentialism, there is a fact of the matter as to what they are, and we don't decide what that fact is, but we instead discover that fact by the proper exercise of our reason.

And now to Plato, who according to Feser “gave us the first great attempt to combine all the various themes developed by his predecessors into a coherent comprehensive system.”<sup>12</sup> As anyone even barely familiar with Plato has heard, he thought the fundamental reality of anything was in its Form, of which anything we perceive with our senses, as opposed to with our intellect, is only a kind of image, and a distorted image at that. The Forms, Feser says, are the essences that Socrates had been looking for. He tries an illustration.

Consider a triangle; in fact, consider several triangles, as they might be drawn on paper, or on a chalkboard, in sand, or on a computer screen. Suppose some of them are small, some very large, some in between; some isosceles, some scalene, some obtuse, and so on . . . . Now, a triangle is just a closed plane figure with three straight sides; that is its essence or nature.<sup>13</sup>

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which Feser seems to follow, to do so. It doesn't matter for the present discussion whether Feser is correctly interpreting Aristotle. The issue is whether we must agree with that interpretation even if Aristotle himself wouldn't have. For further discussion: Gareth B. Matthews, “Aristotelian Essentialism,” *Philosophy and Phenomenological Research* 50 (1990): 251–62.

<sup>12</sup>Feser, p. 34.

<sup>13</sup>*Ibid.*

But Feser is already assuming his conclusion. While it is not incorrect to refer to “closed plane figure with three straight sides” as the “essence” or “nature” of a triangle, it would be more to the point to say that “closed plane figure with three straight sides” is the *definition* of a triangle. And it’s our definition. It is just what we mean when we call something a triangle. There are closed plane figures, and some of them have three straight sides. A closed plane figure can have more sides, none can have fewer, and those that have only three are the ones we call triangles. If it has any more sides, or if any sides are not straight, then we just don’t call it a triangle. And no matter what Plato thought, we don’t need to make it any more complicated than that. Any reference to something additional, such as essence or nature, depends on certain ontological assumptions that we don’t have to make in order to know everything we think we know about triangles. Given just our intended meaning of the word, everything Euclid said about triangles follows by logical necessity.

Feser insists: “What follows from this, Plato would say, is that when we grasp the essence or nature of being a triangle, what we grasp is not something material or physical, and not something we grasp or could grasp through the senses.”<sup>14</sup> Sure, Plato would say that. But what we are grasping when we think about triangles is a set of abstractions, some ideas or concepts about three-sided closed plane figures that are independent of any drawing or other perceptible representation of those ideas. Feser does not accept this. He denies that anything we know about triangles is “purely mental.” What we know must correspond to some objective facts because if it didn’t, then we could decide that some triangles could have four sides and no one who told us we were wrong would have an intellectual leg to stand on. Therefore, says Feser, “the essence of triangularity is something neither material nor mental.”

Nevertheless, it is mental. It doesn’t have to be anything else just because Feser, Plato, or anybody else says so. In our minds, we have notions about things we call lines and points, and in our minds we assume certain things about relationships between lines and points, and when we apply logic to those assumptions we reach certain conclusions that we accept because we’d be contradicting those assumptions if we didn’t. How we justify those assumptions in the first place is an interesting subject of its own, but that justification is itself just another mental activity.

Is it the case that if we don’t accept Plato’s thinking, then we could decide that maybe some triangles could have four sides? No, we couldn’t, not without changing the subject. The subject of our conversation would no longer be “closed plane figure with three sides.” It would be “closed plane figure with three straight sides in most cases but sometimes four.” This would not be a new way of reasoning about triangles. It would be a redefinition of the word “triangle.”

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<sup>14</sup>p. 35.

Words are ours to use as we see fit, and anyone who wants to redefine “triangle” that way is free to do so. I cannot imagine why anybody would want to, but what I can imagine is beside the point. It would be up to anyone who did it to explain to the rest of the world why they thought it would be a good idea. If they failed, as I have no doubt they would, then the rest of the world would just ignore them and the problem would end there.

What Plato seems to have supposed is that our minds had to be perceiving something, somehow, that existed somewhere outside our heads: Abstract objects had to be real, and they had to be someplace, or else we would have no way of knowing about them. This is an intuitively compelling supposition, but it has no basis in anything but our intuition. Naturalists who reject it are not obliged to prove it false. They are obliged only to avoid contradictions in any worldview that they construct without it.

Feser goes on:

And what is true of the essence of triangles is no less true, in Plato’s view, of the essences of pretty much *everything*: of squares, circles, and other geometrical figures, but also (and more interestingly) of human beings, tables and chairs, dogs and cats, trees and rocks, justice, beauty, goodness, piety, and so on and on. When we grasp the essence of any of these things, we grasp something that is universal, immaterial, extra-mental, and known via the intellect rather than senses, and is thus a denizen of this “third realm.” What we grasp, in short, is a Form.<sup>15</sup>

In this realm, the Forms exist, eternal and unchanging. And where is this realm? Wrong question, says Feser. Spatial and temporal location are properties of the material world, but “the Theory of Forms, if correct, *proves* that there is more to reality than the world of time and space.”<sup>16</sup> No, not really. The theory *asserts* that there is more but does not prove it, but that’s OK. Feser is out to discredit naturalism, which is the assumption, loosely speaking, that there is nothing more to reality than the material world of time and space. We can certainly agree that if Plato was right about his Forms, then naturalism is false. But was he right? Feser has promised to show us good reason to think so, but he has not done that yet.

According to the theory, every Form is the perfect archetype of whatever it is a Form of, and any instantiation of the Form in the material world is imperfect insofar as it differs from the archetype. In Platonic terminology, instantiation is effected by participation in the Form: every living man participates in the Form of Man, but some participate more or less than others and thus are better or worse men. But, if we know the Form of anything, then we know what it means

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<sup>15</sup>*Ibid.*

<sup>16</sup>p. 36.

for that thing to be perfect—to be as good as it can possibly be—and therefore, if you’re following Plato’s thinking, that means there must be a Form of Good itself.

then to know any Form itself requires in turn knowing the Form of the Good by reference to which it counts as a perfect archetype. The Form of the Good is thus the highest of the Forms, their source, and indeed the source of all being.<sup>17</sup>

And according to Plato, with whom Feser agrees on this particular point, we know all this through reason alone. Plato was the consummate rationalist, claiming that we just cannot trust our senses or, at the very least, that we dare not regard them as our primary source of knowledge about reality. Only our intellects, not our senses, can tell us the things we most need to know about ourselves and the world we inhabit. And everything we learn in this way, if we learn it correctly, is an objective fact, and that includes any moral principles. On this view, the wrongness of murder, for instance, is no more a matter of anyone’s judgment than the truth of the Pythagorean Theorem. Feser takes a moment here to object to the expression “moral values,” which he regards as:

a very unfortunate expression common these days even among conservatives – because the word “values” implies something dependent on someone who is doing the valuing, and thus insinuates that morality is subjective. For Plato – and Aristotle, and the medieval philosophers who followed them – nothing could be further from the truth: the good for a thing, including for a human being, is entirely objective . . . .<sup>18</sup>

Feser then introduces the reader to Allegory of the Cave, followed by an acknowledgment that few people have ever thought the theory it illustrated was entirely correct. But the core of the theory, he insists, “is admitted even by many who are unsympathetic to his overall worldview to be highly plausible and defensible.”<sup>19</sup> Well, yes, but Feser has promised more than “plausible and defensible.” He has promised to show that if we don’t agree with even the core of the theory, then we can be neither rational nor moral. He hasn’t even started to do that yet.

But, maybe he is about to. Abstractions generally have been a tough nut for materialists to crack, and Feser asks us to consider three kinds that are arguably the toughest: universals; numbers and other mathematical entities; and propositions. The most generic term for the view that these things exist objectively and independently of any human mind is *realism*. There are

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<sup>17</sup>p. 37.

<sup>18</sup>p. 38.

<sup>19</sup>p. 39.

various versions of this realism, Plato's Theory of Forms being only one. Both of the main alternatives to realism, *nominalism* and *conceptualism*, also come in varieties.

At this point, Feser offers a summary of five direct arguments in defense of realism. First: abstractions are "not reducible to any particular." Second: the facts of geometry do not depend for their truth on anything in the material world. Third: The same is true of mathematical facts in general. Fourth: All necessarily true propositions, and many contingently true propositions, are true independently of facts about the material world or the existence of any human minds. Fifth: Science utilizes mathematics and other abstractions; therefore "to accept the results of science thus commits one to accept that there are such abstract objects."<sup>20</sup> But these are not so much arguments for realism as restatements of the intuitions that motivate realism. We anti-realists get it that at some gut level, most of us feel compelled to suspect that abstractions must have a real existence independently of our minds; but we also believe that we have found good reasons to doubt that our guts are telling us the truth on this issue. Of course Feser is entitled to say, "To hell with your doubts, I'm going to trust my gut," and I for one don't have a problem with that. But when he says furthermore that if I disagree with him, I make myself inescapably liable to becoming "deeply irrational, immoral, and indeed insane," then with that attitude, I do have a problem.

We then get four indirect arguments, two objections to nominalism and two to conceptualism. I lean more to the latter than the former, but only because I think nominalism, as usually defined, is excessively reductionist. Anyway, I will address only his objections to conceptualism. Feser again is simply appealing to intuition, and in these cases I don't even share his intuition. For instance:

So, for example, when you think about the Pythagorean theorem and I think about the Pythagorean theorem, we are each thinking about *one and the same truth*; it is not that you are thinking about your own personal Pythagorean theorem and I am thinking about mine (whatever that would mean). So, concepts (and thus universals) and propositions do not exist only in the mind, subjectively, but independently of the mind, objectively.<sup>21</sup>

But that is a just blatant *non sequitur*. He simply asserts "If A then B" without offering even a hint of why B cannot be denied while affirming A. Likewise for his final argument: "Suppose that, as conceptualism implies, universals and propositions were not objective, but existed only in our minds. Then it would be impossible for us ever to communicate."<sup>22</sup> And why

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<sup>20</sup>p. 42.

<sup>21</sup>p. 43.

<sup>22</sup>*Ibid.*

is that? He doesn't say. He just repeats the assertion with various rewordings. But still, what matters to intelligible communication between two people about the Pythagorean Theorem is that whatever they are thinking about, it is the same thing as far as they can tell from everything they are saying about it. If their statements are intended to transmit the same information, then the ontological status of whatever the information is about is irrelevant, unless the ontological status is itself the topic of their conversation.

He does attempt a defense of sorts, but it is little more than an adaptation of Plantinga's evolutionary argument against naturalism. Plantinga claimed that we have no good reason to suppose that natural selection, unaided by a transcendent purposeful intelligence, could have produced brains with cognitive faculties as reliable as ours seem to be.<sup>23</sup> In Feser's version, "our concepts, standards of logic, etc.," are simply inexplicable if they are "determined not by any necessary match with objective reality but rather by the effects on our minds of contingent forces of history, culture, and the like, or even by biological evolution."<sup>24</sup> Now, it would be disingenuous to claim that something is inexplicable after having been offered an explanation, but Feser anticipates the objection. Any naturalistic explanation is self-defeating, he says, because "the advocate of such a view is going to have to explain to us how he *knows* all this, and how our minds got that way in the first place." But this objection just begs the question, because what Feser is trying to prove is that we cannot know anything at all unless we accept Platonic realism. If he asks me "How do you know X?" then I will have an answer for him. Granted, my saying that I know it doesn't mean I really know it, but neither does Feser's claim that I don't know it mean that I don't really know it. At this point, further debate about realism is a waste of time and we need to change the subject to basic epistemology.

And Feser does not even briefly address that subject. He does not tell us what the word "know" means to him, but it is a core philosophical concept, and philosophers are not of one mind about it. Many agree with his apparent thinking, but many others do not, and he is not entitled to claim that his position is the default.

If his argument is to carry any logical weight at all, he must be embracing a kind of infallibilism, the position that we don't know anything unless we know it infallibly. In other words, for any proposition *P*, I cannot correctly claim to know *P* unless it just isn't possible for me to be mistaken about the truth of *P*. If that is Feser's definition, then so be it. By that

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<sup>23</sup>Alvin Plantinga, "Naturalism Defeated," 1994. [http://www.calvin.edu/academic/philosophy/virtual\\_library/articles/plantinga\\_alvin/naturalism\\_defeated.pdf](http://www.calvin.edu/academic/philosophy/virtual_library/articles/plantinga_alvin/naturalism_defeated.pdf). I critique it at <http://dougshaver.net/philosophy/College/plantinganaturalism.htm>

<sup>24</sup>Feser, p. 44.

definition, I'll admit to knowing nothing. But that is not what I mean by knowing, and it's not what a substantial fraction of the philosophical community means. I suspect the alternative is the majority view, but I haven't seen any surveys confirming my suspicion.

For us who reject infallibilism, to put it as briefly as possible, we feel justified in claiming to know *P* if our reasons for believing it are sufficient to eliminate reasonable doubt. We can argue indefinitely about what constitutes reasonable doubt and how we can eliminate it, but we can agree that we've done it for some countless number of propositions in the natural sciences and many other fields of intellectual inquiry. But having eliminated reasonable doubt about *P*, we have not established the impossibility that *P* is false. It still could be false, for all we can know with perfect certainty. Must we then deny knowing *P*? We don't think so. If our reasons for believing *P* are good enough, then we're justified in saying we know it. What we must do is admit the hypothetical possibility that we are mistaken when we claim to know *P*. And as long as we will admit that hypothetical possibility, then we don't see an epistemological problem until we discover a good reason to think we actually have made a mistake. At this point in our epistemic history, we are epistemically entitled to say we know the earth is not the stationary center of the universe. If we should discover, 10 years or 10,000 years from now, that the Ptolemy was right after all, then we'll have to say we were wrong—but not until then.

We think this is consistent with what seems to be the consensus definition of knowledge as justified true belief. This asserts that we know a proposition *P* if and only if:

1. *P* is true as a matter of fact,
2. We believe *P*, and
3. Our belief in *P* is justified.

Most of the philosophical ink that gets spilled on this issue is about what constitutes justification.<sup>25</sup> Infallibilists say, in effect, that it must eliminate any possibility of error. The rest of us say it needs only to eliminate reasonable doubt. It's a matter of utility. Definitions cannot be true or false, but they can be more or less useful, and an infallibilist definition of knowledge is, many of us believe, not useful.

Back on track: It is not my aim in this essay to deny that Platonism or any other version of realism can ground reason and morality. My aim is to deny Feser's claim that reason and morality cannot have any other grounding and particularly not in naturalism.

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<sup>25</sup> Those who think something called the Gettier problem is real usually think a fourth criterion needs to be added. I think the problem, such as it is, can be dealt with by tweaking the definition of justification.

Feser says in summary:

It is no good appealing (as is often done) to the famous principle of Ockham's razor as a motivation; for Ockham's razor tells us to opt for the simpler theory and avoid postulating the existence of something unless we need to, and the clear lesson of the history of the debate over universals, propositions, numbers and the like is that we *do* need to "postulate" their existence.<sup>26</sup>

The clear lesson, it seems to me, is that at the end of the day, Feser's defense of realism assumes its conclusion: Realism is intuitively obvious, and we should believe it because it is intuitively obvious. He can say as often as he likes that this has been established by "the history of the debate," but the debate is not over just because he has declared victory. Reason is not grounded in Platonism, or in naturalism, or in any other philosophy, worldview, or other belief system. It is grounded in bare necessity and is thus prior to all else. If we don't accept the axioms of logic, all discussion is pointless. With the axioms in place, reason can begin.

Having so declared, Feser moves on to Aristotle. But we may note at this point that, if every argument hereafter presupposes what Feser thinks he has already proved, then he doesn't have a case.

Here is his précis of Aristotle's take on the forms:

For Aristotle, universals or forms are real, and they are not reducible to anything either material or mental. Still, he thinks it is an error to regard them as objects existing in a "third realm" of their own. Rather, considered as they are in themselves they exist only "in" the things they are the forms of; and considered as abstractions from these things, they exist only in the intellect. Furthermore, even the intellect relies on the senses in coming to know them. What all this means exactly, how it differs from the views we've considered so far, and why it matters, can only be understood in the context of Aristotle's overall metaphysics – his description of the basic principles and categories governing all reality, knowledge of which must inform any sound scientific, ethical, political, or theological inquiry.<sup>27</sup>

And then he declares (Feser's italics): "*Abandoning Aristotelianism, as the founders of modern philosophy did, was the single greatest mistake ever made in the entire history of Western thought.*"<sup>28</sup>

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<sup>26</sup>p. 45.

<sup>27</sup>p. 46.

<sup>28</sup>*Ibid.*

There are two ways to justify abandoning any worldview, not excepting Aristotle's. If we accept all the assumptions on which it is based, we can demonstrate that its conclusions do not logically follow from those assumptions. Alternatively, we can identify one or more assumptions and reject them as unwarranted, unjustified, or otherwise unconvincing, and it is up to the worldview's defender to demonstrate that we cannot reasonably do this. Assumptions, more or less by definition, are premises offered without proof. As such, they can be denied without disproof. Of course denial could lead to a contradiction, but in that case we have a proof by *reductio ad absurdum* and so it's no longer an assumption.

Of course, "unproved" does not necessarily mean "unjustified." The axioms of mathematics are the paradigmatic unproved premises, but we all agree that they cannot reasonably be denied. But their denial is not unreasonable just because everybody thinks so. The unreasonableness can be demonstrated. The demonstration is not easy to present, and most people are probably convinced that it isn't worth the bother. But it can be done. We don't need to rely on vague appeals to intuition like self-evidence or obviousness. Such appeals are good enough for the philosophically naïve, but well-reasoned justifications are out there for anyone who takes the trouble to look for them. And if Feser thinks it is similarly unreasonable to deny the assumptions on which Aristotle based his metaphysics, then it's up to him to show why.

"The place to start talking about Aristotle," says Feser, "is with Parmenides."<sup>29</sup> Parmenides argued for the impossibility of change on the grounds that change results in something new, but if something new comes into existence, then it must come from nothing, and that is impossible. Aristotle objected to Parmenides's apparent assumption that nothing was the only candidate for the source of something new. Change can occur, he said, by the actualization of potentials. Feser explains it thus:

Parmenides says: If we say that a solid rubber ball<sup>30</sup> can become soft and gooey, then it can't be the actual gooeyness itself that makes this possible, because it doesn't yet exist, and it can't be the non-existent gooeyness either, since what doesn't exist can't explain anything; so, again, the ball can never become gooey, and in general no sort of change is possible, regardless of what our senses tell us. Aristotle replies: Even if the gooeyness itself doesn't yet exist in the ball, the *potential* for gooeyness *does* exist in it, and this,

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<sup>29</sup>p. 47.

<sup>30</sup>The rubber ball is Feser's example, not Parmenides's. Parmenides couldn't have said anything about anything made of rubber, which was unknown in Europe before the 19<sup>th</sup> century.

together with some external influence that *actualizes* this potential (e.g. heat), suffices to show how the change can occur.<sup>31</sup>

Feser is about to go into more detail, but a pause is in order here to consider the historical context. It is in the neighborhood of 400 BCE. Science as we know it has not been invented yet. For roughly the next thousand years, the only people doing what we would recognize as science were the philosophers—more specifically, the natural philosophers, to use the modern taxonomy. We now understand perfectly well how a rubber ball becomes gooey when heat is applied to it. We know about atoms, molecules, thermal energy and intermolecular forces, none of which the ancients had a clue about. Well, some of them had a clue about atoms, but not enough of a clue to persuade many of their contemporaries. Among the unpersuaded was Aristotle himself, and his reputation set the consensus for the next several centuries. It wasn't just his reputation, though. Even in the modern age, the correct understanding of heat was not developed until the 19<sup>th</sup> century, and the atomic theory was not firmly established until the early 20<sup>th</sup> century, because its confirmation depended on technology that did not exist before then. The natural philosophers of ancient times were groping in almost complete darkness, and every idea they came up with needs to be evaluated accordingly. They were not any smarter than we are, and they had far fewer facts at their disposal by which to judge their own theories. About all they could do was speculate.

Speculation is not to be disparaged as such. We would have little science without it, and some of our best science has required bold speculation. But boldness alone confers no intellectual virtue on speculation. Speculation acquires its virtue only retroactively, after it has been confirmed by observation under controlled circumstances, i.e. experiment. And the Greeks, for whatever reason, were not big on experimentation. Trained reason was their forte. To be a philosopher was to be a thinker. And it still is, which is why scientists are no longer called natural philosophers. Scientists do plenty of thinking, of course, but it isn't all they do nowadays, whereas philosophers do practically nothing else.

Back to Parmenides and Aristotle. Parmenides says change can't happen, and to anyone who objects, "But we see it happen all the time," his reply was: "Well, that just goes to prove that you can't trust your senses." It is common knowledge that our senses do sometimes deceive us, and from a certain epistemological standpoint it is easy to think that if something sometimes can't be trusted, then it should never be trusted. Plato seems to have been sympathetic to such thinking, but Aristotle not so much, and for that reason is sometimes credited with being an early empiricist. Whether he is due such credit need not detain us here, but he at least agreed on empirical grounds that there had to be a mistake in any argument for the nonexistence of change.

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<sup>31</sup>p. 48.

And the mistake he found in Parmenides's argument was an excess of ontological parsimony. For Parmenides, only being could exist. For Aristotle, at least two other things had to exist, namely potential and actuality. In fact, being anything but parsimonious, he thought lots of other things had to exist. For one other thing, he said, everything had a nature, because where else would it get its potential? Rubber balls can melt, but there are lots of things they can't do. Why not? Because the potential for those other things is not in their nature. "Hence," Feser notes, "in Aristotle's sense of 'potential,' while a rubber ball could potentially be melted, it could not potentially follow someone around all by itself."<sup>32</sup>

Considering everything that Aristotle or any of his contemporaries knew or could have known about rubber balls, that was probably as good a guess as any. But it was no more than a guess, and arguably not even that. At some level it looks like little more than a *virtus dormitiva*.<sup>33</sup> Why do rubber balls melt but not follow people? Because melting is in their nature and following people isn't. And how do we know what is in their nature? Easy: What we see them do is in their nature, and what we don't see them do isn't. Perhaps Aristotle had a better answer than that, but Feser doesn't tell us what it was.

(Full disclosure: I've read some of Aristotle's *Metaphysics*, but not all of it, and his better answer might be in the part I haven't read. But it's up to his defenders to show me the answer and where to find it. I might be going out on a limb here, but if so, I'm also giving anyone who can do it a perfect opportunity to saw it off and watch me fall on my ass.)

So, a thing's potential is in its nature, but, Feser reminds us, "An outside source of change is also necessary" because "no potential can actualize itself."<sup>34</sup> Why not? Feser doesn't say exactly, but he seems to appeal to observation. One could argue that we never see a rubber ball become gooey except when it is heated, but if the potential for gooeyness could actualize itself, we should see it happen on other occasions at least once in a while. But this is not Feser's argument. He says that if any potential could actualize itself, then it always would, with the result that, in the case of rubber balls, they would all already be gooey. Therefore, a thing's potential needs an influence to be actualized, and the influence has to be external to the thing. "Thus," he says, "we have the classic Aristotelian principle: *Whatever is changed is changed by another*, or, in its more traditional formulation, *Whatever is moved is moved by another*."<sup>35</sup>

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<sup>32</sup>*Ibid.*

<sup>33</sup> For those who have already read *The Last Superstition*, please see my followup comment on p. 52.

<sup>34</sup>p. 49.

<sup>35</sup>*Ibid.*

Feser then offers the parenthetical comment:

When Aristotelians speak of “motion,” they mean “change” in general, not just motion in the sense of moving from place to place, which is what people usually mean by the word these days. . . . The Aristotelian usage is the older usage; the newer usage is a novelty, and one that leads to all sorts of misunderstandings on the part of modern writers when they consider Aristotelian ideas and arguments.<sup>36</sup>

Very well, but Aristotle is hardly the only philosopher whose ideas have been misunderstood or misrepresented. It has happened, throughout history, to every writer who has taken a position on any issue of public importance, and on both sides. And it is not just a matter of common decency to correctly understand and accurately report the arguments of one’s adversaries. It is a matter of intellectual necessity, because the inevitable alternative is that one’s counterargument will be attacking a straw man.

Feser then goes on to make some distinctions that he promises will be important later. We’ll skip them for the time being to take up form and matter.

Against Parmenides, Heraclitus, and Plato, Aristotle insists that common sense is right in affirming that the ordinary objects of everyday experience – tables, chairs, rocks, trees, dogs, cats, and people – are paradigmatically real. With Heraclitus, he holds that these real things undergo change; with Parmenides, he holds that what is real cannot be change alone; and with Plato, he holds that form is the key to understanding how something permanent underlies all change.<sup>37</sup>

Very approximately, according to this view, matter is what anything is made of, and its form or forms is the set of all of a thing’s characteristics or properties. Rubber is the matter of a rubber ball, while roundness, bounciness, and color are among its forms. Not everything that is rubber is a rubber ball, and so there is more to being a rubber ball than being made of rubber. It also needs the forms of roundness and bounciness, but it doesn’t need the form of any particular color. Feser then elaborates:

Those features that are essential to a thing comprise what Aristotelians call its *substantial form* – the form that makes a thing the kind of substance or thing that it is, its *essence*. Being round is part of the substantial form or essence of a ball; being blue is not.<sup>38</sup>

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<sup>36</sup>*Ibid.*

<sup>37</sup>p. 50.

<sup>38</sup>p. 51.

And so, in order for a rubber ball to exist, some rubber has to exist, and some roundness has to exist, and some bounciness has to exist. The rubber itself, presumably, could not bounce if it didn't have the form of bounciness. Recall that according to Aristotle, everything solid was made of just one elementary substance, called earth, and so rubber was just earth with bounciness, and a rubber ball was earth with bounciness and roundness.

OK, that's a plausible enough hypothesis for someone contemplating such things during the 4<sup>th</sup> century BCE. There were not many if any known facts to the contrary, and Aristotle's taxonomy of just four elements—earth, air, fire, and water—was superficially a lot more parsimonious than the modern periodic table of elements. He could not have known, as we know now, that his taxonomy was too parsimonious: There were too many observations that it could not explain well but could be explained better by positing the existence of many more elements, each with properties unique to itself.

Aristotle's defenders will say: Still, he got the principle right, even if he was mistaken about that particular detail. Matter is not exactly what Aristotle thought it was, but it's still matter, and we still need forms to explain why some matter is round and bouncy and other matter isn't. But why? Just because Aristotle said so? Modern chemistry and physics tell us exactly why rubber is bouncy and other things are not. Such explanations came with our modern understanding of the elements comprising the periodic table. Our reasons for disagreeing with Aristotle about there being only four elements are also our reasons for discarding what he said about forms.

“Round” and “bouncy” are words, like “triangle,” and they get their meanings from the way we use them. The objects we observe in our world have innumerable shapes. To communicate usefully about them, we have to identify and label some of those shapes that have certain characteristics in common, such as symmetry around a central point. For this to happen, nothing needs to exist except the objects themselves. The identification of a common feature is called abstraction, and it is something our minds do in response to their sensory data. And so it is with bouncing. Some objects rebound when hitting the ground, others don't. It is useful to talk about that distinction, and so we invented a word for it, a long time before we figured out what made it happen.

Aristotle was indulging a human tendency that is actually very common, probably even universal up to some point. It's called *reification*, the assumption that whenever we can talk about some X as if it exists, then we're necessarily assuming that that X must actually exist. If it is imperceptible to our ordinary senses, as most abstractions are, then we must be perceiving them with some other cognitive faculty: intellect, pure reason, intuition, whatever. We “see” them, somehow. Thus do we tend to think. But as Christians would be first to remind us, just because we all tend to do it doesn't make it right. Neither does it make it wrong, of course, but

the point is that “We all do it” doesn’t settle the question of rightness one way or the other. Feser claims to be demonstrating that if we are not with Aristotle, then we are not with reason, but reason does not need Aristotle’s forms to exist independently of our minds. Abstractions exist in our minds, and our minds are real, and that gives abstractions all the reality they need. Feser has so far provided no compelling reason to think otherwise.

I seem to have just implied a distinction between things that exist independently of our minds, such as material objects, and things that don’t, such as abstractions. At this point, Feser seems both to agree and disagree:

The form of the ball doesn’t exist by itself either; it only exists insofar as the rubber has taken on that specific form. So, form and matter *considered by themselves* are, in general anyway, mere abstractions; they exist in the mind, but not in reality.<sup>39</sup>

Well, then, what does exist in reality? His point is that neither of them can exist independently. You need both, or you have nothing: “Nothing is *just* a piece of matter, for matter cannot exist without form.”<sup>40</sup> Of course, any piece of matter has properties, some of which are alterable and some of which are inalterable. I have dozens of pieces of wood in my workshop, of various shapes, sizes, and degrees of surface smoothness. I can change any of those properties with my tools, and I can apply various chemicals that will change the wood’s color. But nothing I can do will make any board weightless. Feser says that all the work I do on a board changes certain of its various forms, and if I can’t make it weightless, that’s because weight is one of the board’s essential forms. At this point it seems we’re just arguing semantics, and I would happily let it go at that, but Feser says no, we’re talking about differences in our realities. In my reality, there is only me and the wood. In his, there are also the forms, and they are as real, in a crucial sense of that word, as the wood itself.

Form is paradigmatically what determines matter, and matter is defined in terms of its potential to take on different forms. That the distinction is a distinction between interdependent aspects of a thing is what makes a simultaneous reply to Parmenides, Heraclitus, and Plato possible.<sup>41</sup>

Aristotle could define matter as he wished, but whenever we say, “X is defined in terms of Y,” we say no more than, “When people use the word X, they are talking about something in terms of Y.” It doesn’t matter if any philosopher says, “But they’re supposed to be talking about

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<sup>39</sup>*Ibid.*

<sup>40</sup>*Ibid.*

<sup>41</sup>*Ibid.*

Z.” This is not to say it is never useful to debate usage, but usage is all that can be debated. We have something in our minds when we talk about matter, and no matter what any dictionary or any philosopher says, that something either exists or it does not exist, and it either does or does not have the properties we think it has.

According to Feser, Aristotle demonstrated that “permanence is possible, despite what Heraclitus says,” and that change is possible, notwithstanding Parmenides, and that “Plato is wrong to think of forms as generally existing completely independently of the material world.”<sup>42</sup> But we get, from modern science, all the reasons we need to disagree with all three of Aristotle’s predecessors, and they are coherent reasons. Naturalism is a consistent worldview. Many find it unsatisfying. It doesn’t answer some questions we wish we could answer or answer them the way we’d like them answered, and it fails to provide infallible answers to some questions we’d like to answer without any possibility of being wrong. But none of those things makes it incoherent or indefensible, despite what Feser claims to be proving.

Feser offers a little more commentary on the differences between Aristotle’s and Plato’s versions of realism, and then it’s on to the four causes. He begins by practically begging the question again:

They may also be the most important of all the philosophical concepts we’ve looked at so far. For if you don’t understand Aristotle’s four causes, then I dare say you don’t understand anything at all. But then, we all *do* understand Aristotle’s four causes, at least intuitively. You don’t need a Ph.D. to do so; indeed, as in so many other areas, these days a Ph.D. is more likely to be an obstacle to understanding. What is needed is rather an explicit systematic account of what we all know intuitively, and the avoidance of certain deep and widespread modern philosophical errors which we’ll consider in later chapters.<sup>43</sup>

No one can reasonably object to avoiding philosophical errors, or any other kind of error for that matter. But if “what we all know intuitively” happens to be an error, the last thing we need is someone assuring us that we’re right to believe it, especially when that assurance comes in the form of “A really, really famous philosopher said so.”

Feser returns to the rubber ball to illustrate Aristotle’s four causes.

1. Material cause: Rubber, which is what the ball is made of.

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<sup>42</sup>pp. 51-52.

<sup>43</sup>p. 53.

2. Formal cause: Roundness, solidity, and bounciness, which are the forms exhibited by the ball.

3. Efficient cause: The actions of machines and workers at the ball factory, which bring the ball into actual existence.

4. Final cause: Children's amusement, the purpose for which the ball was brought into existence.

"The four causes are completely general," Feser assures us, "applying throughout the natural world and not only to human artifacts."<sup>44</sup> But why should we call all of them causes, and we should we think all four are universally applicable?

The answer to the first question is: Because English-speaking philosophers have always done so. Wikipedia calls it a "peculiar philosophical usage of the word,"<sup>45</sup> because the Greek word used by Aristotle himself was *aitia*, which his contemporaries (and presumably he himself) used in a sense closer to what we mean by the word *explanation*. Philosophy students are routinely told in their Aristotle classes something like, "The only one we call a cause nowadays is the one Aristotle called the efficient cause," but that misses the point. Semantically, Aristotle was not trying erroneously to claim that there were four kinds of the thing that we call a cause. He was instead just going over all of the questions that a person with any curiosity is likely to ask when confronted with any object with which they are not already familiar: What is it made of; what are its properties; how did it come into existence; and what is its purpose? And, Aristotle notwithstanding, there is no reason the answer to the last question cannot be "none."

As Feser himself says, if you answer all these questions, you have given "a complete explanation of a thing." And of course, any complete explanation must include what English speakers normally mean by "cause"—which, to a first approximation, is what logicians would call a sufficient condition. But to speak of four causes is like speaking of nine pitchers on a baseball team. There are nine baseball players on a complete team, and one of them has to be the pitcher, but there is only one pitcher. The other eight players are all players, but they are not pitchers. So it is with explanations. A cause is one explanation for any object, but there are other explanations, and they are not causes.

Up to this point, Aristotle has provided little more than a kind of taxonomy. He has categorized the questions we have to ask if we want to explain something without omitting any

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<sup>44</sup>p. 54.

<sup>45</sup>[https://en.wikipedia.org/wiki/Four\\_causes](https://en.wikipedia.org/wiki/Four_causes).

useful information. But it is related to everything else Aristotle had to say about reality. As Feser reminds us:

Note first that as Aristotle understands the material and formal causes of a thing, they imply far more than the obvious fact that the ordinary objects of our experience are made up of some kind of stuff or other organized in a certain way. Aristotle's entire metaphysical scheme as we've considered it thus far – moderate realism, hylomorphism, the whole ball of wax – is implicated as well.<sup>46</sup>

But we're not compelled to either accept or reject Aristotle *in toto*. We can agree that it makes sense to ask these four questions without feeling obliged to answer them the same way Aristotle would have answered them. I have no idea whether he would have said, if asked about the formal cause of a platypus, that it was essentially a mammal or essentially a reptile, and it doesn't make a bit of difference what he would have said, because biologists in the 21<sup>st</sup> century decide those things using criteria that have nothing to do with essences and everything to do with ancestry: platypuses are classified as mammals and not reptiles because they share a non-reptilian ancestor with all of the other animals that we call mammals.

I've already remarked that we might reasonably deny that everything has a final cause, i.e. purpose. Feser couldn't disagree more, because otherwise, he says, efficient causes make no sense:

Aristotle's notion of efficient cause – that which brings something into being – is often said, almost with a pose of magnanimity, to be an element of his position that has carried over largely unchanged into modern philosophy. . . . In fact it is such a misleading exaggeration that I am tempted to say it is really a falsehood; certainly it is no compliment to Aristotle, given how deeply and notoriously problematic the notion of cause and effect has become in the always unsafe hands of modern philosophers. For one thing, just as material and formal causation are deeply intertwined on Aristotle's account, so too are efficient causes and final causes. You simply cannot properly understand the one apart from the other; indeed, there *cannot be* efficient causes without final ones.<sup>47</sup>

And why not? Feser begs leave to postpone his response to that question: "Suffice it for now to say that Aristotle's notion of efficient causation is by no means easily identifiable with anything you'll find in the writings of the typical modern philosopher."<sup>48</sup> But whatever is typical

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<sup>46</sup>Feser, p. 55. *Hylomorphism* was Aristotle's term for the combination of matter and form that comprises any particular object.

<sup>47</sup>*Ibid.*

<sup>48</sup>*Ibid.*

of modern philosophy is beside the point, if the point is whether it is even possible—as Feser says it is not—to be a rational thinker while disagreeing with Aristotle’s metaphysics.

An airliner crashed during takeoff in Chicago in 1979 after an engine came loose, rupturing hydraulic lines necessary for the pilots to steer the aircraft. The engine separation was entirely sufficient for the crash to occur, and that is reason enough to say that it caused the crash, quite regardless of whether the crash had any purpose of any kind. Of course we can then ask about the cause of engine separation, and the answer turned out to be a faulty maintenance procedure that damaged a clevis (a type of fastener) holding it to the wing. Again, we can say that the faulty procedure was a sufficient condition for the engine separation without supposing that there was any purpose for the separation. Purpose or no purpose, damaged clevises break, and when they do, whatever they are holding together comes apart. And the cause of the faulty maintenance? Now we get to purpose. The maintenance company, which happens to comprise human beings, was trying to save money by reducing its labor costs. And that was all. The company’s purpose had nothing to do with damaging fasteners or crashing airplanes, but the actions it took in order to save money were sufficient to damage that component and thus to crash the airplane. But here is the point: In going from “A was caused by B” to “B was caused by C” and so on, we could not talk sensibly about any purpose until we got to the actions of human beings, because on naturalism, there is no purpose without intelligence.

Intelligent beings make conscious choices, and the making of conscious choices is unintelligible without a concept of purpose. For everything else, under naturalism, the laws of physics and chemistry suffice. It is only for human behavior that our explanations must include reference to purposes and a few other concepts unique to us. Feser says that nothing at all can be explained without reference to purpose, but his saying so doesn’t make it so.

At this point he will surely object, regarding my plane crash example: “Are you seriously claiming that the clevis has no purpose relevant to the consequences of its breaking, or that the engine has no purpose relevant to the consequences of its detachment in flight?” Yes and no. Every part of any mechanical device has a function. A clevis is called a fastener because that is its function: to fasten one object to another. And we do routinely refer to the function of anything as its purpose. But grammatical synonymy does not entail logical equivalence. A thing’s purpose is not necessarily identical with its function. The *Oxford English Dictionary* offers three usage-based definitions of *purpose* relevant to this discussion:

1. “That which a person sets out to do or attain.”
2. “The reason for which something is done or made . . . the result or effect intended or sought.”
3. “That which forms or ought to form the subject of a discourse.”

Some kind of cognition, i.e. intelligence, is clearly presupposed in all these cases. But a thing's function is just what it does. Its purpose, we may say, is its intended function, but intention is itself a function of intelligence. The purpose of a screwdriver is not to open paint cans: i.e., that is not why people build screwdriver factories or work in them. But any painter, acting purposefully to open a paint can, can accomplish his purpose by using a screwdriver, and on that occasion the screwdriver has the function of opening a paint can, but the purpose of opening the paint can exists only in the painter's mind. People have purposes, and we can assign their purposes to the things those people make in order to achieve those purposes. But our purposes are a product of our intelligence, and we have no logically compelling reason to simply assume that purposes can exist in any other way. In particular, we are not entitled to the assumption that anything other than the things we make have any purpose. If we wish to be logically precise, we can disregard linguistic convention and reasonably deny that something has a purpose if we can reasonably doubt that it was made by an intelligent entity. Most parts of living organisms have an obvious function, but it does not follow that they have a purpose.

"Aristotle would be mystified," Feser assures us, "by the modern tendency to treat cause and effect as essentially a relation between temporally ordered events."<sup>49</sup> Well, maybe that's just too bad for Aristotle. Let's see what Feser thinks is the problem with this modern tendency. He doesn't deny that it is a relation of some kind, and if not between temporally ordered events, then between what else? As it turns out, the focus on temporal ordering is not his problem, either. It is rather with the fact that modern philosophers, beginning with Hume, have found it difficult to define exactly what, besides a constant temporal ordering of events, causation actually is.

The way of posing the "problem" of cause and effect just described, and some of the phrases used in doing so, owe much to the Scottish philosopher David Hume (1711–1776) – a big hero to "New Atheists" and secularists in general, needless to say – and philosophers have been oohing and aahing over his "discovery" of this "problem" ever since. . . . In fact Hume's supposedly weighty conundrum is, as we shall see, just one of many "traditional" "problems" of philosophy that have arisen only since, and only *because of*, the abandonment of Aristotelianism.<sup>50</sup>

Feser complains:

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<sup>49</sup>*Ibid.*

<sup>50</sup>p. 56.

Suppose you asked your uncle (or whomever) what caused the broken window. Unless he's a philosopher, he'd probably say, "The brick did" – the brick, not "the event of the brick's being thrown."<sup>51</sup>

Actually, in ordinary conversation, the philosopher too would most likely say, "It was the brick." But a basic aim of the entire philosophical enterprise, from its earliest days, has been to critique everything we regard as common knowledge and figure out whether and how we are justified in regarding it as actual knowledge. This was what Plato and Aristotle themselves were up to, no less than their modern successors, and we are not obliged to assume that because they were among the first and are way more famous than any of the others, they had to have been mostly right if not infallible.

Furthermore, in any exercise of this sort, it is crucial to formulate clear definitions of key terms. Sometimes, as Hilbert and many of his contemporaries came to understand, this just cannot be done. Just as some propositions have to be left as assumptions, some of our vocabulary has to be left undefined. Hume and his successors were just challenging us to ask ourselves: Exactly what do we mean when we say that *A* causes *B*? and if a good answer happens to be hard to come up with, then there is a problem, and it isn't solved just by saying, "Aristotle told us."

When trying to answer any question, an important clue often lies in the answer to another question: Why are we asking? When we ask what caused something, exactly what are we trying to find out? We usually want to know one of two things, and sometimes both. We want to know either how to make it happen again whenever we want it to happen, or how to prevent it from happening when we don't want it to happen. In the first case, which is the usual one, we're looking for a sufficient condition. In the second, we're looking for a necessary condition. And the first has to include the second, because any sufficient condition must somehow bring about any necessary conditions.

Non-philosophers don't normally use terms like "sufficient conditions" or "necessary conditions," but that is what practically everybody means when they talk about causes. Philosophers can then take it from there. If we say that *A* causes *B*, we generally mean that in some sense or for some reason, *A* cannot happen without *B* also happening. A philosopher may then inquire: Why not? and the answers might be harder to find than the average person supposes. The effort to find them, though, can help us distinguish mere temporal coincidence from what we intuitively mean by causation.

Most of us skeptics get it that there is a difference, notwithstanding how some metaphysicians have interpreted Hume, and that is why Feser misses the point when he says: "for

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<sup>51</sup>*Ibid.*

common sense it is ultimately *things* that are causes, not events.”<sup>52</sup> Common sense will insist that pilot error can cause a plane to crash. Now, in common speech, an event may well be regarded as a thing, but that renders Feser’s objection simply incoherent. He must mean “thing” in the sense of “object,” but the mere existence of an object is rarely a sufficient condition for anything except a gravitational field. “In the case of the broken window,” he notes, “the key point in the causal series would be something like the pushing of the brick into the glass and the glass’s giving way.”<sup>53</sup> Indeed. It wasn’t just that the brick was in that location. It was how the brick was moving plus certain other of its characteristics such as mass and solidity. Certain characteristics of the glass itself were also relevant. Not just any piece of glass will break when struck in the same way by the same brick.

Hume’s problem, as he stated it, was our apparent (to him) inability to find a logically necessary connection between cause and effect. He asked in effect: If we can imagine (as we normally can) that *A* could possibly happen without *B* also happening, then how do we justify any claim of causation except in terms of constant conjunction? Feser thinks this is just a silly question:

But in examples like these, there is no question of the causes and effects being “loose and separate” or lacking a “necessary connection”; to say that a brick’s pressing through the glass might “conceivably” not be accompanied by the glass’s giving way, or that a hand’s shaping the clay might “conceivably” occur without the clay’s being shaped, wouldn’t pass the laugh test of even the most jaded modern philosopher (though I admit you can never be too sure).<sup>54</sup>

Granted, some people can get carried away with speculations about bricks that hit windows without breaking them. But they’re usually trying to prove that we don’t really know what causes anything, or some such nonsense. But Hume’s point was, or should have been, not that we don’t know whether bricks cause windows to break. It was rather that if we think we know, we’re epistemically entitled, even obliged, to ask how we know, and if pure logic won’t tell us, then how else? Whether we should be satisfied with Hume’s response is beside the point. All that matters is that we can formulate and defend our own answers, regardless of whether they agree with either Hume’s or Aristotle’s.

Feser next introduces Aristotle’s claim that any cause must contain whatever is in its effect:

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<sup>52</sup>*Ibid.*

<sup>53</sup>*Ibid.*

<sup>54</sup>*Ibid.*

The basic idea is that a cause cannot give to its effect what it does not have to give, and it can be illustrated by a simple example. Suppose you come across a puddle of water near an outdoor spigot. You will naturally conclude that the puddle was caused by the spigot, either because someone turned it on or because it is leaking. The effect is a puddle of water and the cause is something fully capable of producing that effect, since it contains water in it already.<sup>55</sup>

OK. But where is the broken glass in the brick? I know how to find water in a spigot, but where do I look in a brick for either glass or breakage? Feser would probably say, “You’re missing the point” or something along that line. But the point can only be: The window has to be there before anything can break it. Fine. And you can’t have a puddle of water if there is no water. But in Feser’s example, the puddle was caused by the water moving from the spigot to the ground, not by the spigot itself. The spigot was a source, not a cause. The cause of the water’s movement was pressure—more specifically, a pressure imbalance, which is both necessary and sufficient for any fluid to move. Aristotle knew little if anything about fluid pressure, which caused the water to leave the spigot, or about gravity, which affected the direction in which it would continue moving after it was no longer subject to the pressure inside the spigot.

What about something like fire? Being a smoker, I’m always carrying a gadget that produces a flame whenever I want it to, but it doesn’t contain any fire. How does Aristotle explain that, if any cause has to contain its effect? Easily enough, says Feser:

The traditional way of making this distinction is to say that a cause has the feature that it generates in the effect “formally” in the first sort of case (e.g. when both the cause and the effect are red or on fire) and “eminently” in the second sort of case (e.g. when the cause is not itself red or on fire but has an inherent power to produce redness or fire). If a cause didn’t contain all the features of its effect either formally or eminently, there would be no way to account for how the effect came about in just the way it did. Again, a cause cannot give to its effect what it does not have to give.<sup>56</sup>

So, my cigarette lighter can make fire because it has the “inherent power” to make fire. Actually, I think Aristotle would have done a little bit better than that. I suspect he would have said something about the lighter fluid containing some fire that was released by the spark, which was itself a bit of fire contained in the flint and released when the flint was rubbed by the wheel. But Feser still has a point to make about the explanatory power of Aristotelianism. How does the wheel release the fire in the flint by rubbing it? Who knows? It just has that power. I think we’re

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<sup>55</sup>p. 57.

<sup>56</sup>*Ibid.*

almost back to *virtus dormitiva*. Aristotle hasn't explained anything so much as he's just stuck a label on it. In fairness, though, it's hard to imagine how he could have done much better. Nobody in ancient times had a clue about what fire actually was, and even our modern understanding was not complete until the 20<sup>th</sup> century. The phlogiston theory of the early Enlightenment was only barely an improvement over Aristotle.

Feser then says that it is “sometimes suggested that the principle in question is disproved by evolution,”<sup>57</sup> and he proceeds to argue for its actual consistency. I have never seen this particular suggestion, though I have seen other claims of a conflict between evolution and Aristotle's essentialism—and again, counterarguments claiming actual consistency. I won't concern myself here with adjudicating the dispute over how consistent evolution is with Aristotle's thinking, though it would perhaps be pertinent at this point to note that with enough ingenuity, practically any theory can be reconciled with any empirical observation. Anyway, Feser's primary thesis is we can't have any science in the first place if we don't accept Aristotle because reason itself depends on Aristotle's metaphysics. The real issue then is not whether we can accept both evolution and Aristotle, but whether we can justifiably accept evolution without Aristotle.

Feser next returns for a moment to the issue of final causation.

Most people, including many contemporary philosophers, deeply misunderstand what Aristotle means by this. They sometimes suppose, for example, that he is making the quite absurd claim that the moon is *consciously trying* to go around the sun, or that fire *wants* to produce heat. (Laughter ensues, and then everyone goes back to praising Hume for his supposedly far-more-sober suggestion that a brick could “conceivably” disappear into thin air or turn into a turnip.) But Aristotle never said or thought any such thing. His whole point, in fact, is that there is a kind of goal-directedness that exists *even apart from* conscious thought processes and intentions.<sup>58</sup>

Between a conscious moon and a metamorphic brick, I'm not sure which I would judge to be the more absurd proposal, but Hume's point was merely that we assert no necessary contradiction if we say, “This object was a brick five seconds ago, and now it is a turnip.” As for Aristotle's point that goal-directedness can exist independently of intelligence, we need only ask why we should think so. So what if it's not an absurdity? As a reason to believe, “It's not absurd” doesn't carry much epistemological weight. Aristotle's reason for suggesting goal-directedness, apparently, was that it explains certain things we observe in the natural world. Very

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<sup>57</sup>p. 58.

<sup>58</sup>*Ibid.*

well. It is one possible explanation for those observations. But it is not the only explanation on hand. Feser says Aristotle regarded human intelligence as just a special case of the universal phenomenon of goal-directedness. Perhaps it is, or perhaps animal intelligence is the only case of it. We know antecedently that it is one case, because it is the case from which we got the idea of goal-directedness in the first place. The question is whether logic compels us to agree with Feser that:

The moon is “directed toward” movement around the earth, as a kind of “goal.” Fire is directed toward the production of heat, specifically, rather than cold. Water is directed toward evaporation, then condensation, then precipitation, then collection, then evaporation again, in a cyclical fashion. And so forth.<sup>59</sup>

Feser promises to elaborate on the importance of final causation “in subsequent chapters,” but for the time being:

One reason worth emphasizing here, though, is their inherently preeminent place among the four causes. Aquinas refers to the final cause as “the cause of causes,” and for good reason. The material cause of a thing underlies its potential for change; but potentialities, as we’ve seen, are always potentialities for, or directed toward, some actuality. Hence final causality underlies all potentiality and thus all materiality. The final cause of a thing is also the central aspect of its formal cause; indeed, it determines its formal cause.<sup>60</sup>

All he is saying here, though, is that without final causation, nothing else in Aristotle’s metaphysics will make any sense. So be it. Maybe Aristotle’s metaphysics doesn’t make any sense, but I’m not trying to prove that. I’m just hoping to show that whether or not it makes sense, we don’t need any of it in order to be both rational and moral.

Feser begins the next section of his book, “Getting Medieval,” with an extended insult of Richard Dawkins’s philosophical skills, in particular his misunderstanding of Thomas Aquinas. I will admit in a heartbeat that Dawkins, *qua* philosopher, has little to contribute to the debate between naturalists and Thomists. Having read several of his books, I don’t recall offhand any particular comment he has made about Aquinas. And, if he did say something that I don’t remember, it wouldn’t surprise me at all if he was mistaken about what Aquinas said. But it hardly matters. You can’t defend Aquinas by proving that Dawkins misunderstood him. Perhaps Feser’s point is something like: If all you know about Aquinas is what you’ve learned from Richard Dawkins, then you’re misinformed about Aquinas’s thinking. Very well, but then I may

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<sup>59</sup>*Ibid.*

<sup>60</sup>p. 59.

note that if all you know about naturalism is what you've learned from Edward Feser, then you're misinformed about naturalism.

Moving on, Feser devotes several additional paragraphs to discrediting Christopher Hitchens, Sam Harris, and Daniel Dennett, all of which is equally irrelevant to his primary argument, until we finally get to:

But enough of this unpleasantness. Let us turn to Aquinas. To understand his arguments for God's existence, you need first to understand what is wrong with the way philistines like Dawkins read them, or rather misread them.<sup>61</sup>

Now, it can be pedagogically useful, when trying to explain something about which there is widespread misinformation, to begin along the lines of: "You have probably heard that A, B, C, D, and E, but none of those things are true." In the diatribe that he has just concluded, though, Feser has had almost nothing to say about specific mistakes promulgated by the Four Horsemen. He has instead focused mainly on their failure to give Aquinas and other Medieval philosophers any serious attention. The one alleged mistake that he does address is Dawkins's construal of Aquinas as a would-be empiricist.

Dawkins assumes that Aquinas is engaged in a kind of empirical theorizing, "postulating" God's existence as a "hypothesis" to "explain" certain pieces of "data." That is, he thinks Aquinas's reasoning is analogous to the sort of reasoning a detective engages in when he infers from a cigarette butt and the size of a shoe print that the suspect was probably a six-foot-tall smoker, or that an astronomer engages in when he infers from the observed wobble of a certain distant star that there is probably a large planet orbiting it.<sup>62</sup>

Very well. If that is actually not what Aquinas was trying to do, then we can't fault him for not succeeding. But then, what was he trying to do? According to Feser, Aquinas wasn't trying to be like a scientist but rather like a mathematician.

What Aquinas *is* doing can be understood by comparison with the sort of reasoning familiar from geometry and mathematics in general. Take the Pythagorean theorem, for example. Once you understand the axiomatic method, the definition of triangularity, and so forth, and then reason through a particular proof of the theorem, you can see that the theorem must be true, and necessarily so.<sup>63</sup>

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<sup>61</sup>pp. 64-65.

<sup>62</sup>p. 65.

<sup>63</sup>pp. 65-66.

Actually, the Pythagorean theorem is not exactly a necessary truth. What is necessarily true is that Euclid's postulates entail it. You cannot deny the theorem without contradicting at least one of those postulates, but those postulates are not necessary truths. They can be denied without contradiction, and some of them are denied in non-Euclidean geometries. And in those geometries, the Pythagorean theorem is actually false. (Another version of it is true, but it isn't Pythagoras's version.) For most of Western intellectual history, Euclidean geometry was indeed regarded as the paradigm of necessary truth. During the 19<sup>th</sup> century, though, mathematicians discovered that it wasn't so, and Feser cannot be unaware of this.

Feser tries to clarify a point. If a mathematical proof fails, he explains, "the reason it would fail is not that there is some evidence it failed to take account of, or that its conclusion was less probable all things considered. It would just be because there was a logical fallacy somewhere in the proof."<sup>64</sup> But no. A valid argument, in which by definition there is no fallacy, can also fail if any of its premises isn't true. For any mathematical argument, Feser says, "The premises are indubitable." And most people would agree. But that is precisely what they used to say about all of Euclid's axioms. In the context of everyday experience, of course, we must accept Euclidean geometry, or else an awful lot of that experience isn't going to make any sense. But context is what it's about. Context tells us which axioms we should accept and which ones we should reject.

Feser then tries a different tack. He has distinguished between scientific reasoning and mathematical reasoning. He says the former starts from empirical premises and draws probabilistic conclusions while the latter reaches necessary conclusions from "purely conceptual premises." And Aquinas, he says, was doing both: combining empirical propositions with conceptual premises and reaching necessary conclusions. And, according to Feser, we're talking about empirical observations "so general that there is no serious doubt of their truth."<sup>65</sup>

He assures us, too, that any possible mistake in this kind of reasoning "will not be a failure to consider all the empirical evidence, a violation of Ockham's razor, or any other such thing."<sup>66</sup> We shall see, but we may note at this point that, while he admits that mistakes are possible, he doesn't say exactly what kind they could be. He only tells us what kind they can't be. The possibilities aren't that hard to enumerate, though. If the reasoning is demonstrably valid, then the only relevant objection can be to the premises. He has already said that we're dealing

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<sup>64</sup>p. 66.

<sup>65</sup>*Ibid.*

<sup>66</sup>p. 67.

with two kinds of premises: empirical and conceptual, and he assures us that the empirical premises cannot reasonably be challenged. That leaves us with the concepts to deal with.

Feser begins with an argument against what he calls “scientism or positivism,” which he claims is itself a metaphysical position and so requires a metaphysical argument to be justified. By this time we should have gotten a definition of metaphysics, but we haven’t, and we should try very hard to avoid the kind of argument of which “atheism is also a religion” is the classic instance. As religion is defined by common usage, atheism does not qualify. Of course we don’t have to stick with common usage. Whatever we’re discussing, we can define our key terms however we wish. But if we’re going to define them idiosyncratically, we should have a better reason than to score debating points.

In most philosophical contexts, common usage defines *metaphysics* as reported by the *Oxford English Dictionary*:

The branch of philosophy that deals with the first principles of things or reality, including questions about being, substance, time and space, causation, change, and identity (which are presupposed in the special sciences but do not belong to any one of them); theoretical philosophy as the ultimate science of being and knowing.<sup>67</sup>

I’m going to assume that that is what Feser means. With that in mind, here is what he says about the metaphysics of science:

Of its very nature, scientific investigation takes for granted such assumptions as that: there is a physical world existing independently of our minds; this world is characterized by various objective patterns and regularities; our senses are at least partially reliable sources of information about this world; there are objective laws of logic and mathematics that apply to the objective world outside our minds; our cognitive powers – of concept-formation, reasoning from premises to a conclusion, and so forth – afford us a grasp of these laws and can reliably take us from evidence derived from the senses to conclusions about the physical world; the language we use can adequately express truths about these laws and about the external world; and so on and on. Every one of these claims embodies a metaphysical assumption, and science, since its very method presupposes them, could not possibly defend them without arguing in a circle.<sup>68</sup>

By referring to the “very nature” of science, Feser is assuming his conclusion. Modern science is what modern scientists do, and nothing more need be said about its nature until Feser

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<sup>67</sup>“Metaphysics,” *OED Online*, Oxford University Press, <http://www.oed.com.contentproxy.phoenix.edu/view/Entry/117355>.

<sup>68</sup>Feser, p. 67.

can prove otherwise. Scientists do, in fact, take various assumptions for granted in the course of their work. So do we all, both in our work and in the rest of our lives. Nobody in their right mind avoids making assumptions, ever. And of the particular assumptions on Feser's list, not one is unique to the enterprise we usually call science. Whatever we do, on the job or anywhere else, we assume that there is a physical world existing independently of our minds and that all the other listed characteristics are true about it. And nobody, scientist or not, can defend them without arguing in circle. That is precisely why they are called assumptions. We can't prove them, but we can't think straight if we don't believe them.

There is one area of philosophy that claims to reject any metaphysics, and that is logical positivism, but the positivists defined metaphysics in terms of meaningfulness, and they had their own definition of meaning in terms of verifiability. In short, the positivists declared metaphysics to be meaningless by definition. I think most of us will agree, though, that the use of idiosyncratic definitions is not a good way to win an argument. Science does presuppose certain ideas that, as the OED notes, are commonly held to be within the purview of metaphysics, and therefore, as Feser notes, science itself "could not possibly defend them without arguing in a circle."<sup>69</sup> But how does this discredit naturalism? It doesn't. Feser's target here is a bogeyman that he and others have called "scientism," which he identifies as the claim that the only legitimate reasoning is scientific reasoning. He might think that a person cannot coherently espouse naturalism while rejecting scientism. Whether this is true depends, I think, on how strictly we define "scientific," but Feser declared at the outset that the target of his book was naturalism. The question at this point, then, is whether a naturalist can defend what Feser has identified as certain metaphysical assumptions of scientific investigation.

Well, they are assumptions. But then, against what do they need a defense?

Very generally speaking, there are two possible objections against any of the assumptions on which any worldview is based. One is that the assumption at issue is inconsistent with one or more other assumptions of the same worldview. If I believe *A*, *B*, and *C*, and can deduce a contradiction from their conjunction, then I need to reject at least one of *A*, *B*, and *C*. The other possible objection is that the assumption is unnecessary. If I am trying to explain *D*, *E*, *F*, and *G*, and if I can explain them just by assuming *A* and *B*, then I don't need to assume *C*, and a principle of parsimony urges us not to make any unnecessary assumptions. Another source of non-necessity is derivability. If we have been assuming *A*, *B*, and *C*, and then discover that we can deduce *C* from *A* and *B*, then *C* is no longer really an assumption. It is now an inference,

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<sup>69</sup>*Ibid.*

leaving *A* and *B* as our only assumptions. Any set of assumptions are called independent if none can be deduced from any of the others.

Another possible objection might be unobviousness. If we're going to assume anything, it should in some way compel our assent. This is often phrased in terms of self-evidence or intuitive appeal. In some epistemological theories, assumptions of this sort are called "properly basic." They are ideas that we believe, by a kind of instinct, as soon as they occur to us. Any idea that is not obvious in this kind of way is subject to challenge on grounds of not being sufficiently obvious.

We thus have three desiderata. Ideally, a set of assumptions ought to be logically consistent, independent, and obvious.

We can now review Feser's list of science's metaphysical assumptions:

1. There is a physical world existing independently of our minds;
2. this world is characterized by various objective patterns and regularities;
3. our senses are at least partially reliable sources of information about this world;
4. there are objective laws of logic and mathematics that apply to the objective world outside our minds;
5. our cognitive powers – of concept-formation, reasoning from premises to a conclusion, and so forth – afford us a grasp of these laws and can reliably take us from evidence derived from the senses to conclusions about the physical world; and
6. the language we use can adequately express truths about these laws and about the external world.

As long as there have been philosophers, many of them have strived to justify these six propositions by deriving them from more basic assumptions—"first principles," as Aristotle called them. Feser claims that Aristotle, with an assist from Aquinas, succeeded, and while doing so also just happened to prove the existence of the Christian God and to establish the logical basis of a particular set of moral principles. Before we continue examining that claim, let us note that most people, naturalists or not, would regard the six listed propositions as both consistent and obvious, and there is no logical problem, but only a terminological one, if they happen to be not all independent.

I have agreed with Feser that these are metaphysical assumptions. Some of my fellow naturalists would object to this, since it is generally taken for granted that whenever we're

talking about science, one thing we're not talking about is metaphysics. In other contexts, I would object likewise, but the issue is more semantic than substantive. They are assumptions of some kind. If Feser wants to add the label "metaphysical," let him. The fundamental issue is whether we need any justification for believing them beyond their being obvious, consistent, and sufficient to explain everything that naturalists think needs an explanation. As long as we're addressing that issue, it makes no difference whether, as my detractors would say, "We don't need any metaphysics" or as Feser would insist, "You already have some metaphysics, but you need more. You also need Aristotle's."

After that introduction, Feser moves to a discussion of three of Aquinas's arguments for God's existence. Having earlier introduced the concept of realism and noted that there are variations of it, he explains that Aquinas accepted a variant known as Scholastic realism, which is the "position that results when one combines Aristotle's version of realism with Augustine's conception of universals as existing in God's mind."<sup>70</sup> But this raises a question: If universals can exist in God's mind, why not in our minds? I will of course stipulate that God, if he exists, can do things that we can't do, but this isn't about what God can do. It's about what universals can do, and Feser cannot, without begging the question, simply assert that they can exist in a divine mind but not in a human mind.

First up is the argument from change, more usually called the argument from motion. Feser reminds us that in the Aristotelian lexicon, motion and change are equivalent. Most of us will probably agree at least that motion is a particular instance of change, and that practically any other kind of change involves, at some level of explanation, the movement of something. For Aristotle, though, what any change is, is the actualizing of a potential, and a potential can never actualize itself, and so actualization must be made to happen by something external, which is the efficient cause of the potential's actualization, i.e. the effect.

So now we have causes and effects, and any cause is itself the effect of another cause, and so on back in some indefinitely long series. But now, said Aquinas, we need to make a distinction. Suppose *A* causes *B*, and *B* causes *C*, and *C* causes *D*. Then we can say that *A* is a cause of *D*. Now, it can be the case that in order for *D* to be happening, *C* must also be happening at the same time, but it might not be necessary for *A* to also still be happening. In that case, according to Aquinas, the causal ordering is essential in the case of *C* and *D* but accidental in the case of *A* and *D*. And the key to the distinction is simultaneity. Essential ordering happens when the effect can occur only at the same time the cause is occurring. In any such series of

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<sup>70</sup>pp. 71-72.

causes and effects, all causes and effects are happening at once, and in that case, Feser assures us, there has to be a first member of the series.<sup>71</sup>

Feser illustrates with someone pushing a stone with a stick:

The motion of the stone depends on the motion of the hand, which depends on the motion of the stick, which depends on the firing of the neurons, which depends on the firing of other neurons, all of which depends on the state of the nervous system, which depends on its current molecular structure, which depends on the atomic basis of that molecular structure, which depends on electromagnetism, gravitation, the weak and strong forces, and so on and so forth, all simultaneously, all here and now. The actualization of one potential depends on the simultaneous actualization of another, which depends on the simultaneous actualization of another, which depends on the simultaneous actualization of another, which depends on . . .

How far can it go? Not that far, actually; certainly not to infinity.<sup>72</sup>

Agreed: Not to infinity. But is all this really happening at the exactly same instant? No, not exactly. There is a temporal sequence. Neural events in the brain happen some milliseconds before neural events in the arm, which happen some milliseconds before the muscular contractions occur, and those contractions occur some milliseconds before the stick moves, and the stick itself will move a few nanometers, and take a few nanoseconds to do so, before the stone begins to move. Strictly speaking, none of these causes happen simultaneously their effects.

Of course Aristotle couldn't have known any of this, and for that matter neither could Aquinas. If I'm pushing a stone with a stick, it does seem to me that it moves at the very instant I decide to push it. It takes some sophisticated modern technology to demonstrate that this is not the case. As for potentials and actualities, we can certainly use those words to describe the whole series of events because our language is naturally flexible that way. But how we describe anything we see is our decision. It is our language, and it is entirely up to us how we use it. Some ways of describing what we see are more useful than others, though. Newton's laws of motion are far more informative than Aristotle's potentials and actualities. "To account for the actualization of the potential motion of the stone," says Feser, "we had eventually to appeal to the actualization of the potential existence of various deeper levels of reality."<sup>73</sup> Yes, we did, if we were compelled to account for it in Aristotelian terms. But we didn't have to. We can account

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<sup>71</sup>pp. 72-73.

<sup>72</sup>p. 74.

<sup>73</sup>p. 75.

for it in terms of physics and biology, and we can account for biology in terms of chemistry, and we can account for chemistry in terms of atoms and their constituent particles. As for accounting for those constituent particles, we're not done with that project yet. At any point in this progression, we can interpret what we have discovered in terms of potential and actuality, but we gain nothing by way of explanatory power by doing so, any more than we increase our understanding of how sleeping pills work by saying that they have the potential for inducing drowsiness. Sleeping pills are explained by describing the effects of their active ingredients on our central nervous systems, and those effects are explained by describing how various kinds of molecules interact when they get close to each other.

What we're doing with all this explaining one thing in terms of another, according to Feser, is identifying the "actualization of the potential existence of various deeper levels of reality."<sup>74</sup> But doesn't all this explaining have to end somewhere, or with something that, for whatever reason, we can agree does not need explaining? Feser thinks so:

But then the only way to stop this regress and arrive at a first member of the series is with a being whose existence does not need to be actualized by anything else. The series can only stop, that is to say, with a being that is *pure actuality* (or "Pure Act," to use the Scholastic phrase), with no admixture of potentiality whatsoever.<sup>75</sup>

I have admitted that, given any scientific explanation, it can be restated in Aristotelian or Scholastic terms. Given this Scholastic assertion, though, I have no idea how to express it in scientific terms. Feser does offer a hint, though. What he means to say is that the very existence of change "suffices to show that there is and must be a first Unmovable Mover or Unchangeable Changer."<sup>76</sup> This is the conclusion of Aquinas's argument, to which he appends the observation, "and this we call God."

Maybe so, if we're Aristotelians, but Feser has not yet proved that we have to be Aristotelians in order to be rational. He has not demonstrated, as he assured us he was going to, that there is no logical way to explain any change except in terms of potential and actuality, construed in idealist terms as things that actually exist in all the objects that we observe, including ourselves.

Feser then devotes a few paragraphs to explaining how, once we understand God in these terms, everything else that orthodox Christians believe about him must be true. And while he's at

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<sup>74</sup>*Ibid.*

<sup>75</sup>*Ibid.*

<sup>76</sup>*Ibid.*

it, he takes a few more digs at Richard Dawkins for his misunderstanding of Aquinas. For purposes of the present discussion, I can stipulate whatever theology Feser thinks is entailed by saying that God is the Unchangeable Changer. We're still looking for his proof that we cannot be rational or moral if we doubt the existence of any such entity, and thus it does not matter if, as Feser claims:

the "No one's ever shown that the first cause would be omnipotent, omniscient, good, etc." objection . . . is an urban legend, sustained by the fact that atheists tend to read only each other's books and not the writings of the religious thinkers they're supposedly refuting.<sup>77</sup>

Feser then attempts to address an objection I have already touched on: Aristotle's scientific naivete. He notes that Newtonian physics, for instance, "is sometimes claimed to undermine Aquinas's view."<sup>78</sup> And his response, in short, is that even if Newton's laws explain everything that Aristotle tried to explain, the laws themselves need an Aristotelian (and hence Thomistic) explanation:

For it just leads to the further question of what is the cause of a thing's existing with the nature it has, and that takes us once again back up a regress that can only terminate in a purely actual Unmoved Mover.<sup>79</sup>

But to talk of a thing's nature in this particular way is to assign it an ontological status that presupposes Aristotle's metaphysics. Feser is reifying an abstraction without showing that we are logically compelled to do so, i.e. without showing that we who don't do so are forced to abandon logic.

Feser next brings up Aquinas's argument for a sustaining cause, which he says is the correct meaning of the term "first cause." This question, he says, "isn't about what got things started or how long they've been going, but rather *what keeps them going*,"<sup>80</sup> and again we're back to natures and essences. He begins with a brief restatement of his argument that, *contra* Hume, causation itself must exist, and he then explains how it follows, in Aristotelian terms, that "everything in the universe, and indeed the universe as a whole, must be sustained in being here

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<sup>77</sup>p. 77.

<sup>78</sup>p. 79.

<sup>79</sup>*Ibid.*

<sup>80</sup>*Ibid.*

and now by a cause outside it, a First Cause which upholds the entire series.”<sup>81</sup> And, he goes on, this First Cause exists necessarily—i.e. it is not logically possible for it not to have existed.

Let’s take a closer look, then, at the issue of necessity and contingency.

By the usual definition of necessity in this sense, a thing exists necessarily if it was impossible for it not to have existed. In Aristotelian terms, this happens if necessary existence is part of the thing’s nature or essence. But now we’re arguing in a circle. What else, if anything, might we mean by necessary existence?

Without assuming Aristotelian metaphysics, existence itself is just an abstraction, a label we apply to an idea we have about the distinction between things that are real and things that are not real: Real things exist and unreal things don’t exist. To most of us, it seems intuitively obvious that in general, any real thing could have been unreal and any unreal thing could have been real. Anything that is real but could have been unreal is said to exist contingently, and otherwise to exist necessarily. The Thomistic argument is that nothing could be real unless at least one other thing could not possibly have been unreal.

“Why do some things exist but not others?” is a question we naturally would like an answer to, but “Because some things actualize existence and other things don’t” isn’t much of an answer. A satisfactory answer might tell us something about the distinction, if there actually is one, between necessary and contingent existence.

We can avoid begging any ontological questions by reducing the issue to necessary and contingent truths, over which much philosophical ink has been spilled. There is a current fad for saying that a proposition is necessarily true if it is true in all possible worlds, but the concept of possible worlds has epistemological problems of its own. A definition preferred by many philosophers, myself included, is that a proposition is necessarily true if its negation asserts or entails a contradiction, and is otherwise contingent. If  $P$  is necessarily true, then, by definition there is some proposition  $Q$  such that  $\sim P \rightarrow (Q \ \& \ \sim Q)$ . If there is no such  $Q$ , then  $P$  is contingently true, if it is true in the first place. Since  $P$  can be any proposition, it can be the assertion of something’s existence, and so without begging any metaphysical questions, we can say that something exists necessarily if the proposition affirming its existence is necessarily true.

To demonstrate God’s necessary existence, then, it must be demonstrated that we cannot deny his existence without affirming a contradiction. And I claim at this time that no theist has ever done this. It is beside the point that God’s existence might be necessarily true within an Aristotelian-Thomistic metaphysical worldview, until such time as it has been proved that that worldview itself cannot be denied without contradiction. And we should note here that “ $Q$  is

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<sup>81</sup>p. 83.

inexplicable” is not a contradiction for any *Q*. A worldview is not inconsistent just because it leaves some questions unanswered, unless that worldview explicitly purports, on its own terms, to answer those specific questions.

After further commentary on what we may infer about God from his necessary existence, Feser moves on to Aquinas’s argument known as the Fifth Way—but not directly. He first devotes several more paragraphs to scolding Dawkins for misunderstanding the Fifth Way argument: “Dawkins, like many other atheistic critics, thinks this is more or less the same argument as William Paley’s famous Design argument’.”<sup>82</sup> Feser agrees that Paley’s argument was worthless, but only because it wasn’t Aristotelian:

Paley is a “modern” philosopher who, in common with other modern philosophers . . . rejects Aristotle’s metaphysics and denies that formal and final causes really exist in nature, or at least denies that we can have any knowledge of them. Another difference is that whereas Aquinas is attempting to provide a strict and airtight *metaphysical demonstration* of the existence of God, Paley – like the “Intelligent Design” theorists who follow him – is arguing instead on the basis of empirical probabilities, and claiming only to show that *some* sort of cosmic designer (maybe the God of traditional theism, but possibly something less grand) is *more probably* (but not certainly) the cause of the universe than any impersonal force.<sup>83</sup>

Continuing on this tangent, Feser derides most modern apologetics in general because it “more or less gives away the store to the skeptics by adopting the modern ‘mechanistic’ conception of nature, and is thus reduced to a pathetic ‘God of the gaps’ strategy.”<sup>84</sup> Now, Feser does not actually deny that there are gaps in what naturalism can explain. There are phenomena, he insists, “which, as we will see later, *demonstrably cannot* be explained in terms of evolution or in any other materialistic way.”<sup>85</sup> But he thinks that is beside the point, because even if it weren’t so, that would be irrelevant to a defense of Aquinas’s Fifth Way—which, at long last, he proceeds to outline.

He begins with the observation that we observe regularities throughout the universe, from planetary orbits to biological phenomena. Certain things keep happening over and over, without fail. The entire physical universe, in short, “can be thought of as a vast system of material

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<sup>82</sup>p. 84.

<sup>83</sup>p. 85.

<sup>84</sup>p. 86.

<sup>85</sup>*Ibid.*

elements interacting according to regular patterns of cause and effect.”<sup>86</sup> And therefore, what? Therefore, he says, we need final causation, because these regularities are otherwise inexplicable. Everything does what it does because that is its purpose.

As we saw when we first looked at Aristotle’s notion of final causality, this doesn’t mean they are *consciously trying* to reach these goals; of course they are not. The Aristotelian idea is precisely that goal-directedness can and does exist in the natural world even apart from conscious awareness.<sup>87</sup>

Yeah, that’s the Aristotelian idea—but why are we logically compelled to accept it? Because, according to Feser, we can’t explain anything at all if we don’t. Well, *epur si muove*. There are other explanations for the universe’s regularities. Feser and other Aristotelians may regard them as unreasonable, but nobody made them the arbiters of reasonableness.

At this point, Feser seems to admit that purpose presupposes intelligence, because he now argues that the existence of purpose in the inanimate world entails the existence of a Supreme Intelligence, which of course is Aquinas’s God.<sup>88</sup> Very well. If  $A \rightarrow B$ , then I can’t deny  $B$  without denying  $A$ . But I denied  $A$  to begin with, and that wasn’t a mistake just because Feser says so, or because Aristotle said so. But we’re not yet halfway through the book yet, and of course Feser isn’t done with his argument:

I realize, of course, that many will reply that . . . final causes don’t exist. The moderns, they will allege, were right to deny their existence, as well as the existence of what Aristotle called formal causes. Well, it’s true that many people say this. But they are wrong to say it. The reality of formal and final causes is rationally unavoidable, as we will see by the end of this book.<sup>89</sup>

One would have hoped to see such a key premise of his argument established earlier. Perhaps, by the time he demonstrates the rational unavoidability of formal and final causes, he will also have shown why the demonstration had to be deferred. But first, he says, “we need to say a little more about what follows if there *are* formal and final causes.”<sup>90</sup> In particular, he says, given Aristotle’s metaphysics, it follows that all living things have souls of various kinds,

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<sup>86</sup>p. 87.

<sup>87</sup>*Ibid.*

<sup>88</sup>pp. 88-90.

<sup>89</sup>p. 90.

<sup>90</sup>*Ibid.*

depending on whether it is a plant, a nonhuman animal, or a human being.<sup>91</sup> And he follows this with an extended argument for mind-body dualism. This is not, Feser insists, supposed to be an explanation of any empirical observation, and therefore cannot be undermined by any recent or potential discoveries of correlations between mental events and the neurochemistry of our central nervous systems. In brief, our souls are our forms, and

Usually actuality and potentiality are combined, and potentiality can never exist without actuality; but actuality can and does exist without potentiality, namely in God, who is Pure Actuality. Similarly, form and matter are usually combined, and matter can never exist without form; but form can exist without matter, and does in this case, at least after death when the matter of the body is no longer informed by the soul, its form.<sup>92</sup>

And now, having just assured us that no empirical observation could contradict this, Feser claims that it is confirmed by modern science, that “the nature and structure of DNA is exactly the sort of thing we should expect to exist given an Aristotelian metaphysical conception of the world.”<sup>93</sup> Well, maybe with hindsight, but I am not aware of any Aristotelian or Thomist saying, after the discovery of DNA, “We told you so.” Nor does Feser produce any quotation from any Thomistic theologian writing before the mid-20th century predicting anything like our current understanding of genetics.

No doubt he would respond, with great irritation, “Oh, of course I don’t mean we could have predicted such details as nucleotide pairs or double helices.” Well then, exactly what was expected on Aristotelianism? According to Feser, “the notions of DNA, of the gene, and so forth are utterly suffused with goal-directedness and potentiality.”<sup>94</sup> But no matter what we had discovered about the mechanism of heredity, that is how it would have looked to an Aristotelian, because Aristotelianism presupposes that everything is “utterly suffused with goal-directedness and potentiality,” and Feser has assured us that no empirical discovery could prove otherwise. Any claim of empirical confirmation is therefore a circular argument.

Equally circular is his claim that our current knowledge of DNA is “not at all what we would expect if materialism were true.”<sup>95</sup> But exactly why not? Actually, our current knowledge explains very well how DNA works to create the appearance of goal-directedness and even of

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<sup>91</sup>pp. 91-92.

<sup>92</sup>p. 95.

<sup>93</sup>p. 97.

<sup>94</sup>*Ibid.*

<sup>95</sup>*Ibid.*

intelligent design—and if it had not done so, that would have been a problem for us materialists. Unlike Aristotelians, we will not say that no empirical discovery could possibly ever contradict us.

Next up on the consequences of final causation is morality, or natural law. Feser begins by explaining, with some apparent exasperation, that Aristotelians don't define "nature" the same way it is defined by modern common usage. This does, as he notes, give rise to frequent misunderstandings such that most objections to natural law ethics are irrelevant. And I will readily concede that anyone who wants to criticize Aristotelianism is obliged to learn the Aristotelian lingo. That is one reason why I wanted very much to read Feser's book.

What is good for any thing, of any kind, he says, is determined by its "form, essence, or nature."<sup>96</sup> In other words, the nature of anything just is, so to speak, a perfect version of that thing. There is a sense, therefore, considering the imperfections of the natural world, in which nothing in nature (per common usage) is entirely natural (per Aristotelian usage). And, the nature of any thing includes its purpose. That being so,

when we turn to human beings we find that they too have a nature or essence, and the good for them, like the good for anything else, is defined in terms of this nature or essence. Unlike other animals, though, human beings have intellect and will, and this is where moral goodness enters the picture. Human beings can *know* what is good for them, and *choose* whether to pursue that good. And that is precisely the natural end or purpose of the faculties of intellect and will – for like our other faculties, they too have a final cause, namely to allow us to understand the truth about things, including what is good for us given our nature or essence, and to act in light of it.<sup>97</sup>

Feser then expounds an idea that is almost reminiscent of the Socratic dictum that no one knowingly does evil. The proper exercise of reason, he says, must lead us to know what is good for us, and whatever that is, it will be in our nature to want it. Now, we obviously don't always act accordingly, and according to Feser, "that is a problem of will, not of reason."<sup>98</sup> But is it always? Feser surely does not think that we always exercise our reason properly. He points out that "doing the rational thing can sometimes be extremely difficult and unpleasant,"<sup>99</sup> which is indisputably true, but so can knowing what the rational thing to do is in the first place. The point

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<sup>96</sup>p. 101.

<sup>97</sup>*Ibid.*

<sup>98</sup>p. 102.

<sup>99</sup>*Ibid.*

Feser is missing is that this can be the case even when everyone around you already does know. He offers as an illustration someone with whom I can very well identify:

An obvious illustration of this is what happens when someone decides to stop drinking to excess: He previously thought drinking to excess was a good thing to do, or at least not a habit worth struggling against; then he realizes that it is not a good thing to do, and in fact that it would be good to stop doing it; and so he decides to stop doing it. Now he may well find that implementing this decision is extremely difficult; he may even come to find it so difficult that he starts to think it impossible. But that doesn't mean that to stop drinking to excess really isn't what is good for him, and thus what reason recommends. It only shows that his will has become so extremely corrupted that he is unable, or nearly unable, to do what it is good and rational for him to do.<sup>100</sup>

I haven't a clue about Feser's drinking habits, past or present, but I wasted what could have been the best years of my life drinking excessively. Yes, I did it because I thought it was a good thing to do, and yes, when I decided it would be good to stop, I decided to stop. And I was lucky, because quitting turned out to be less difficult than I had feared it would be. But my belief, while I was drinking, that it was good for me was a mistake. I thought I was behaving rationally, though I was not doing anything of the sort. That was manifestly not the proper exercise of my reason. Now, Feser might say that since I found it easy to quit, my will must have still been in pretty good shape. Maybe, but I didn't quit because I wanted to. I quit because I knew I had to. I had begun to suffer badly as a result of my drinking, and it had become obvious, beyond even my ability to deny it, that I would continue suffering for as long as I continued drinking.

I do believe that something we should call human nature exists, but not in the Aristotelian sense. It is our nature to want what seems good for us and to act accordingly, given the opportunity. It is not our nature, though, to invariably know what actually is good for us, because we do not invariably reason correctly and we cannot reliably know when we are reasoning incorrectly. The history of philosophy has been a quest to figure out, among other things, exactly what the proper exercise of reason consists of, and a clear solution still eludes us. Of course it was obvious to the people who knew me well during my drinking days that my behavior was irrational, but it was not obvious to me, and I was the one most in need of knowing.

Feser and I are tantalizingly close to agreement here:

For you do by nature want to do what you *take* to be good for you; reason reveals that what is *in fact* good for you is acting in a way that is conducive to the fulfillment of the

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<sup>100</sup>*Ibid.*

ends or purposes inherent in human nature; and so if you are rational, and thus open to seeing what is in fact good for you, you will take the fulfillment of those ends or purposes to be good for you and act accordingly.<sup>101</sup>

Our disagreement is about “ends or purposes inherent in human nature.” We do have ends or purposes, and they do arise from our nature, but it is not an Aristotelian nature. It is our genetic endowment as modified by our life experiences. It is a fact, which even Feser seems not to deny, that we have such an endowment. It is a fact that it is affected by the events of our lives. Our ends and purposes do not exist independently of ourselves, because they are the products of our cognitive faculties, which are the product of natural selection. So it is, at any rate, on naturalism. That is not itself an argument for naturalism, but if it suffices to explain our behavior, then it refutes the assertion that only Aristotelianism can explain our behavior. Feser has promised to prove that naturalism cannot explain our behavior. We’re still waiting to him to keep that promise. He does say, at this point of his discussion, “If there are no Aristotelian forms, essences, or natures, then there is no such thing as what is good for human beings by nature.”<sup>102</sup> Agreed, but only as Aristotle defines “nature.” Nothing precludes the existence of “what is good for human beings” just because we reject Aristotelian forms etc., because Aristotle is not the final authority on what does or can exist or what its purpose might be. According to Feser, “If there are no final causes, then reason does not have as its purpose the attainment of truth or knowledge of the good.”<sup>103</sup> But as beings capable of reason, we have our purposes, and we can use our reason for any or all of those purposes. Just because they are our own purposes does not mean they don’t exist. There might or might not exist other purposes transcendent to ourselves, but if they do, then they exist besides, not instead of, our own purposes.

Without transcendent purposes, Feser claims, “there is nothing contrary to reason in preferring that the whole world be destroyed rather than that my little finger gets scratched.”<sup>104</sup> And strictly speaking, this is true. But it is no less true on Aristotelianism, insofar as the statement “It would be better if the whole world were destroyed than if my little finger were scratched” neither asserts nor entails a contradiction. If Feser means to say that it is contrary to reason on Aristotelianism, then he must mean that Aristotelianism as a whole includes principles that such a statement would contradict. Very well, but just about every naturalistic worldview that I’ve ever heard of also includes principles that such a statement would contradict, and so on

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<sup>101</sup>*Ibid.*

<sup>102</sup>p. 103.

<sup>103</sup>*Ibid.*

<sup>104</sup>pp. 103-104.

any such worldview, that statement would be contrary to reason. Granted, Feser also says that reason itself cannot be justified absent a commitment to Aristotelianism, but he hasn't proved that yet.

Feser then segues into an explanation of how natural law underlies the sexual moral code that was prevalent in much of Western society for most of the past two millennia, followed by his responses to several objections. For present purposes, I'm going to stipulate everything he says on this issue, because I'm not interested in proving any inconsistency or incoherence on his part. I'm only addressing his claim that we naturalists cannot be rational and cannot have a defensible morality. However, he does conclude with some comments on the connection between natural law and his theology. He introduces these comments with:

Now, notice that at no point so far in my exposition of natural law theory in general or its approach to sexual morality in particular have I appealed to scripture, or traditional religious teaching, or even to a purely philosophical notion of God. As this indicates, the tedious secularist allegation that opposition to abortion, "same-sex marriage," and the like can only rest on "faith," or an appeal to divine revelation, is pure fiction.<sup>105</sup>

In defense of this claim, Feser notes that Plato and Aristotle both condemned homosexuality, and obviously neither could have been deferring to scriptural injunctions or any Judeo-Christian dogmas. The claim that they condemned it without qualification, as Feser himself does, is problematic,<sup>106</sup> but it is apparent that, to whatever degree and in whatever sense they disapproved of it, they did not say "Because the gods forbid it." But, Feser assures us, it does not follow that God is irrelevant to any natural-law argument, because "He is the Author of the natural law, even if knowledge of the grounds and content of that law can largely be had without reference to Him."<sup>107</sup> Very well. Feser says that if you accept the existence of a natural law, then you must accept the existence of a Natural Lawmaker. In other words, natural law entails theism, not the converse. Maybe so. This does threaten to take us into Euthyphro territory, but we can evade that issue for the time being. We need only note that according to his own argument thus far, if we're justified in denying natural law, then we're not obliged to believe in God. And he has not yet explained why, if we deny natural law, we can be neither rational nor moral.

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<sup>105</sup>p. 111.

<sup>106</sup>Brent Pickett, "Homosexuality," *The Stanford Encyclopedia of Philosophy* (Fall 2015 Edition), ed. Edward N. Zalta. <<http://plato.stanford.edu/archives/fall2015/entries/homosexuality/>>.

<sup>107</sup>Feser, pp. 111-112.

Next up is the problem of evil and its relationship to faith.

Faith, according to Feser, “in the present context . . . is nothing less than the will to keep one’s mind fixed precisely on what reason has discovered to it.”<sup>108</sup> That is not what most Christians (or dictionaries) say it is, but “the present context” is Feser’s own argument, and so he gets to define his key terms however he wishes. And, I certainly cannot object to anyone’s submission to the dictates of reason. So then, what does faith, as Feser defines it, have to do with the problem of evil? He begins thus:

Pure reason proves through philosophical arguments that there is a God and that we have immortal souls. This by itself entails that a miracle like a resurrection from the dead is possible. Now the historical evidence that Jesus Christ was in fact resurrected from the dead is overwhelming when interpreted in light of that background knowledge. Hence pure reason also shows that Jesus really was raised from the dead. But Jesus claimed to be divine, and claimed that the authority of His teachings would be confirmed by His being resurrected. So the fact that He was resurrected provides divine authentication of His claims. Hence reason shows that He really was divine. But He was also obviously distinct from the Father to whom He prayed and the Holy Spirit whom He sent. Since this entails the doctrine of the Trinity, reason shows that doctrine must be true as well. And so forth. At every step, evidence and rational argumentation – not “blind faith” or a “will to believe” – are taken to justify our acceptance of certain teachings.<sup>109</sup>

But, he just got through saying that faith is, or involves, an act of will: “the will to keep one’s mind fixed precisely on what reason has discovered.” Has he contradicted himself? Maybe not. With some charity, we may suppose that he would distinguish between the will to believe a particular proposition and the will to believe whatever reason has revealed. And, that is indeed a pertinent distinction whenever we can maintain it. But who, no matter what they believe, will admit to disregarding reason? There are some who do, but they are rare. Feser is a Roman Catholic, and he knows full well how many evangelical Protestants there are who say that they know Catholics are going to burn in hell because reason tells them so. Of course, his response will be that their reasoning is erroneous, but then will come their rejoinder that it is his reasoning that is in error. And this kind of debate is not at all limited to religious disputes. In any controversy that arouses people’s emotions, every party will claim to have reason on its side. This is not because reason itself is so malleable, but because the human mind finds it so easy to manipulate reason to justify just about any idea it wants to embrace. This is a universal tendency

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<sup>108</sup>p. 112.

<sup>109</sup>p. 114.

to which no one is immune. Its effects can be, with very hard intellectual work, diminished but never eliminated. If we want badly enough to believe something, we can find a way to make it appear to be the conclusion of an irrefutable argument.

None of this means, of course, that our reasoning must be flawed just because it reaches a conclusion we happen to like. If it means anything, it is just that the more we like the conclusion, the more rigorously we must examine the reasoning we use to reach it and, perhaps especially, the more diligently we must seek out and defend whatever assumptions that reasoning depends on.

Feser's digression here on faith as an exercise of reason exemplifies the apparent dual purpose of his book. My critique has focused on one of his purposes, a defense of Aristotelian metaphysics. His other purpose was to attack certain arguments enjoying a certain popularity among modern atheists. There is a tenuous connection, insofar as some of those arguments do, as Feser reminds us early and often, reveal an unfamiliarity with the Aristotelian foundations of some theistic arguments. However, it is not a defense of one's position to prove that one's opponents have misunderstood it. Feser hasn't made his case until he has proved both that (a) Aristotle was right and (b) anyone who disagrees is thereby incapable of being either rational or moral. So far, he has proved neither, but he is supposed to be setting the groundwork for his proof. And in that setting, while expounding on the true nature of faith, he offers this observation:

And if a monotheistic religion's claim to be founded on a divine revelation is going to be at all credible, that claim is going to have to rest on a very dramatic miracle; there simply is no other plausible way in which an alleged revelation might be verified. The resurrection surely counts as such a miracle, for there are no plausible natural means by which a dead man could come back to life. . . . All things considered, then, the one purportedly revealed monotheistic religion which can appeal to a single decisive miracle in its favor is Christianity. Establish that the resurrection really occurred, and you will have proven that Christianity is true; show that it did not occur, and you will, as St. Paul himself affirms, have disproved Christianity. There is no other world religion that opens itself up to rational evaluation so crisply and clearly.<sup>110</sup>

I must note, just in passing and just for the record, that I don't agree with the claim that proof of the resurrection would prove Christianity. But it obviously is true that disproof of the resurrection would disprove Christianity, or at least its historically orthodox version (and Feser clearly wants nothing to do with any other version). Now, I'm not sure what kind of proof Feser is talking about here. I've never seen any proof, in the mathematical sense of proof, that Jesus

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<sup>110</sup>p. 117

did not rise from the dead, but he is arguing in effect that if the resurrection didn't happen, then Christianity is false. The logical form of such an argument is  $\sim R \rightarrow \sim C$ . It would follow, then, that if I can reasonably doubt  $R$ , then I can reasonably doubt  $C$  if  $R$  is the only reason I could have for believing  $C$ .

Anyhow, Feser does not attempt at this point to prove the resurrection, except with a casual reference to witnesses. Instead he returns to the main point of this section, which is to rebut the atheists' argument from evil by explaining how Aquinas dealt with it:

there is no limit to the good result that might be made in the next life out of even the worst evils we suffer in this one. For even the worst evils we suffer are finite. Therefore there is every reason to think that God can and will bring out of the sufferings of this life a good that so overshadows them that this life will be seen in retrospect to have been worth it.<sup>111</sup>

As Feser notes, correctly in my own judgment, there can be no rebuttal to this that doesn't assume its conclusion, and so the argument from evil fails as an argument for atheism. But, Feser's response also fails as an argument for theism. You can't prove a proposition just by rebutting an argument against it. On this particular issue, the two sides are just stalemated. Feser doesn't see it quite that way, of course.

The bottom line is this. Reason itself, as I have argued, shows us that there is a First Cause who is Being Itself, Goodness Itself, all-powerful, all-knowing, and all the rest, and it also shows us that we have immortal souls. Hence reason tells us that there is a God who created us for a destiny beyond this life and who is fully capable of guaranteeing that the good we attain in the next life outweighs the evil we suffer in this one to such an extent that the latter, however awful from our present point of view, will come to seem "not worth comparing" to the former, and indeed if anything will even be seen to have been worth having gone through from the point of view of eternity.<sup>112</sup>

Yes, he has so argued. But as I have tried to show, his argument rests on certain presuppositions that I regard as unjustified. Perhaps justification will be forthcoming, but until I see it, I am not obliged to assume everything the Feser assumes. Or am I? At this point, Feser says he will address some of the objections to his assumptions.

As he notes, Aristotle's metaphysics began to lose favor early during the European Enlightenment, among the originators of which Descartes is typically counted. Feser finds

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<sup>111</sup>*Ibid.*

<sup>112</sup>p. 119.

precursors of modernism in the medieval writings of, among others, John Duns Scotus and William of Ockham, “who, though Scholastics, rejected Aquinas’s synthesis of Aristotelianism and Christian theology.”<sup>113</sup> However, having noted their rejection, he does not actually explain it, at least not in any words of their own. But he does, at least in Ockham’s case, give us a hint:

Ockham is often described as a nominalist; in fact he was a conceptualist, which is bad enough (recall our discussion in Chapter 2). For Ockham, there are no true universals, essences, or natures in the objective world, only particular individual things. . . . [Ockham also denies] that we can demonstrate the existence of causal connections between things. For if things have no shared essences, and God could have made anything follow upon anything else, then we simply cannot know with certainty that causes of type A will always be followed by effects of type B.<sup>114</sup>

Thus, according to Feser, Ockham’s metaphysical problem is the same as Hume’s: “skepticism about the possibility of our knowing objective causal connections between things, whether inspired by Hume or Ockham, notoriously threatens not only cosmological arguments for God’s existence, but the very possibility of science.”<sup>115</sup> I am, of course, in no way distressed by any threats to cosmological arguments for theism, but the consequences to science of denying that causation *per se* is on an ontological par with billiard balls is not what Feser would have us think. He claims to be reporting what is simply “an extremely well-known problem for Humean theories of causation,”<sup>116</sup> but to call it well-known is to evade the real issue. Yes, there are lots and lots of people who think Hume identified a problem that has so far defied a naturalistic solution, but to then infer that therefore there is no naturalistic solution is to argue from consensus. Feser of all people should see the fallacy in that.

As Feser admits, Aristotle is not easily understood. His metaphysics “involves a number of complex distinctions which require for their expression an equally complex technical vocabulary; and this complexity only grew as Aquinas and other Aristotelian Scholastic philosophers of the Middle Ages developed Aristotle’s views further.”<sup>117</sup> But the late Medieval Scholastics who followed Scotus and Ockham tried to keep Aristotle’s vocabulary while rejecting his realism, producing a result that “would come to seem an exercise in mere wordplay

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<sup>113</sup>p. 121.

<sup>114</sup>p. 122.

<sup>115</sup>p. 123.

<sup>116</sup>*Ibid.*

<sup>117</sup>p. 124.

and irrelevant hair-splitting, rather than a serious investigation of the real world.”<sup>118</sup> If so, this might have contributed to the apocryphal stories about Medieval philosophers debating how many angels could dance on the head of a pin.<sup>119</sup> But again, this proves only that Aristotle was misunderstood, not that he was right.

In any case, Feser concedes, “this was not the main reason why the moderns rejected Scholastic Aristotelianism.”<sup>120</sup> The main reason, rather, was a failure to distinguish between Aristotelian science and Aristotelian metaphysics. Modern science did discredit much of the former, but according to Feser it could not discredit the latter, because it is “a description of reality that is more general and basic than any scientific theory, resting as it does on facts (about change) that science itself takes for granted.”<sup>121</sup> OK, but it is a reality that any description must assume the existence of, as the facts on which that description rests must also be assumed. So far as I can tell, the only fact about change, generically speaking, that science takes for granted is that it happens. Any empirical science, says Feser, whether modern or Aristotelian, is “completely independent of Aristotle’s *metaphysical* ideas, such as the distinction between actuality and potentiality, the doctrine of the four causes, hylomorphism, and so forth.”<sup>122</sup> Doesn’t that render his ideas unfalsifiable? Feser seems to hedge at this point. They can be, he says, “subjected to rational evaluation or criticism, [but] such criticism can only come from some alternative metaphysical theory, not from empirical science.”<sup>123</sup>

OK. Here is an alternative metaphysical theory: Nothing exists except matter and energy as revealed by, or inferable from, observation of the natural world aided by the exercise of reason. According to Feser, the exercise of reason applied to observation shows that this theory cannot be true, that there must also exist such things as actuality, potentiality, final causes, forms, and so forth. But he has not yet demonstrated this, and his mere say-so does not make it so. He also says, though, that no observation could falsify it. His ontology, he says, “is valid *whatever* the empirical scientific facts turn out to be.”<sup>124</sup> Now, Aristotle’s metaphysical speculations were

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<sup>118</sup>*Ibid.*

<sup>119</sup>“How many angels can dance on the head of a pin?” *Wikipedia*, [https://en.wikipedia.org/wiki/How\\_many\\_angels\\_can\\_dance\\_on\\_the\\_head\\_of\\_a\\_pin%3F](https://en.wikipedia.org/wiki/How_many_angels_can_dance_on_the_head_of_a_pin%3F).

<sup>120</sup>Feser, p. 124.

<sup>121</sup>p. 125.

<sup>122</sup>p. 124.

<sup>123</sup>p. 125.

<sup>124</sup>*Ibid.*

his attempt to explain the observable world, but whatever can explain any possible observation at all ends up explaining nothing at all, and I suspect Aristotle himself would have understood this.

Anyway, having established to his own satisfaction that modern science, while discrediting Aristotle's science, did nothing to discredit his metaphysics, Feser seeks to explain why almost everybody nowadays thinks it did. And it's because, he says, Aristotle's metaphysics is inconsistent with modern appetites—particularly our appetite for disregarding God's will and the ecclesiastical authorities whose job it is to convey his will to us. And he doesn't indict only secularists when he says this.

Consider that by the time Bacon, Hobbes, Descartes, et al. were writing, Martin Luther had already greatly extended Ockham's individualist tendencies in religion and politics, replacing not only ecclesiastical authority but also (what he regarded as) the stifling and unbiblical system of Aristotelian Scholasticism with the primacy of individual conscience. In his defense of divorce, he had (together with Henry VIII) inaugurated a revolution in social mores, undermining one of the traditional bulwarks of the stability of the family. John Calvin's brand of Protestantism had replaced the traditional emphasis on the spiritual dangers of wealth and benefits of poverty with a new affirmation of industry, thrift, and acquisition as Christian virtues. Intentionally or not, the Reformation thus ushered in a new worldliness the practical results of which – increased wealth and a new sense of individual freedom – led to a desire for more of the same. At the same time, its fragmentation of Christianity into hostile camps and the bloody conflicts to which this gave rise made religion come to seem a dangerous source of social unrest; and its pitting of faith and the Bible against reason and philosophy increasingly made religion come to seem rationally unfounded as well.<sup>125</sup>

Of course Feser realizes that many of his readers will not view these developments with the same alarm they arouse in him. But the point, he insists, is not whether any of them are good or bad as such. The point is that the Western world, or certain influential segments of it, wanted them to happen and could not make them happen without rejecting Aristotle, and so they rejected him not because he was wrong but because he was inconvenient. And, eager to assure that this is not just his opinion, he cites a few other modern philosophers who seem to agree with him to at least some extent.<sup>126</sup> And so we get an argument from authority on top of a genetic fallacy.

Even if it was the case that early modern intellectuals had ignoble motives for rejecting Aristotle's metaphysics, that doesn't mean they lacked any better reason to do so. Feser concedes

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<sup>125</sup>p. 126.

<sup>126</sup>pp. 127-28.

that “there were some arguments” for ditching Aristotle, but “none of them very impressive.”<sup>127</sup> And of course they don’t impress him, but that isn’t telling his readers whether they should or should not be impressed. This is the point at which Feser should have said: Here are the best arguments against Aristotle, and this is what is wrong with each of those arguments. And he sort of starts to do this:

The undeniable success of the quantificational approach to the study of the natural world, and especially the technological achievements it has made possible, might seem an obvious retroactive justification of this revolution. But there are three reasons why such an argument in favor of the moderns over the Scholastics is no good.<sup>128</sup>

So far as I know, nobody has ever argued that Aristotle was wrong because quantification has been successful and made modern technology possible. And Feser himself explains exactly why nobody has so argued: There is no incompatibility between Aristotle’s metaphysics and quantification or technology.

The next argument Feser confronts is one I have already brought up, and I must beg the reader to take my word for it that I originally wrote about it several days before I got to this part of Feser’s book. Honestly, I didn’t see it coming.

A particularly famous criticism of Aristotelian Scholasticism by early modern philosophers is enshrined in Molière’s joke about the doctor who pretends to explain why opium causes sleep by saying that it has a “dormitive power.”<sup>129</sup>

The doctor was a character in Molière’s play *The Imaginary Invalid*, a 17<sup>th</sup>-century musical comedy. It was apparently supposed to be a joke and is usually taken as such, but Feser says the humor depends on begging a metaphysical question. As he sees it:

To say “Opium causes sleep because the chemical structure of opium is such that, when ingested, sleep results” is hardly more informative than “Opium causes sleep because it has a power to cause sleep.” If the former statement is not a tautology – and it isn’t – then the latter isn’t either.<sup>130</sup>

Actually, the former is very nearly a tautology, given the modern assumption that whatever any drug—or for that matter anything else we ingest, be it food, poison, or other—does

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<sup>127</sup>p. 129.

<sup>128</sup>*Ibid.*

<sup>129</sup>p. 130.

<sup>130</sup>*Ibid.*

is a function of its chemical structure. It is what we would say even if we knew nothing about the chemical constituents of opium or how they interacted with the central nervous system. In the modern world, to say that “its chemical structure is such that, when ingested, sleep results” is to say no more than “it has a power to cause sleep.” So it is very nearly a tautology. It is not exactly a tautology because it does state that this power is explicable in chemical terms rather than in terms of, say, evil spirits. But Feser is either just wrong or simply begging the question when he says that “Opium causes sleep because it has a power to cause sleep” is not a tautology. And he seems to be begging the question:

[W]hatever the specific *empirical* details about opium turn out to be, the fundamental *metaphysical* reality is that these details are just the mechanism by which opium manifests the inherent powers it has *qua* opium, powers that a thing has to have if it is going to have any causal efficacy at all.<sup>131</sup>

But this is just his Aristotelian thesis restated, a thesis that he has said is consistent with—cannot be falsified by—any empirical observation or discovery whatsoever. On his terms, there is not and cannot be anything that his metaphysics does not explain.

For many of us moderns, unfalsifiability is of course a problem, but since I’m not trying discredit Aristotle, I’m letting Feser slide with it. My thesis is not the Aristotle was wrong. I obviously think he was, but I’m not trying to prove that. All I’m saying we don’t need Aristotle’s metaphysics in order to be both rational and moral.

Feser next addresses an objection by Locke to Scholasticism, particularly its notions of forms, powers, and essential properties, by claiming that Locke seems to have badly misunderstood the Aristotelian principles on which Scholasticism was based. And perhaps he did. I can claim only the meagerest understanding of Aristotle myself—just what I’ve gotten by reading Feser’s book and what I dimly remember from a single class in college. But Feser is making a bigger point here than “Locke was wrong about Aristotle.” It is because of Locke, he says, that practically every modern Western philosopher has been wrong about Locke.

[Locke] is one of the most important figures in the early modern anti-Aristotelian revolution – and arguably the *quintessential* modern philosopher, insofar as now-prevailing Western attitudes about scientific rationality, religious toleration, government by consent, and individual rights owe more to Locke than to any other thinker. As has been noted, the generally acknowledged feebleness of his arguments has not led many to want to reconsider his conclusions, precisely because those conclusions have become so deeply embedded in the Western liberal consciousness that it is simply taken for granted

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<sup>131</sup>*Ibid.*

that they *must* be defensible somehow, whether or not Locke himself was able to pull it off.<sup>132</sup>

But then Feser himself goes on to note that post-Lockean objections to Aristotle were actually a bit more specific than this. The “main case” for the modern worldview, he says, “is that considered as a systematic totality it constitutes an alternative to Scholasticism that accounts equally well for all the “evidence” while avoiding Scholasticism’s alleged difficulties, so that it should be preferred to Scholasticism on grounds of simplicity.”<sup>133</sup> Or, he says more succinctly a bit later: “The main objection to Aristotelian Scholasticism is that we just don’t *need* it.”<sup>134</sup>

Uh, yeah.

Feser’s immediate response is that this begs the question of what facts there are that need to be explained. Final causes, for instance,

are not “hypothetical entities” or “theoretical postulates” designed to “explain” such-and-such empirical evidence à la molecules, atoms, and quarks; they are rather unavoidable metaphysical realities whose existence is a necessary precondition of there being any “empirical evidence” at all.<sup>135</sup>

But Feser’s insistence that they are unavoidable doesn’t make them so. If the universe seems, to his mind, incomprehensible without them, then that just might tell us more about his comprehension than about the universe. If modern science actually does avoid them, then it can’t be true that they are unavoidable. Feser presumably means that they cannot be avoided with logical consistency, that their denial entails a contradiction. At this point in his book, he has not yet gotten around to demonstrating such a contradiction in a worldview without Aristotle. But he is about to start.

He begins with what is now usually called the “mind-body problem” which he seems to suggest was sort of invented by Descartes. He summarizes, more or less fairly, why our subjective experiences (often dubbed “qualia” in the philosophical literature) are not easily explicable on naturalism, and indeed why some philosophers think they are not at all explicable. And the actual problem, he says, is that “The physical world, on this [naturalistic] understanding, *just is* whatever exists independently of any mind or conscious experience or subjective mental

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<sup>132</sup>p. 131-32.

<sup>133</sup>p. 132.

<sup>134</sup>*Ibid.*

<sup>135</sup>*Ibid.*

representation.”<sup>136</sup> But that means, he says, that no conscious experience or mental representation can itself be explained. And as a consequence, any attempt at a naturalistic explanation must, in effect, deny their very existence. As a further consequence, those who insist on their existence are forced, following Descartes’ lead, to accept some kind of dualism.<sup>137</sup> So says Feser. “But,” he says, “it is the denial of final causes that most clearly poses an absolutely insurmountable obstacle to any attempt to explain the mind in purely material terms.” Why is that? Because, he says, “the human mind manifests final causality more obviously than anything else.”<sup>138</sup> And of course it does—but only on the assumption that final causality actually exists.

Feser tries to elaborate with some comments about intentionality:

More generally, even where purposes and actions are not in question, the mind is characterized by what philosophers call “intentionality” (from the Latin *intendere*, to point to or aim at): it is directed toward or represents things beyond itself. For example, you can think about rocks and trees, dogs and cats, circles and squares, planets and galaxies, molecules and atoms, and in doing so your mind is, as it were, “directed toward” them or “pointing beyond itself” to them. Notice that this is so even if you have no intention of doing anything (e.g. of picking up a certain rock, petting a certain dog, or whatever). You might be simply contemplating them. (“Intentionality” is a more general phenomenon than the having of intentions to act in this or that way.) It is also so even if the things in question do not exist. . . . Intentionality is regarded by many as the defining feature of the mind, the “mark of the mental,” as the 19th-century philosopher Franz Brentano famously characterized it. And it should be obvious that it is simply a *conceptual impossibility* that it should ever be explained in terms of or reduced to anything material, at least as matter is understood by the advocates of the Mechanical Philosophy and their contemporary naturalistic descendents . . . .<sup>139</sup>

But Feser is still just assuming his conclusion. Naturalists do conceive of ways the brain could do everything it is known to do, notwithstanding its being nothing but a material object functioning according to natural law. It could be a conceptual error, but it cannot be a conceptual impossibility. For some of us, the mind-body problem has a quite simple solution: The mind just is what the brain does. Or rather, it is what the brain does that we are aware of. (In evolutionary time, minds are a very recent development compared with brains.) Of course, that way lies

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<sup>136</sup>p. 137.

<sup>137</sup>p. 138.

<sup>138</sup>*Ibid.*

<sup>139</sup>pp. 138-39.

madness, according to Feser, but to call an idea crazy is not to prove that it is crazy. Feser has promised a proof in his final chapter, and it will be interesting to see why the proof needed a book-length introduction. For the time being, though, it is also interesting to note that Feser, unlike Christians in general, actually rejects dualism. It was forced on Descartes, he explains, by the Enlightenment's rejection of Aristotelianism.<sup>140</sup> He devotes a few pages to explaining how Aristotle was not a dualist and why those Christians who parted ways with Aristotle had to invent dualism. From there he moves on to some briefer critiques of several other problems he believes were engendered by the Enlightenment's rejection of Aristotle.

Like the mind-body problem, they are commonly referred to as "traditional" problems of philosophy, but also like that problem, they are in fact, for the most part, of relatively recent vintage, arising only as a result of the moderns' rejection of key classical, and especially Aristotelian, metaphysical categories. Here are some examples.<sup>141</sup>

First up is skepticism. Aristotle explained knowledge in terms of the mind sharing a form with the thing known. "But the moderns rejected formal causation, and with it this picture of knowledge."<sup>142</sup> Without formal causation, though, it is possible that we could be wrong about practically anything, and as Feser notes, "One sorry byproduct of all of this is that generations of hapless Philosophy 101 students have come to think that philosophy is fundamentally about wondering whether the table in front of you really exists."<sup>143</sup> That might say more about modern pedagogy than modern philosophy. It is true that epistemologists have failed to reach anything like a consensus on how we know anything, but for some reason there has been no revival of pyrrhonism in the modern era. The postmodernists may be flirting with something like it, but the philosophical community has ignored them for the most part. We do reject infallibility, but we do not reject the notion that we are justified in believing a substantial portion of what nearly everybody regards as common knowledge, such as the existence of the tables and practically everything else we see in the world around us. And what Feser does not explain is how we regain infallibility by believing in Aristotle. For all his commitment to Aristotelianism, I don't think even Feser believes himself incapable of error. Of course skepticism can be overdone or misapplied, but that is a failing of human nature, not of modern philosophy.

Feser next brings up the problem of induction. As he states the problem, "if things have no shared forms or essences (formal causality) and nothing intrinsically points beyond itself

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<sup>140</sup>p. 140.

<sup>141</sup>p. 142.

<sup>142</sup>*Ibid.*

<sup>143</sup>p. 143.

toward anything else (final causality), then, to repeat, how can we possibly infer from the things we observe to the things we don't, or from the past and present to the future?"<sup>144</sup> How, indeed? Well, we do. Philosophers ever since Hume have had a hard time explaining how we do it, but they have been compelled to admit, as Hume did, that we do it anyway, and for the most part with remarkable success. And Feser knows this, of course. His point is that Aristotle explained how induction works and no other explanation is even possible.<sup>145</sup> Nevertheless, other explanations are on the philosophical table, and an alternative is not wrong, much less nonexistent, just because a lot of people won't accept it. Feser is not about to claim that widespread rejection of an idea means that it can't be right.

Next, according to Feser, if we reject Aristotle's notion of human nature, "Then we get something called the 'problem of personal identity' (yet another 'traditional' problem of philosophy which is really entirely modern)."<sup>146</sup> That last remark is at least disingenuous. The ancients certainly did wrestle with the problem of reconciling identity and change, whether or not it occurred to them that it would apply to human beings as well. And if it didn't, that doesn't mean it shouldn't have. But modern or not, Feser conflates the problem of personal identity with the problem of defining personhood. He cites the Terry Schiavo case ("where an obscenely large number of Terri Schiavo's fellow human beings could get themselves to believe that starving her to death wouldn't constitute murder") as a consequence of the modern world's rejection of Aristotle. Without formal causes, he says, there is "not a principle of unity that ensures that a person remains the same person throughout all the changes he undergoes as he gains, loses, and rearranges his various component parts."<sup>147</sup> But to say that such a principle must exist is to beg the ontological question. Those who argued for the termination of Schiavo's life support weren't claiming that she was no longer the same person she used to be. They argued that she was no longer a person, period. They could have been mistaken, but not just because Aristotle would have disagreed with them.

As with skepticism and the problem of induction, it is true as Feser says that modern philosophers have found transtemporal identity problematic, a source of various paradoxes. But no problem is proved unsolvable by the failure of philosophers so far to have found a solution they all agree on. Feser observes that the paradoxes have forced philosophers such as Derek Parfitt "to conclude that there really is no such thing as a "person" or a "self" as traditionally

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<sup>144</sup>p. 144.

<sup>145</sup>*Ibid.*

<sup>146</sup>p. 145.

<sup>147</sup>*Ibid.*

understood.”<sup>148</sup> Well, maybe there’s not, but the key phrase there is “as traditionally understood.” Our traditional understanding was based on everything we used to think we knew. Now we know a lot more, and one thing we know now is that much of what we used to think we knew was just wrong. To modify our concept of “person” or “self” is not to deny that such a thing exists. It is only to deny that it is the same thing Aristotle thought it was, and disagreement with Aristotle is not irrational just because Feser says it is.

Next up is free will. Feser assures us that:

To take the materialist route entails more or less denying free will outright, unless it is simply redefined so that any action that flows from our desires counts as “free,” even if those desires were themselves determined by forces outside our control (a theory known as “compatibilism” since it alleges that free will and determinism are compatible).<sup>149</sup>

Yes, exactly. And most of us would prefer that this not be true. But reality has a very long history—as I don’t doubt for second that Feser would agree in a heartbeat—of telling us that what we want to be true just doesn’t count for anything. But while he correctly states the materialist position on free will, his interpretation misses the mark. It implies, he claims, that “human behavior differs in degree but not in kind from the behavior of billiard balls and soap suds.”<sup>150</sup> But no, a difference in degree can become a difference in kind. Billiard balls and soap bubbles don’t make decisions, but we do make decisions, and that suffices to make us different in kind.

Feser’s fifth and sixth problems with naturalism are with the notion of natural rights—which, perhaps ironically, naturalism must deny—and morality in general. The problem common to both is modernism’s denial of an objective basis on which to decide (in a political context) who has what rights or (in a general context) what is the difference between right and wrong. As he points out, “To deny that there are any formal or final causes in the natural world is implicitly to deny that there is any objective standard of goodness [or justice] in that world either.”<sup>151</sup> But not exactly, in fact. Such a denial may follow from philosophical naturalism, but not everyone who rejects Aristotle’s metaphysics is a philosophical naturalist. The philosophical menu is considerably more varied than that. But, it is naturalism that I’m defending, and so I’ll briefly

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<sup>148</sup>p. 147.

<sup>149</sup>p. 148.

<sup>150</sup>*Ibid.*

<sup>151</sup>p. 150.

address Feser's concern on that point—only briefly, because I must keep this essay to a readable length.

As I said earlier, while I deny an Aristotelian ontology for human nature, I don't deny the existence of something that we may reasonably call human nature. We are social animals, and that nature therefore includes our need to live in communities. And it is a need in the most basic possible sense: Without communities, we don't survive. But communities need rules. Communities without them don't survive, and thus their members don't survive. But this is not enough for Feser:

For the Humean, all value is subjective; that is to say, it exists only relative to the one doing the valuing. Reason, the “slave of the passions,” can tell us what we must do to further the realization of whatever it is we value, and it can tell us whether the pursuit of some values would be consistent with the realization of others, but it cannot tell us what ultimate values we ought to have, since (in the absence of forms or essences of either a Platonic or Aristotelian sort) there just is nothing there in mind-independent reality for reason to grasp as an objective standard of goodness.<sup>152</sup>

Right. Of course, this presents a challenge for any community attempting to decide what rules to enact, who will make those rules, and by what means the rules will be enforced. Our political and moral lives are much easier if we suppose that we are justified in prohibiting some behavior because it's just an objective fact that the behavior is bad. But reality cares nothing about making our lives easier. Some political and moral codes will cause more suffering than other codes if they are enforced, and that can be reason enough on which to base our preferences.

According to Feser, “this isn't morality at all, but just a non-aggression pact between self-interested bundles of impulse and willfulness.”<sup>153</sup> But in saying so, he just confirms that he doesn't mean what I mean when he uses the word “morality,” and he just begs the question if he appeals to Aristotle in defense of his usage. I believe that a diminution of human aggression, and its concomitant diminution of human suffering, would constitute a significant moral advance for this world. I could be mistaken about that, but I'm not being irrational. Feser attempts to denigrate utilitarian ethics for its subjectiveness, but why is subjectivity suddenly a problem when we're talking about morality? Nobody whose opinion I care about is claiming that something is good just because we like doing it. All we're insisting on is that it isn't bad just because certain other people don't like us doing it.

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<sup>152</sup>*Ibid.*

<sup>153</sup>p. 151.

Without Aristotelian metaphysics, says Feser, we cannot justify the exercise of reason for anything, particularly for “the pursuit of the good.”<sup>154</sup> But he’s back to begging the question. Reason is an ability we have, and that much is a fact. We can use it or not, and we can choose the purposes for which we use it. That too is a fact. We can use it rightly or wrongly, and it embodies its own criteria that let us know which we are doing. It has no transcendent purpose, absent Aristotelian assumptions, but it does have the intrinsic purpose of checking our beliefs for consistency. It can tell us whether our assumptions justify whatever we infer from them, and whether our assumptions themselves are consistent with each other. But it cannot tell us which assumptions to keep and which to abandon if we find a contradiction. In short, it provides no guarantee of our finding any irrefutable truths. We assume what we must assume—on faith, for those who must say so—but we’re not entitled to think ourselves infallible about anything.

Speaking of faith, Feser agrees with most apologists that (a) blind faith is a bad thing and (b) Christianity has never promoted it.

The standard one-line summary of the Enlightenment goes like this: Because religion is based on blind faith, the founders of modern Western thought sought to free science and philosophy from its irrational embrace, to reduce or eliminate its influence on public life, and to re-orient even private life toward improving this world rather than preparing for an illusory afterlife. As we have seen, this has things almost precisely backwards. In fact the moderns didn’t reject religion for resting on blind faith; it would be truer to say that they falsely accused it of resting on blind faith so that they could justify their rejection of it, and cooked up a new conception of what should count as “rational” in the hope of making the accusation stick.<sup>155</sup>

What Feser here calls “blind faith” is probably fideism, which according to the Roman Catholic Church is a heresy. Much that I agree with has been said elsewhere about the unfairness of certain popular memes in modern rhetoric about Christianity in general and Medieval Christianity in particular, but apologists offended by a conflation of appropriate faith with fideism have no one but themselves to blame, because I have yet to see any consensus among them on what constitutes appropriate faith. In forum after forum, I have asked believers, “What do you mean by faith?” and have never gotten the same answer twice. They don’t even quote Hebrews 11:1, although I have seen, on more than one occasion, the assertion, “If we had evidence, it would not be faith”). I do get it that certain concepts, including some of the most important ones, are really hard to define. But faith is said to be a justification for certain beliefs

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<sup>154</sup>p. 155.

<sup>155</sup>p. 156.

that, according to Christianity, one must hold on penalty of eternal damnation, in which case apologists owe the world some explanation of exactly what that justification consists of.

Feser himself isn't paying up. After denying that the church ever endorsed blind faith, he makes no attempt to explain what kind of faith the church did endorse. Rather, he says, the moderns used the "blind faith" excuse to reject Aristotelianism. This could suggest that, in Feser's thinking, faith of the appropriate kind is just belief in Aristotle. But, he doesn't say so, so maybe not. In any case, it is true that, as he observes,

the philosophical assumptions the modern thinkers all came to hold in common, and in particular their hostility to the key metaphysical doctrines of classical philosophy in general and Aristotelianism in particular, had an inherent tendency to undermine the traditional philosophical case for the existence of God, the immortality of the soul, and the natural law.<sup>156</sup>

True enough, even if "hostility to" is replaced by the more neutral "disbelief in." But Feser cannot argue, except circularly, that therefore those philosophical assumptions were wrong. We have been waiting for Feser to show us why rationality compels us to accept Aristotelianism, and we're now at the final chapter, which he titles "Aristotle's Revenge," in which he has promised to do just that.

It doesn't begin well, as the reader is treated first to a several-page-long diatribe against the eliminative materialism of Paul and Patricia Churchland—the point being, Feser assures us, that it is the sole logical consequence of rejecting Aristotle. Now, I have read much of the Churchlands' work, and Feser's account of it looks to me more like a caricature than a characterization, but let's just agree that eliminative materialism, whatever it actually is, is something we don't want to be true. Is that supposed to prove that it can't actually be true? Has Christianity itself not told us, over and over again for 2,000 years, that just because don't like something doesn't mean it isn't so?

But of course Feser knows better than to argue that eliminative materialism can't be true because he would hate for it to be true. He says he can prove that it is "indeed insane."<sup>157</sup> Now we need to be very careful. Let's schematize the argument he is about to make. Let *A* = Aristotelianism, *N* = naturalism, and *EM* = eliminative materialism. Then he proposes to prove the following:

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<sup>156</sup>*Ibid.*

<sup>157</sup>p. 163.

Premise:  $\sim A \rightarrow N$

Premise:  $N \rightarrow EM$

Premise:  $\sim EM$

$\therefore \sim N$

$\therefore A$

It is true that in Western academia, the decline of Aristotelianism was coincidental with the rise of philosophical naturalism, but this doesn't mean anybody has to become a naturalist if they reject Aristotle. More to the point: It doesn't mean Aristotelianism is the only alternative to naturalism. This falsifies the first premise, which is sufficient to render Feser's argument unsound.

What about the insanity of eliminative materialism? Feser defines EM as "the theory that beliefs, desires, and other mental phenomena do not exist and ought to be eliminated from our description of human nature and replaced by concepts derived from neuroscience,"<sup>158</sup> and whether or not it may appropriately be described as "insane," nothing matters to the logic of his argument except whether it is true or false. I'm sure he would protest, "Obviously, if I think it's insane, I must think it is false." Very well, but any true theory can be ridiculed in such a manner as to seem insane, and ridicule is not argumentation. You don't prove something false just by making fun of it.

In the following, Feser presents an apparent precis of his argument, absent his usual derision:

The whole eliminative materialist enterprise is founded on the notion that science gives us the only accurate picture of reality. Yet science is in the business of making *assertions* about the world, developing *theories*, putting forward *explanations*, extending our *knowledge*, and so forth; and every one of these notions is utterly suffused with intentionality, which as we saw in the previous chapter is the central and defining feature of the mind. Insofar as an assertion, theory, explanation, or knowledge claim *represents*, *means*, "*points*" to, or is "*directed*" toward something beyond itself, it is every bit as "intentional" as the mind is, so that if the mind goes, science goes with it. Indeed, reason in general – another paradigmatically mental phenomenon – goes with it also, and thus so

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<sup>158</sup>p. 161.

too does any rational argument anyone has ever given, *including any argument anyone has ever given or could give for eliminative materialism.*<sup>159</sup>

So his argument essentially is that eliminative materialism, if true, would falsify the very science on which it claims to be based and is therefore self-negating. And, I suppose it is in some hyperbolic sense insane to accept a self-negating theory. Now, I happen to generally agree with the Churchlands' work insofar as it supports a thoroughgoing reductionism. I believe that the conscious mind just is some of the what the brain does. Most of what the brain does is subconscious, but the mental activities that we're concerned with here are the ones we're aware of: thoughts, feelings, attitudes, beliefs, etc. If the Churchlands are claiming that none of these phenomena actually exist, then I disagree with them, although I wouldn't characterize their thinking as insane. I suspect that our disagreement is more about semantics than substance, but we don't have to sort that out here. Let's just stipulate that, sane or not, they're wrong about the nonexistence of mental phenomena. Does this, as Feser asserts, negate naturalism? No, it doesn't. We would then be left with reductionism, which asserts that mental phenomena are adequately explained by neurochemistry without denying that those phenomena exist. Reductionism is certainly consistent with naturalism, and so Feser's second premise is untrue. He cannot save Aristotle by trashing eliminative materialism.

Of course, he knows full well that most naturalists are not on board with the Churchlands; but, he says, they should be, and they would be if they were consistent: "every form of materialism really entails eliminative materialism."<sup>160</sup> How so?

Scientific materialism "explains everything" in non-Aristotelian terms only by sweeping what doesn't fit the mechanistic model under the rug of the mind. And thus the only way to deal with the lump that remains, short of Descartes's dualism, is to throw out the rug, lump and all. Hence to say that matter, understood in mechanistic terms, is *all* that exists, is implicitly but necessarily to deny that the mind exists.<sup>161</sup>

Using this kind of logic, one could as easily prove that baseball doesn't exist. And, perhaps Feser would agree that, yes indeed, if we accept materialism in good faith, then we must deny the existence of baseball. And there is a sense in which he is correct, but it is not any sense in which, when we're watching a game in progress, we must declare, "None of this is really happening." We affirm the existence of people, and we affirm the existence of their activities, and among their activities is a particular set of behaviors that we label "the game of baseball."

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<sup>159</sup>p. 164.

<sup>160</sup>p. 165.

<sup>161</sup>*Ibid.*

The ontological status of human beings is sufficient to make it rational to talk about baseball as if the game itself had the same kind of existence. Similarly, the ontological status of the central nervous system suffices to make it rational to talk about its activities, including the mental phenomena of which we are aware, as if those activities had the same kind of existence as our nerves and the electrochemical events occurring within them. If the Churchlands and a few other philosophers don't think so, then that is just irrelevant. To see someone like Feser, who despises materialism, side with the Churchlands and say "They're the only ones who correctly understand materialism" is a bit like seeing certain skeptics pointing to Protestant young-Earth creationists and saying, "They're the only ones who correctly understand Christianity."

Feser isn't done yet with his argument, though. Referring to materialists, he says:

While they dutifully parrot the general line that Aristotle and his Scholastic followers were all wrong and no longer worth taking seriously, they often inadvertently appeal to concepts that can make sense only if interpreted in a broadly Aristotelian way.<sup>162</sup>

But what is required for an idea to make sense to what the law calls a "reasonable person" is not subject to Feser's arbitration or the judgment of any other particular philosopher. Geocentrism makes no sense to the modern mind, but it made perfect sense to the minds of nearly everyone before Copernicus, Galileo, and Newton came along (one among many reasons being Aristotle's endorsement of it). And whether, and to whom, it ever made sense had nothing to do with whether it was true or false. Heliocentrism makes sense to us now because we have a ton of evidence for it, and it didn't make sense to the ancients because they didn't have that evidence. Their only evidence was what they could see, and what they could see looked like a stationary world at the center of the universe.

According to Feser, "the usual objections to final causality are based on egregious misunderstandings," specifically the conflation of conscious with unconscious goal-directedness. I must confess to not knowing what the usual objections are. If they are the result of ignorance of what Aristotle really said, then too bad for the usual objections. But Feser has carefully explained what Aristotle was talking about, and I have read his book with close attention. I get the distinction that Aristotle was making. What I don't get is why I should believe that anything like unconscious goal-directedness exists.

Furthermore, he protests,

Aristotelians *do not claim* that every object in the natural world necessarily serves some function. What they do claim is that everything in the world that serves as an efficient

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<sup>162</sup>p. 166.

cause also exhibits final causality insofar as it is “directed toward” the production of some determinate range of effects.<sup>163</sup>

Whether this is a distinction that makes a difference need not concern us right now. I just ask again: Why should I think so? What compelling reason do I have for believing that every efficient cause is directed toward “some determinate range of effects”? “Final causality,” Feser insists,

“is that which makes efficient causality possible, the factor that grounds the necessary connection between causes and effects that is evident to common sense and which becomes problematic on a modern, mechanistic account of the material world.”<sup>164</sup>

Well, not just because he says so. Connections between causes and effects have to exist, but they don’t have to exist necessarily, notwithstanding our very fallible common sense, and notwithstanding how problematic a contingent connection would be for a committed Aristotelian. It is not a problem for the rest of us, and it doesn’t become a problem just because Aristotelians say it is a problem.

Feser then revisits the problem of a naturalistic philosophy of mind. According to materialism, as he begins his explanation of its account of our minds:

Individual thoughts are just physical symbols in the brain – like words or sentences, only encoded in the form of neural firing patterns, rather than in ink (as when you write a word or sentence), or sound waves (as when you speak it), or magnetic patterns on tape (as when you utter it into a tape recorder), or electrical current (as when you type it into a computer). Thinking – going from one thought to another – is just transitioning from one symbol in the brain to another according to the rules of an algorithm, in just the way a pocket calculator goes from “2” and “+” and “2” and “=” to “4” according to the rules of an algorithm, the difference between the calculator and the brain being a difference in degree but not in kind.<sup>165</sup>

All right. Close enough. As he acknowledges, it is a considerable oversimplification, but it will do for our purposes. So what does he think the problem is? “First of all,” he says, “nothing counts as a ‘symbol’ apart from some mind or group of minds which interprets and uses it as a symbol.”<sup>166</sup> Yeah, that is what we all thought, until we invented computers. But that was because

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<sup>163</sup>*Ibid.*

<sup>164</sup>p. 167.

<sup>165</sup>*Ibid.*

<sup>166</sup>*Ibid.*

we had no other use for the concept of symbolization or any similar concept, such as encoding information. Feser objects that “since the materialist’s ‘computer model’ of the mind tries to explain the mind in terms of symbols in the brain, but nothing counts as a symbol in the first place except when interpreted as such by a mind, the theory goes around in a circle,”<sup>167</sup> but now his oversimplification becomes problematic for his argument. There is no “computer model” of the mind, except insofar as any model of the brain is a model of the mind. What the brain does, among other things, is encode information that it receives from its sensory peripherals. It then processes that information and produces various outputs, including the mental phenomena that we associate with our minds—thoughts, feelings, etc. This encoding happens in any creature with any kind of nervous system, including those that, so far as we have any reason to believe, experience nothing like sentience. Worms almost certainly do not have minds, but their nervous systems do encode and process information. Our nervous systems are vastly more complex and thus receive and process many orders of magnitude more information. Our mental lives seem to many of us to be entirely explicable as a consequence of the complexity of the organic computers that our brains are. We could be mistaken, but arguments from incredulity won’t prove it. Neither will Feser’s mere unsubstantiated assertion that the whole idea is just incoherent.

Feser next disputes the notion that the brain is just executing a bunch of algorithms. An algorithm can be defined as a set of rules, meeting certain criteria, for solving a particular problem. According to Feser, nothing can follow a rule “unless it could at least in principle be conscious of doing so,”<sup>168</sup> but this is a rhetorical sleight of hand. We do refer to executing an algorithm as “following the algorithm,” i.e. following the rules that comprise the algorithm. But this sense of “following” presupposes no consciousness. If it did, then no computer now in existence could be executing algorithms. Either that, or our computers actually could, at least in principle, be conscious of following rules. And some of us don’t really have a problem with that latter alternative. We don’t think any computer is conscious of anything yet, but not because we think computer consciousness is impossible in principle.

Feser doesn’t miss the implication: Even a pocket calculator executes algorithms in the usually intended sense. But Feser suggests that the usually intended sense is mistaken. A calculator, he says, doesn’t really follow an algorithm, but only acts *as if it were* following an algorithm. It follows its algorithmic rules, he says, “in a derivative sense, insofar as its designers created it with that purpose in mind, though here too everything depends on their being

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<sup>167</sup>p. 168.

<sup>168</sup>*Ibid.*

something capable of consciously intending that an algorithm be followed.”<sup>169</sup> But of course. We have had some conscious intention for every machine we have ever made. We are capable of purposive activity because we have minds that can formulate purposes. Our machines have no such capability, at least not yet. The only purposes they can have are our purposes. Yes, the rules that computers follow when executing algorithms are our rules, not their own. But it does not follow that our brains are not themselves executing algorithms. That way lies Paley’s watchmaker argument.

Feser follows this with several pages of elaboration of his objection to the materialist interpretation of brain states as symbols, but he adds nothing of substance to his earlier claim that, since there can be no symbolism without minds, you can’t have minds dependent on symbols. As before, he is for the most part simply begging that question against naturalism. Then he gets to the penultimate section of his final chapter, titled “Irreducible Teleology,” in which he sets forth “three levels of physical reality in which final causality is unavoidable: biological phenomena, complex inorganic systems, and basic laws of nature.”<sup>170</sup>

*A. Biological phenomena:* According to Feser,

contemporary Darwinian biologists, no less than their Aristotelian predecessors, constantly help themselves to teleological language in describing and explaining the phenomena with which they have to deal, and no one denies that it would be impossible for them to carry on their researches without it.<sup>171</sup>

Yes, they do help themselves to that language, but not because their research would be impossible without it. They do it for the same reason astronomers still say the sun rises and sets: It’s a lot more convenient to talk that way than to use alternative circumlocutions. It is not sound reasoning to infer anything about reality from the language we use to talk about it. The statement “a unicorn is an imaginary animal resembling a horse having a single horn growing out of its forehead” logically entails the actual existence of unicorns, notwithstanding the qualifier “imaginary.” Furthermore, to speak of organs or behaviors having functions is metaphysically noncommittal, but to infer purpose from function is to beg the ontological question—even if biologists themselves sometimes conflate the two. They are, after all, not usually either philosophers or wordsmiths. And begging the question is what Feser spends the next several paragraphs doing as he attempts to prove that it makes no sense to talk of function without talking about purpose. He attempts to demonstrate, with numerous quotations from the scientific

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<sup>169</sup>p. 168.

<sup>170</sup>p. 173.

<sup>171</sup>*Ibid.*

and philosophical literature (mostly the latter), that a naturalistic account of evolution is incoherent without any teleological presuppositions, but it all boils down to a “because I say so” argument. Feser seems to suggest that biologists themselves are actually attempting, in the long run, to deny the existence even of function:

The main problem with the theory in question, however, is the one emphasized by John Searle, namely that natural selection simply has nothing whatsoever to do with teleology or natural functions, and that that is indeed *the very point* of appeals to natural selection. To say that such-and-such an organ was selected for by evolution is not to “analyze” or “explain” how it has the function it does, but rather to imply that it has no function at all but only seems to. It is, as noted above, to *eliminate* teleology.<sup>172</sup>

I respect Searle as a philosopher quite a bit, but if he says biologists are arguing for the nonexistence of biological functions, then he and I are construing the biological literature very differently. And even if some biologists actually are trying to make such a case, then I’m going to disagree with them, notwithstanding the utter absence of any scientific credentials in my c.v. Yes, the scientific community of biologists does deny teleology, but no, they do not therefore deny function.

*B. Complex inorganic systems:* Final causation, Feser says, “is particularly evident in inorganic natural cycles like the water cycle and the rock cycle.”<sup>173</sup> But to say that *A* is evident in *B* is just to say that *B* is difficult or impossible to explain without assuming *A*, and whether this is so can depend on what we think constitutes a sufficient explanation. Here again, Feser simply asserts without further argument the insufficiency of any non-teleological explanation:

The role of condensation in the water cycle, for example, is to bring about precipitation; the role of pressure in the rock cycle is, in conjunction with heat, to contribute to generating magma, and in the absence of heat to contribute to generating sedimentary rock; and so forth. Each stage has the production of some particular outcome or range of outcomes as an “end” or “goal” toward which it points.<sup>174</sup>

So he says. But do we have any other reason to believe it? In both cases, Feser says, each stage has many other effects that are not part of the cycle. As [David] Oderberg points out, sedimentation might (for example) happen to block the water flow to a certain

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<sup>172</sup>p. 175.

<sup>173</sup>p. 179.

<sup>174</sup>p. 180.

region, the formation of magma might cause some local birds to migrate, or condensation in some area might for all we know cause someone to have arthritic pain in his big toe.<sup>175</sup>

Well, sure . . . and therefore, what? If the water cycle has any purpose in the sense of an intended function, then the production of arthritis is probably not it, but as some anonymous sage noted a long time ago, you can never change only one thing. For any event, there are multiple effects, and they cascade chaotically. That is why alternate histories are mere exercises in pure speculation. It's not that they can't be correct at some sufficiently coarse resolution. Had Lincoln survived, Reconstruction probably would have gone better than it did under Andrew Johnson. But we cannot know that, and we cannot know that even if it had, the subsequent history of race relations in this country would have been any better.

Of course arthritis is not part of the explanation of the water cycle, but that has nothing to do with whether the water cycle has any purpose. The fact remains that the water cycle has an explanation, and we know what that explanation is. We can explain it in terms of efficient causation—necessary and sufficient conditions. We don't need any more explanation in terms of purpose, because even if we assume purpose, we add nothing to the knowledge we already had. We certainly won't have more reliable weather forecasts.

*C. Basic laws of nature.* Here Feser just gives us more of the same. He begins by repeating his objections to Hume's "radical empiricism" and construal of causation as "constant conjunction." He quotes a handful of modern philosophers who endorse his notion that if we take Hume seriously, we just have to ditch science altogether because, he says (assuming his conclusion again), there can be no science without Aristotelian essences, universals, and inherent powers.<sup>176</sup>

He presents a telling summation in his final section, titled "It's the moon, stupid."

*At the very least*, then, there can be no doubt that a broadly Aristotelian philosophical worldview is still as rationally defensible today as it ever was, and must be admitted to be so even by those who do not think (as I do) that when one pursues these matters to the end one will see that it, or something very much like it, is rationally unavoidable.<sup>177</sup>

But Feser's promise throughout this book was not just that he would defend Aristotle. It was also that he would prove both the irrationality and the moral bankruptcy of naturalism—of any worldview, for that matter, that rejected Aristotle's metaphysical assumptions. He obviously

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<sup>175</sup>*Ibid.*

<sup>176</sup>p. 182.

<sup>177</sup>p. 185.

thinks he has accomplished this, but his thinking so and even saying so does not make it so. In the end, he is compelled to blame the unpersuasiveness of Aristotle on the *mala fides* of his detractors.

Even in Aristotle's own work, we find a very conservative ethics grounded in human nature, a doctrine of the immateriality of the human intellect, and an Unmoved Mover of the universe contemplation of whom is the highest end of human existence. By the time Aquinas and the other Scholastics were done refining and drawing out the implications of the Aristotelian system, it was evident that it entailed nothing less than the entire conception of God enshrined in classical monotheism, the immortality of the soul, and the natural law system of morality. To acknowledge the truth of the Aristotelian metaphysical picture of the world is thus unavoidably to open the door to everything the Scholastics built on it.<sup>178</sup>

What the Scholastics built was modern Catholicism, and so to a modern Catholic like Feser it's no wonder that Aristotle's metaphysics look so good. But my conclusion does not depend on any disparagement of Catholicism, or of the Scholastics, or of Aristotle, unless a denial of infallibility is construed as disparagement. My conclusion is simply that Feser has failed to prove, as he assured us he was going to prove, that we cannot be justifiably rational or moral unless we accept Aristotle's metaphysics.

To be more specific, let's review the three propositions he said he was going to defend. They were: (1) that what has been called the "war between science and religion" is actually a war between naturalism and "the classical worldview of Plato, Aristotle, Augustine, and Aquinas"; (2) reason and morality are impossible within a naturalistic worldview; and (3) "the religious vision enshrined in classical philosophical theism cannot fail to commend itself to every rational and morally decent human being who correctly understands it." I haven't addressed (1) because it wasn't relevant to the other points I wished to make. As for (2), I have explained why reason does not depend on any worldview: because we cannot even describe, let alone defend, any worldview without presupposing reason. And I have tried to explain why, given reason, we can have morality. On to (3): This can only be defended by a circular argument. There are many people to whom classical philosophical theism does not commend itself, notwithstanding that they understand it quite well, and they are rational and morally decent people, unless and only unless we assume Feser's conclusion.

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<sup>178</sup>*Ibid.*