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Evolution, Intelligent Design, and Public Education

A Comment on Thomas Nagel*

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Thomas Nagel recently proposed that the exclusion of Intelligent Design from science classrooms is inappropriate and that there needs to be room for “noncommittal discussion.” It is shown that Nagel’s policy proposals do not fit the conclusions of his arguments.

In “Public Education and Intelligent Design,” Thomas Nagel (2008) argues against Judge Jones’s ruling in *Kitzmiller v. Dover Area School District*. In Dover, the court struck down the Dover school district’s requirement that biology teachers in its public schools inform students about intelligent design (ID); the court reasoned that the district’s requirement violated the Establishment Clause of the First Amendment of the United States Constitution owing to the fact that “the religious nature of ID would be readily apparent to an objective observer, adult or child” (2005, 718).

Nagel’s argument proceeds in two stages. The first is a philosophical argument to the effect that Dover relies upon a spurious demarcation between science and nonscience; according to Nagel, “either both of them [i.e., evolution and ID] are science or neither of them is” (2008, 201-2). Second, Nagel proposes a policy argument indicating that a “noncommittal discussion of some of the issues would be preferable” (2008, 205) to Jones’s ruling that it is “unconstitutional to teach ID as an alternative to evolution in a public school science classroom” (2005, 765).

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Although we believe that Nagel's philosophical argument does not succeed, we will not focus on that at this time. Instead, we want to draw attention to a few incongruities between Nagel's philosophical argument and his policy suggestions. More specifically, we shall argue that the success of Nagel's philosophical argument warrants policy recommendations far more radical than the ones he endorses; in fact, the success of the philosophical argument warrants policies that Nagel explicitly hopes to resist.

We begin with a sketch of Nagel's philosophical argument. The Dover ruling identifies three distinct grounds upon which ID fails to be a science:

We find that ID fails on three different levels, any one of which is sufficient to determine that ID is not a science. They are: (1) ID violates the centuries-old rules of science by invoking and permitting supernatural causation; (2) the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980's; and (3) ID's negative attacks on evolution have been refuted by the scientific community. (2005, 735)

Nagel rejects the first and third claims, arguing that they occasion the following dilemma:

Either [the critic of ID] admits that the intervention of... a designer is possible or he does not. If he does not, he must explain why that belief is more scientific than the belief that a designer is possible. If on the other hand he believes that a designer is possible, then he can argue that the evidence is overwhelmingly against such a designer, but he cannot say that someone who offers evidence on the other side is doing something of a fundamentally different kind. (2008, 195)

Nagel contends that opponents of ID must argue either that (1) ID is not a science because an intervening designer is impossible, or that (2) ID is science, but completely undermined by the evidence.

According to Nagel, the first horn of the dilemma is unpromising. The rejection of supernatural design as a possible explanation of life is itself either an empirical or nonempirical thesis. The belief that a supernatural designer is impossible cannot be confirmed by empirical evidence. Yet if the belief is held without empirical justification, there is no reason to take it to be a scientific claim, but rather a "basic, ungrounded assumption about how the world works" (2008, 194).

Thus the ID opponent must grasp the second horn of the dilemma and argue that although a supernatural designer is possible, the evidence is overwhelmingly, indeed conclusively, against it. But this puts the ID opponents in a difficult position. For they now admit that whether or not ID is scientific is a matter of looking at the evidence, and there is good reason to believe that the evidence against a supernatural designer is not conclusive. To make this point, Nagel turns to Michael Behe's argument that random mutation is not sufficient to explain the rate or direction of variation necessary for natural selection to have yielded some of its most successful outcomes (Behe 2007, 165). Nagel claims that Behe's thesis "seems on the face of it a scientific claim, about what the evidence suggests, and one that is not self-evidently absurd" (2008, 192). If a designer is not ruled out a priori, then there is legitimate scientific question as to whether the evidence points to the existence of one. And given that those working in ID present their cases with empirical evidence, Nagel argues that "whatever the merits. . . , [it] is clearly a scientific disagreement, not a disagreement between science and something else" (2008, 197).

Nagel's dilemma, then, purports to show that evolution and ID are "symmetrical positions," in that "either both conclusions are rendered nonscientific by the influence of their nonscientific assumptions or are both scientific in spite of their assumptions" (2008, 197). Either way, the exclusion of ID from the science curriculum on the basis of its alleged nonscientific status is unjustified: If neither is scientific, then teaching one while prohibiting the other has the effect of promoting a religious view. In the case of teaching evolution without ID, we "contravene the requirement of religious neutrality" because evolution depends "on a view, atheism or theistic noninterventionism, that falls clearly in the domain of religious belief" (Nagel 2008, 201).

Hence Nagel insists that space should be made somewhere in the public school curriculum—not necessarily in biology classes (2008, 204)—for "noncommittal discussion" (2008, 205) of the debates among evolutionists and the proponents of ID.

For educational policy, however, this conclusion is in several respects curious. First it should be noted that Nagel's conclusion is a good deal more modest than his argument would warrant. If indeed "either both of them are science or neither of them is" (2008, 201-2), why should anyone settle for merely a "noncommittal discussion" of the issues? First, it is not clear what exactly a "noncommittal discussion" of the issues would entail, especially for high school students, for whom the details are not yet understood. We have argued elsewhere (forthcoming) that discussions under these conditions usually tend to polarize rather than educate participants. Second, given that Nagel holds that "either both

of them are science or neither of them is,” why not insist that ID must be included in the biology curriculum whenever evolution is? Why not insist on equal lesson time for both views? Why not leave it up to the individual school districts to decide? Alternatively, why not argue that both ID and evolution should be banned from the biology curriculum? Nagel’s argument, were it to succeed, insists that either both or neither must be taught in a biology class.

Nagel attempts to avoid this result by introducing the distinction between bad science and nonscience (2008, 198). His argument infers that although ID is not nonscience, it is bad science, and thus need not be taught in biology any more than the Ptolemaic system need be taught in astronomy. But it is not clear if this distinction has any weight in the current case, for it is not clear whether the good/bad science distinction is any more tractable on purely empirical grounds than the science/nonscience distinction. Surely ID theorists deny that their view is bad science; indeed, their view is that evolution is bad science. If Nagel is correct that ID is not nonscience then there is no reason for the ID proponents to eschew the more ambitious conclusion: ID must be taught, it must be taught in biology class specifically, and it may be taught to the exclusion of evolution. In short, the modesty of Nagel’s conclusion cannot be sustained if his arguments succeed.

Second, consider that Nagelian arguments could be employed *mutatis mutandis* to other academic disciplines. Take physics, for example. Surely the Newtonian mechanics taught in high school physics classes presupposes the truth of certain metaphysical propositions, such as that material objects exist over time. Physics therefore proceeds on the nonscientific assumptions that (1) material things exist, and (2) material things causally interact over time. The falsities of Berkeleyan idealism and Malebranche’s occasionalism are therefore presupposed by high school physics. Hence a Nagelian dilemma: either the falsities of idealism and occasionalism (and their respective theological views) are themselves an empirically demonstrable thesis or they are not. If they are not, then Newtonian mechanics is simply a disguised theology; if they are, then room must be made for consideration of the evidence for and against temporally persisting material things. And we’re off to the races, but this time in a physics classroom.

Finally, note that the prepared statement prohibited by the Dover decision invites students to discuss “the Origins of Life” (Nagel 2008, 187) with their families. One is left to wonder what the capitalizations are meant to signify. In any case, given his arguments, Nagel should, like Judge Jones, oppose such a statement as overtly religious. Recall that the fulcrum of Nagel’s argument is that if evolution is scientific then

so is ID. If ID is, as Nagel alleges, a scientific account of biological life, why should students be instructed to discuss the matter with their parents, rather than, say, a biologist? The invitation to discuss the matter with one's parents, who might not have any special training or expertise in any area of science, is an unspoken concession that the questions evolutionary theory attempts to answer are ultimately not scientific questions at all, but rather questions of the sort best left to individuals and their families—questions of conscience, tradition, and spirituality. Otherwise, students would have been encouraged to ask further questions from biologists or other scientists as well. Accordingly, the statement that lies at the heart of the Dover decision is at odds with Nagel's own view of the matter.

The more general problem is that Nagel's arguments provide support for equal-time and possibly even more radical policies. Although Nagel's stated conclusion is, in the end, modest and perhaps even unobjectionable—few would deny that it would be a good thing to make room somewhere in the high school curriculum for discussion of this controversy—his arguments against Dover warrant much stronger conclusions than Nagel intends. That is, despite the modesty of Nagel's conclusion, many will draw more ambitious results from Nagel's arguments: Evolution is just a religion; no different from other religious views of life, with no claim to any special status, and so on. Nagel thus lends credence to policy proposals that are even more disturbing than those against which the Dover decision was intended to protect.

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