

Dialogue III: Intelligent Design and Naturalism

What Intelligent Design Does and Does Not Imply

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James Madden and Mark Discher



James D. Madden

The ID theorist claim[s] that the scientific evidence suggests a designer who has manipulated the matter at some point(s) in the course of history [while] objectors ... claim that the notion of such an interventionist designer is theologically unnecessary and cumbersome.

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The authors believe that the debate between theological critics of intelligent design theory, best represented by Howard Van Till, and proponents of such views is often predicated on a false dichotomy between methodological naturalism and interventionist creationism, and this way of casting the issue leads to errors on both sides. We argue that there are other explanations besides the theory of an interventionist designer which are equally capable of accounting for the intelligent design scientist's findings, and the scientific findings themselves do not favor any of these options over any others. Nobody may simply help himself or herself to interventionism on the basis of intelligent design findings. Furthermore, objectors such as Van Till are mistaken inasmuch as they take intelligent design proponents to task for advocating a theory that supposedly requires an interventionist designer. In short, theological objections to intelligent design are at best premature.

Howard Van Till has repeatedly thrown down the gauntlet to proponents of the Intelligent Design (ID) movement.¹ He asks them to distinguish between the mind-like sense of design and the hand-like sense of design, and then to specify which type of design it is that the proponents of ID are talking about in their theory. Mind-like designing is designing in the conceptualizing, blueprint-making sense. Hand-like design is design in the sense of fabricating, constructing or assembling. Van Till is prepared, with his Robust Formational Economy Principle, to grant design in the former sense, but he takes ID theorists to task for suggesting that there has been design in nature, and in particular in biological structures, in the latter sense.

On Van Till's view, nature has had within itself since the initial singularity all of the potentiality and wherewithal to bring about the entire array of things in existence, including human beings and consciousness. ID theorists, on the other hand, claim that matter and the laws that govern matter are not sufficient by themselves to have brought

about by chance at least some of the highly specified and complex systems and structures that are to be found in nature. But if ID scientists are correct, how is it precisely, Van Till wants to know, that this hand-like assembling takes place? If the designer has not equipped creation at the beginning with all of the potential to develop into what we see around us, then, Van Till claims, the ID proponent is committed to saying that the designer has intervened along the way; he has engaged in hand-like tinkering with the materials through some act(s) of organizing and assembling them. But Van Till thinks that this purported implication of ID is theologically offensive, because it is unnecessary. Since it is, on Van Till's view, perfectly theologically acceptable to posit that creation was fully-gifted by the creator at the beginning, and since such a theory is simple, there is no need, he argues, for IDers to try to demonstrate subsequent intervention. So, the debate has been cast in terms of the ID theorist claiming that the scientific evidence suggests a designer who has manipulated the matter at some point(s) in the course of history against objectors such as Van Till who claim that the notion of such an interventionist designer is theologically unnecessary and cumbersome.

We believe, however, that this debate is predicated on a false dichotomy. As it stands,

the way the debate has been cast is between practical materialism (what often travels under the moniker of *methodological naturalism*), and interventionist creationism, the idea that (at least some) biological structures have required hand-like tinkering by a designer. We believe that framing the discussion in this way is likely to lead to errors on both sides. On the one hand, ID proponents are mistaken to the degree that they suppose that something like hand-like manipulation of the material is entailed by their scientific findings—assuming that their findings are, in fact, empirically sound.² We claim that (sound) ID science neither entails nor implies any such thing. As we shall see, there are other explanations besides the theory of an interventionist designer which are equally capable of accounting for the ID scientist's findings, and *the scientific findings themselves do not favor any of these options over any others*. Therefore, it is not necessary that the ID proponent assume that he is saddled with the task of explaining a process of "hand-like manipulation or assembling." Furthermore, it is inappropriate for Van Till to press ID proponents to do so. It is not necessary to infer "hand-like" design from the evidence the IDer will use to support his claim.

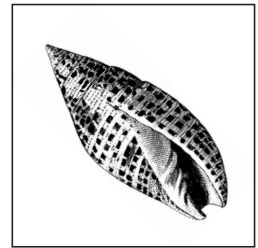
On the other hand, we believe that in this particular case Van Till is committing an error by raising theological objections to the purported empirical findings of ID. Although we applaud Van Till's willingness to bring the demands of Christian faith to bear on his evaluation of ID, we take this particular instance to be methodologically unsound. Because the advocates of ID purport to be engaged in a scientific enterprise (and we see no reason not to take them at their word) the questions concerning their empirical findings are just that—empirical. Hence, it is inappropriate for Van Till to object to such findings on the basis that they are to him theologically distasteful. The question as to whether a plausible (broadly) materialist explanation for biological complexity can be given is a question that should be kept separate from questions concerning how it might be that a creator relates to his creation.

In what follows, we will proceed in three phases. First, we shall offer arguments for what we take to be the legitimate expectations for a successful ID project. In short, we argue that ID is best construed as a material-

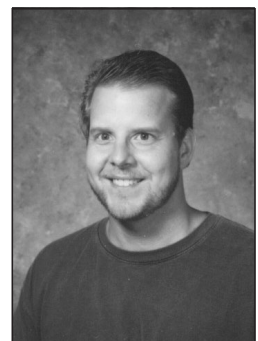
ism defeater, and not a positive case for any particular form of nonmaterialist explanation. Second, we shall discuss the relationship between the nonmaterialist modes of explanation that would become live options if ID's scientific enterprise is successful. We conclude that the adoption of any one of these possible models of explanation would require a radical rethinking of the basic materialistic assumptions of biological science and therefore would require broad scientific, philosophical, and theological dialogue. The results of that dialogue, we maintain, are an open question—even for the orthodox Christian believer—and therefore it is premature to reject ID on the basis of any presumed results of this wider debate. Finally, we shall offer two principles for how the ID debate should proceed from here, which we believe will assist in ensuring that the dialogue is positive and constructive.

ID Theory: A Materialism Defeater and not a Theistic Proof

Part of our main thesis is that the empirical deliverances of a successful ID would primarily constitute an argument sufficient to undermine materialism but insufficient for determining which nonmaterialist explanation of biological origins is most plausible. Hume cautioned us to restrain the conclusion(s) of any teleological argument to match closely the evidence it cites. For example, it is difficult to justify belief in an omnipotent, omniscient, and perfectly good being based on the evidence of design alone. The evidence adduced by the ID theorist is quite consistent with a variety of designers with various competencies and moral proclivities. Thus, we cannot say that ID, if successful, proves the existence of God, or for that matter any particular theory of creation or divine causality, e.g., interventionist creationism. Such considerations, we take it, are part of what led Michael Behe himself to express

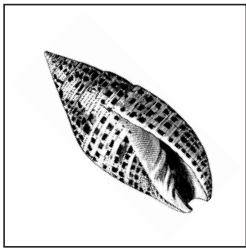


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great restraint when proposing the implications of his own ID arguments. As Behe puts it, his argument “is limited to design itself; I strongly emphasize that it is not an argument for the existence of a benevolent God” and “questions about whether the designer is omnipotent, or even especially competent, do not arise in my argument.”³

But even this is not modest enough. While it is commendable that the likes of Behe desist from making claims concerning the attribute(s) of the purported designer, we argue that it is illicit and goes beyond the scientific evidence to posit at this point any designer at all. Even though careful ID theorists may refrain from drawing robust theological conclusions from their empirical work, they do at times seem to believe that they have delivered strong evidence of some sort of designer. However, as long as ID theory is taken to be part of a *scientific* research program, we maintain that the ID theorist, *even if his science is sound, cannot help himself to a designer based on the empirical evidence alone.* Indeed, if theism were true, we might well expect the sort of empirical phenomena that ID theory cites as evidence to obtain. However, *we would also expect much the same phenomena to obtain if any one of a variety of other nonmaterialist theories of origins were to be true.* While positing a designer would be sufficient for accounting for the design that a design theorist might uncover (recognize, encounter), it is not necessary; our aim is to point out that there are other live metaphysical options available for accounting for design. We submit the following as evidence for our thesis that there are multiple metaphysical theories which can support the findings of a successful ID hypothesis, but no one of which is entailed or implied by any body of empirical evidence.

a. *Interventionist Creationism.* The notion that there is an omni-competent deity that involves itself occasionally in the natural history of the universe is consistent with the evidence cited by ID. One would expect to find in nature the sort of phenomena the IDer points to on the assumption of interventionist creationism. So interventionist creationism is one possible metaphysical explanation of a successful ID scientist’s data. But the scientific data themselves neither entail nor even imply that this is the correct metaphysical account of the empirical data.

b. *Atheistic Pansychism.* Some prominent philosophers of mind, e.g., Thomas Nagel and Mary Midgely, attempt to account for consciousness by supposing that at the most basic level physical particles have nonphysical, mental properties. One could also adopt such a pansychic theory in order to explain bio-complexity. According to such a theory, the structure of organisms is the product of intrinsic intentional states had by otherwise inert fundamental particles. That is, if we were to take the supposed mental properties of fundamental particles as being intentional states, then it seems we can build a non-materialist (although broadly naturalistic) theory of natural teleology, which would not necessarily commit us to the existence of a designer. It might strike us at first as being wildly implausible, but it is neither more nor less supported by the empirical evidence than any other nonmaterialist position. As we have said, none of these metaphysical theories is either implied or excluded by the findings of a successful ID science.

c. *Aristotelianism.* Historically, followers of Aristotle have believed that each organism has an immaterial component, a “form.” It is in virtue of its form that an organism is structured in a certain way such that it is a member of a natural kind. Irreducible complexity, so the Aristotelian might argue, could then be accounted for by the influence of the organism’s form. Since Aristotelian forms are not empirically detectable, Aristotelianism is underdetermined by any scientific research program. Although Aristotelianism suffered a set-back following the scientific revolution, it is increasingly an option that contemporary metaphysicians and philosophers of science, including nontheists, are willing to consider.

In claiming that each of these models is a live option⁴ and is equally supported by the empirical evidence adduced by ID proponents, we are not suggesting that the ID scientist is not allowed to go beyond the empirical data by giving reasons either for or against one of these explanatory models. (Indeed, the scientific enterprise, when construed on any but the most facile positivist models, requires the scientist to go beyond the empirical data.) We are only insisting that successful ID science itself does not imply any one of these options over any other; a scientist who accepts ID is within his

intellectual rights to accept any one of these nonmaterialist models, assuming that an ample metaphysical case can be made in its favor. Given this, it is an error for the likes of Van Till to reject ID because of its association with interventionist creationism.

Of course, the question arises at this point as to what intellectual work ID might do, if it ultimately does not recommend any one theory of origins. Our answer, in short, is that a successful ID theory would limit the range of plausible explanations of bio-complexity by eliminating any theory that relies upon strictly materialist presuppositions. By materialism we mean the view that *efficient* and *material causes* along with precise laws of nature are by themselves sufficient to explain and predict all phenomena in the natural world; it is the view that we do not need to include anything in our explanation of how things in nature operate and why they are arranged in any particular way that is not empirically observable and mathematically calculable.⁵ If ID succeeds against the variety of *scientific objections* arrayed against it, then it seems to give strong evidence that materialism is false. At a minimum, then, even if ID ends up offering no significant constructive scientific proposals, it will have provided the invaluable service of defeating materialism and opening us up to seeking nonmaterialist explanations for all that for which materialism cannot account. Our claim is only that ID limits or narrows the options by defeating materialism. If and when materialism has been defeated, there is then a host of different nonmaterialist models of explanation that become live options.

Biology Beyond Materialism

If it were the case that ID science made a legitimate claim that Darwinian natural selection is in principle unable to explain the occurrence of certain instances of bio-complexity, then, assuming that some version of Darwinian natural selection is the best materialist explanation of bio-complexity available and that we cannot really envision a materialist replacement for this theory, we would be left with a dilemma in choosing between the following two options: (1) We could accept a version of "promissory note materialism," and in lieu of giving an explanation simply bank on the historical precedent of scientific progress to deliver at some point in the future a full materialist account of biological origins; or (2) We could recognize the need to rethink the materialistic presuppositions of the life sciences and attempt to construct and defend a nonmaterialist model of reality that explains biological complexity.

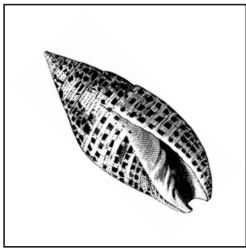
As for (1), one may worry whether life is too short to wait to see whether the materialist will make good on this promise. As long as the materialist's fulfillment of the promise is outstanding, we may wish to grant to the IDers that, *if they can successfully defend their evidence in the scientific arena*, materialism has been defeated, and biologists, as a result, need to rethink the materialistic assumptions of

their discipline. Assuming that ID is scientifically credible and that there is currently available no plausible alternative to Darwinian natural selection that can serve to do the same theoretical work for the materialist, it seems reasonable to reject the materialist's promissory note. Without at least some broad outline of what a non-Darwinian account would look like, we are well within reason to reject materialism. Of course, if it does turn out to be the case that further down the road more evidence comes to light and the materialist can make good on his promise to give a plausible and reasonably complete explanation of biological complexity, then we are always within our intellectual rights to revise our commitments by rejecting ID and adopting a materialist perspective. As open and honest seekers of the truth, we must go where the evidence leads. But for the present, a successful ID program would force us to entertain (2).

If we do relinquish the current materialistic paradigm, then it would be at this point that the scientific enterprise becomes theoretical rather than merely empirical ...[since] the empirical data are insufficient to determine which non-materialist model of explanation is to be preferred.

It is important to notice, however, that, if we do relinquish the current materialistic paradigm, then it would be at this point that the scientific enterprise becomes theoretical rather than merely empirical; we would no longer be strictly within the domain of empirical science. The reason for this is that the empirical data are insufficient to determine which nonmaterialist model of explanation is to be preferred. In short, the data underdetermine theory.

Of course, this instance of the data underdetermining theory is not a special case. The scientific enterprise regularly involves more than, and extends beyond, strict empiricism. Nevertheless, in the wake of a successful ID program, the need for rethinking the basic materialist assumptions of modern biology would take us far beyond the usual data-theory gap accepted as a matter of course by scientists. Normally the scientist has available to him



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Our first principle [for mediating the ID debate] is that all parties to the debate need to see ID primarily as a materialism-defeater, and not as a positive case for a designer. ... our second principle ... [is that] the empirical case must be the primary concern in the debate for and against ID.

a basic stock of concepts and methodological standards by which to judge the plausibility of a theory beyond its adequacy to the empirical data. Successful ID, however, would rob the biologist of many of these relevant tools, and some of the standards of theoretical plausibility would be open for revision. As such, options such as interventionist creationism, pan-psychism, and Aristoteliansim, which were previously beyond the pale for legitimate biological explanation (as we put it above, “wildly implausible” for the biologists), would need to be reevaluated in terms of their philosophical coherence and explanatory power. At such times of paradigm shift (to borrow a tired and overused phrase), the scientist must appeal to broader intellectual fields than that of his or her specific area of scientific expertise.

In short, the biologist, in the wake of a successful ID program, must make use of the results of inquiries that go beyond the region of biological inquiry. It is at this point that together we, as scientists (practitioners of the physical and biological sciences alike), philosophers, and theologians, would need to engage in the revision of the basic presuppositions of inquiry in the life sciences in an effort to articulate new standards of plausibility. Successful ID would require the debate among scientists in general and biologists in particular to be opened to include the insights of theology and philosophy.

Thus, in a sense Van Till proceeds properly by offering theological and philosophical arguments, not without force, against the plausibility of interventionist theism. For, assuming that ID is successful, those are the arenas in which this debate will ultimately be played out. However, Van Till is hasty in assuming that a successful ID entails an interventionist designer, for the results of this interdisciplinary rethinking of foundations are yet to be determined. Serious thinkers can be found who advocate each of the models we have mentioned above, and we are a long way from seeing which will gain consensus. It is important to keep in mind the rich debate that is being had about these matters before the issue is deemed settled. To assume beforehand that the matter has been settled in favor of an interventionist designer will likely lead one to ascribe a position (and its attendant difficulty) to the IDer which he need not hold.

Two Principles for Mediating the Debate

We believe that our arguments offer a number of points that will help organize the ID debate hereafter. Our first principle is that all parties to the debate need to see ID primarily as a materialism-defeater, and not as a positive case for a designer. Although both sides need to exercise restraint in what they take the results of ID to be, we think that it is particularly important point for the ID advocate to recognize this. Because there is a spectrum of live metaphysical options to consider, the “design” scientist cannot automatically assume the existence of a designer. By conceding this, the ID proponent will be in a better position to defend the scientific legitimacy of his work. This sort of theoretical modesty is bound to repay the ID advocate with a much stronger theory, a theory that can be defended on all planes of intellectual inquiry—scientific, metaphysical, and theological. As far as we know, prominent members of the ID movement have not claimed that an interventionist designer is entailed by their purported scientific findings, but we believe that matters would be helped if this point were given greater clarity and emphasis.

Interpreting ID as primarily a case against materialism will also help clarify the issue for the critic such as Van Till. The evidence for or against ID stands in need of response on strictly scientific grounds, regardless of whether or not it is deemed theologically acceptable. For it could turn out to be the case that, even if ID is theologically odious, the scientist may nevertheless need to accept it, if that is the direction that the inquiry goes. In such situations, the scientist may need simply to leave the theological problems for the humanist disciplines to sort out. In other words, theological objections do not serve to deter ID once it has been framed as being primarily a scientific program and materialism defeater.

This brings us to our second principle for mediating the ID debate. The empirical case must be the primary concern in the debate for and against ID. Since none of the philosophical and theological worries arise unless ID is scientifically successful, strictly scientific issues should at this point be the focus of concern.

If we are correct that the empirical issue is of paramount concern, then Van Till's motives for attacking the alleged interventionist designer of the ID movement are wrong-headed. It looks to us as though Van Till (and others who might hold a position similar to his) want to have a perspective on biological science that begs an important question. He assumes that the correct (best) theory will be one that is compatible with orthodox Christian theism and at the same time (broadly) materialistic. While such a theory may turn out to be precisely what is required, it is illicit for Van Till to assume this a priori without giving ID a fair chance to defeat even this broad sort of materialism. Although it is possible that a broadly materialist perspective is compatible with traditional Christian theology, it does not follow from the mere possibility of compatibility that a broad materialism is true. Whether it is true or not will depend upon whether ID can serve as a materialism defeater. Whether ID will succeed in that capacity, it is too early to tell. But since Van Till is an open and liberal-minded seeker of the truth, there is no reason for him to foreclose on ID's scientific project ahead of time by ruling out by way of theological and philosophical commitments the possibility that even a broad materialism may be false.⁶



Notes

¹See, for example, Van Till's "Is the Creation a 'Right Stuff' Universe?" in *Perspectives on Science and Christian Faith* 54, no. 4 (2002): 232-48.

²Our claim is not that any ID theorist has accepted this dichotomy, although we will later note a case in which we believe Michael Behe has illicitly helped himself to the notion of a designer. Rather we are only out to warn against the temptation of this interpretation of the ID project by both its proponents and opponents.

³Michael Behe, "The Modern Design Hypothesis: Breaking Rules," *Philosophia Christi*, Series 2, vol. 3, no. 1, 165.

⁴We do not mean to limit the options to just these; there are certainly many more.

⁵We limit the scope of this definition to phenomena above the quantum level. As such we remain agnostic as to whether indeterminacy at the quantum level of analysis provides a counterexample to materialism as we define it.

⁶Special thanks to Prof. Martin Curd for his critical comments on an earlier draft of this paper. We are also quite indebted to the detailed criticism we received from blind reviews from *Perspective on Science and Christian Faith*. It is likely that they still do not agree, but our thoughts are much clearer for having had the opportunity to entertain their criticism. Any mistakes are solely the authors' responsibility.

A Gift-Giving Suggestion

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ASA Plans Its 60th Annual Meeting

IPSWICH, MA: The 2005 ASA Annual Meeting will be held August 5-8, at Messiah College, Grantham, PA. The theme of the meeting is: "Alternative Energy Resources, Conservation, and the Environment."

The program chair is Kenell Touryan from the National Renewable Energy Laboratory of the USDOE assisted by Jack Swearingen, and local arrangements co-chairs are Edward Davis and Gerald Hess from Messiah College.

We have four plenary speakers who are experts in alternative energy technologies, conservation, and the environment: (1) Stan Bull, Ph.D., Associate Director, National Renewable Energy Laboratory (NREL), Golden, CO; (2) George Sverdrup, Ph.D., Manager, USDOE Hydrogen Program at NREL; (3) Robert Wauzzinski, Ph.D., Associate Professor of Philosophy and Religion, Ball State University, author of *Discerning Prometheus: The Cry for Wisdom in our Technological Society* (Rosemont, 2001). Held Lindeman Chair in Philosophy of Technology at Whitworth College, and has published papers in *Perspectives on Science and Christian Faith*; (4) Egbert Schuurman, Ph.D., Professor and Chair, Department of Christian Philosophy, Technological Universities of Delft and Eindhoven, Netherlands, author of numerous books and articles on technology and ethics from a Christian perspective. Schuurman is also a graduate engineer.

The alternative energy resources will include solar energy (solar thermal and solar electric), wind, biomass (bio-gas; biodiesel; ethanol, heat, etc.), geothermal, hydrogen and distributed systems, including hybrid systems (for example, renewable energy with diesel backup) for the developing and underdeveloped world countries. Bull and Sverdrup will be speaking on renewable energy resources/technologies, conservation and hydrogen, Wauzzinski and Schuurman will speak on the limits of technology and how alternative energy resources, conservation, and environmental care provide a biblical framework for technology.

There will be related sub-themes, such as environmental ethics and climate change. In fact, what is exciting about this annual meeting is that attendees will be confronting and wrestling with several of the critical issues raised in Ken Touryan's article, "ASA in the 21st Century: Expanding Our Vision for Serving God, the Church, and Society Through Science and Technology" (*PSCF* 56, no. 2 [2004]: 82-8).

The site of the annual meeting will be on the Messiah College's scenic main campus, located on 400 beautiful rolling acres in the suburban town of Grantham, in south central Pennsylvania, a 30-minute drive from the Harrisburg International airport and a 1½-hour drive from Baltimore International airport. Tourist attractions include among many others: the National Civil War Museum, Civil War Gettysburg, Hershey Chocolate World and Amish Country.