

The theological failure of 'Intelligent Design' and a Whiteheadian alternative

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Abstract

Against Dembski's claim that ID provides a bridge between science and theology it is argued that this claim is flawed because ID not only does injustice to science but also seriously injures religious belief and theology by impoverishing the theological and religious heritage. Specifically, by clinging to a mechanistic world view that reduces the world to 'dead' matter and extrinsic forces, ID reinforces the concept of an intrinsically purposeless world, contrary to its promise of rehabilitating purposiveness.

This mechanistic perspective is challenged by the scientific view that the world consists of inherently dynamic, self-organizing processes (*e.g.* the biological process of evolution). The latter perspective calls for a different conception of God and of the God-world relationship.

In line with Aristotle, Aquinas, and more specifically Whitehead and adaptive dynamics, a conception is explored in which the relationship between God and the world is conceived in terms of an intrinsically purposive nature, and in which God is the condition for the possibility of the world's freedom and directionality.

Introduction

William Dembski claims that Intelligent Design (ID) is a bridge, even *the* bridge, between Science and Theology.¹ In my opinion, as I hope to make clear, ID is no bridge at all, because it fails to reach the riverside of science and of theology.

However, even though my position with regard to ID is explicitly negative, I want to make the following preliminary remark:

Many religious people in my secularized country feel that ID liberates them from the taboo that smart people should not be religious. It helps them 'coming out.' We theologians have to credit ID for this, and to reproach ourselves for failing to establish the respectability of religious belief in the context of science, and to do so in a theologically better but equally appealing way.

Nevertheless, I think that the ID-approach is a backward step. And this is what I first hope to make clear.

I. Intelligent Design falls short on the side of *science*

ID seeks gaps in the evolution theory. In itself this may be a good scientific strategy: It keeps scientists on their toes. In this respect ID could work as an inconvenient but valuable gadfly. However, ID wasted this possibly favorable influence for a couple of reasons:

1. De ID-movement is very attached to the idea of “irreducible complexity” (Michael Behe).² In itself it is a good method to point out that many things go unexplained, but to say that they are *irreducible* is simply one bridge too far. For how scientific is it to say that something *cannot* be explained? When a biologist (as for instance, Kenneth Miller) answers that the development of the eye, or of the famous bacterial flagellum may very well have followed a specific understandable evolutionary path, the ID-answer is: We do not want to hear a story telling us how things *might* have gone, but we want a proof that this is the way things *have* in fact occurred. However, all that is needed to refute the ID claim of ‘irreducibility’ is to show that the allegedly irreducible *can* in fact be reduced.

Thus, instead of being the useful gadfly who spurs the biologist to critically examine areas that remain unexplained or poorly explained, ID claims, by terming it ‘irreducible,’ that the scientist *cannot* succeed. This makes the claim ineffective on the side of science.

2. ID also wastes its possibly favorable influence by its claim that it can fill the alleged gaps by its use of the concept of ‘intelligent design.’ By doing so, it induces (or gives the appearance of inducing) a designer or God into scientific discourse. However, to postulate an entity, not falsifiable by definition—because it does not and cannot belong to our empirically perceptible reality—as part of the formation of scientific theory is an idea very alien and hostile to science’s self-understanding.

3. The very suspicion raised by the ID-theory of smuggling God into scientific discourse makes it into an ineffective gadfly. Biologists to a great extent do pay attention to phenomena such as purposiveness, trends, increasing complexity, as well as to how to make these phenomena intelligible. A lively discussion is going on between the school of Stephen Jay Gould (who puts a very heavy emphasis on chance) and people like Stuart Kauffman and Simon Conway Morris (who put less emphasis on chance and more on directedness). But such internal discussion is slowed down by the danger that any reference to the failures of the prevailing neo-darwinist theory will make you be considered as a member of the ID-camp. In short, a most ineffective gadfly!

But let me put to rest ID’s ineffectiveness on the side of science, and let me turn my attention to the relation between ID and theology.

II. ‘Intelligent Design’ and its ineffectiveness on the side of *theology*

By seeking alleged gaps in the theory of evolution and by seeking to fill up those gaps with the extra-scientific entity of an “intelligent design(er)”, ID follows a strategy that is alien and hostile to science.

Here the suggestion may arise that the above mentioned shortcoming of ID *on the side of science* may very well be profitable *on the side of theology*. However, I want to defend the position that ID is at least as harmful on the belief- or theology-side as it is on the science-side, and maybe even more so.

Many arguments can be given for the theological failure of ID. I will mention only two arguments for this position: first, shortly, one that concerns the effect of ID, and secondly an argument that concerns its theological content. Here the main argument will be that, by reintroducing the concept of God as designer and producer of the world who intervenes in the world im-mediately, ID harks back to a mechanistic world view which—contrary to its promise of rehabilitating purposiveness—reinforces the concept of the world as intrinsically purposeless, and resurrects huge problems of God and evil.

1. ID IMPEDES THE SCIENCE AND THEOLOGY DIALOGUE

The ID-movement wants to promote the idea that religious belief is not necessarily ridiculous, even in the context of science, this as an antidote to the militantly atheistic ideas of people like Richard Dawkins et al.

However, by its strategy and its way of arguing that is alien to science, ID makes it nearly impossible for religious belief to be taken seriously from the perspective of a scientifically informed culture, and it reinforces the common prejudice that an attitude of faith is inherently anti-scientific, and that real scientists need to be atheists.

In this way ID blocks its own project, and it impedes the Science and Theology dialogue.

Here it may be very instructive to listen to the ancient theologian Augustine, when he says:

“Usually, even a non-Christian knows something about the earth, the heavens, and the other elements of this world, about the motion and orbit of the stars and even their size and relative positions, about the predictable eclipses of the sun and moon, the cycles of the years and seasons, about the kinds of animals, shrubs, stones, and so forth, and this knowledge he holds to as being certain from reason and experience. Now, it is a disgraceful and dangerous thing for an infidel to hear a Christian, presumably giving the meaning of Holy Scripture, talking nonsense on these topics; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn. The shame is not so much that an ignorant individual is derided, but that people outside the household of the faith think our sacred writers held such opinions....”³

2. THE PROBLEM ID WANTS TO SOLVE IS THE MEANINGLESSNESS OF THE WORLD.

BACKGROUND: MECHANISTIC TURN OF THE WORLD VIEW & ANTHROPOLOGICAL TURN IN THEOLOGY

I now want to pay more attention to the real theological objective of ID and its background, to the shortcomings of ID’s proposed solution, and finally I will explore a Whiteheadian alternative.

In the 17th century, Galileo and Descartes transformed the Aristotelian matter-form conception into the dualistic matter-mind scheme, thereby dividing reality into two mutually independent domains.

This division of the world into material and mental substances made it impossible to conceive the role or the influence of the mind with regard to the body. Similarly, it also made it impossible to understand how God (being something mental) could possibly have an influence on the material world. Hence theology diverted its focus to God’s influence on mental or spiritual things. It restricted its domain to the spiritual and mental (feelings, intentions, affections, purposes), leaving out most of the material. Ever since, and especially so since Kant, this originally Cartesian conception that God can be spoken of only in the area of the

human subject, or of the human spirit with its morality and freedom, has also resonated in theology. Bultmann is a good example of this.

All in all, this development amounted to an ‘anthropological turn’ in theology, in which the relationship between God and nature was all but ignored. Nature and matter became the exclusive domain of science.

One serious consequence for theology was that nature, in the sense of material or physical nature was expunged from theological reflection ever more, and came to be a domain that was left to itself, disconnected from God. In the words of Jürgen Moltmann: God became worldless, and the world became godless.

Moreover, in this approach, purpose is restricted to human beings (or God), while the material world—since Galileo and Newton—is understood primarily in terms of matter and external mechanical forces, and therefore as intrinsically purposeless and valueless, a perspective that already had its roots in 14th century nominalism. Nature is reduced to a machine. Hence the term ‘mechanicism.’

However, in the meantime, humanity too has become an object of natural science. Consider the evolutionary origin of humanity, or the working of our brain, to mention only two topics. This means that the so-called spiritual domain of the human being too is considered to thoroughly depend on or to be determined (at least partly) by matter (the genes, the brain). In itself there is nothing wrong with that. But, given the predominance of the mechanistic conception of nature in our contemporary experience of the world, the view that everything is meaningless and purposeless has come to be seen as the only scientifically defensible view of the world.

3. THE ID-‘SOLUTION’ AND ITS SHORTCOMINGS

This view, that the world is meaningless and purposeless—a view proclaimed to be ‘scientific’ with atheistic overtones—, is what ID wages war against.

ID-people (as well as those who only vaguely think that it has something positive to offer) are of the opinion that the time has come to teach a lesson to the brutal atheism of the leading defenders of evolution, who enthusiastically proclaim that the world, including human beings, is meaningless, a claim that raises feelings of alienation, of fear or of moral nihilism.

Though I share ID’s concern, I do not share its analysis and even less its solution. In fact, I think that, instead of providing a solution, ID is reproducing the problem. Why?

Well, the ID-theory wants to reintroduce the ideas of purpose and of intention into the narrative of the cosmos, of earthly life, and human beings. However, in its attempt to reinstate purposiveness (which is deemed positive in itself), the ID-theory returns to an explicitly mechanistic model. It speaks of design which, since it is intelligent, needs a Designer according to most. And a designer is someone with a conscious purpose, who is acting or making or manipulating according to that purpose. This utterly technical designer/ producer picture is in the end completely mechanistic because it restricts all purpose and intention to the Design(er), while the product itself remains purposeless: a stupid machine working according to purposes that its designer built into it, so that it cannot be understood from within itself.

Thus, instead of challenging and conquering it, *ID espouses the mechanistic model as its basic point of departure and thereby reinforces the mechanistic claim of the intrinsic purposelessness of the world. Hence my conviction / statement that, far from solving the problem, ID reproduces it.*

I want to call attention, albeit shortly, to another serious theological shortcoming that seems to be inherently connected to the ID-theory. The ID-argument entails an ‘entity’ that not only designs intelligently but also—at least sometimes—*produces* the product. For, according to the main example of ID, this ‘entity’ would actually be putting together a bacterial flagellum aside from the evolutionary process. However, it is well known already for ages, that such interventionist and im-mediate conception of the action of God raises insuperable theological problems, especially when it comes to the relation between God and evil.

We may conclude that ID frustrates both science and religion by assuming that the only context for the discussion of the relation between God and the world is the mechanistic view that conceives God in terms of designer and interventionistic producer, and the world in terms of ‘dead’ matter and extrinsic forces.

III. Getting away from the mechanistic world view / exploration of an alternative

1. ALTERNATIVE CONCEPTUAL POSSIBILITIES REGARDING PURPOSIVENESS...

The solution, so it seems to me, will have to come from a scrutiny of the critique of the mechanistic world view. In other words: maybe we can re-animate a thinking about God and nature, by liberating our thinking on nature from the grip of the mechanistic framework that has prevailed for so long; in short, by no longer seeing nature as a machine, but as consisting of striving and living organisms. This may also offer new possibilities when it comes to the relation between God and nature.

By the way, one may ask whether, by doing so, we do not run the risk of anthropomorphism. I think the following quote from Ian Barbour may be a helpful answer: “To be sure, we must avoid the dangers of *anthropomorphism*, the assumption that other creatures are just like us. However, we must also avoid the dangers of *mechanomorphism*, the assumption that other creatures are just like machines.”⁴

The conception of purpose/ purposiveness/ goaldirectedness/ finality or whatever term one may give to it is enormously taboo within science. Let there be no mistake, there were good reasons for the taboo. Ever since Aristotle, thinking in terms of ‘purposes’ has been closely related to thinking in terms of ‘forms/ essences’ or ‘natural orientations.’ Thus, for instance, the essential characteristic of solid things was thought to lie in their striving to reach the surface of the earth. In this way, the question why stones are falling could be answered by saying that a stone falls because it is seeking its natural place; an answer that explains the obscure by the more obscure. Already in the 14th century, nominalistic thinkers objected to this reasoning in terms of ‘forms/ essences/ purposes.’ But, not until Galileo would such meaningless application of the principle of purpose disappear. Such reasoning in terms of purposes utterly fails to give any quantitative insight. That is why Galileo took an important step when he abandoned the unquantifiable matter-form scheme, and returned to the ancient idea of smallest material particles or atoms, which, as we know, has proved to be very suitable to quantitative investigation. From a scientific point of view, this turn signified an extraordinarily big step in the right direction, even though, as we have seen, it had far reaching consequences for our world view.

To this day, discussions are raging regarding the question whether the concept of ‘purpose’ should be allowed to play a role in our picture of the human being and of the world, and if so,

how so. In those discussions, ‘purpose’ has proved to be a concept with an extraordinary multitude of meanings, a fact that in itself already often obscures the discussions.

Mostly, the term ‘purpose’—certainly in the context of ID—has the connotation of a conscious agent who makes or manipulates something according to that purpose. So the effect is thought as predetermined and the way to it as straightforward. Moreover, as said above, the effect, the product, is seen as something that is in itself purposeless, working only according to the purposes built in by its designer, and that therefore can not be understood from within itself.

This mechanistic model is beset by a great number of difficulties, not only for theology, but also when it comes to the philosophy of nature. Presently, the mechanistic view is challenged from within science by the picture of intrinsically dynamic, self-organizing processes, as, for example, many (if not all) biological processes. A plant or a population is neither constructed piece by piece, nor is it governed from without, but it develops, it grows, it forms itself in interaction with its environment. This is a *form of ‘purposiveness’* not imposed from without, not straightforward, but involving an internal *searching process* by trial and error. Such process may be seen not only in living nature, but also in some physical processes, or, for instance, in a democracy...

My suggestion is to explore these other examples of purposiveness. Indeed, instead of capitulating to mechanistically tinted concepts according to which ‘somebody’ is turning or has been turning the dials so as to make us go through life like machines without any deviation from our built-in purpose, let us try other concepts of purposiveness that correspond to this searching process.

Think for instance of an *artist*. An artist has an internal desire for what is not yet, for what he or she wants to represent, seeks to compose, or something like it.

Or take a *biological population*. Such population is not arbitrarily or haphazardly ‘fooling around’ with regard to its genetic composition, but (by recombination) it moves to the genetic composition of the population that is preferable in its context. Such population does not follow a purpose that is imposed from without, but it ‘automatically’ moves towards its ‘best option,’ where ‘best option’ itself changes according to the changes in the situation (moving target adaptation).⁵

And there are many other examples, e.g., in education.

When is said that the process ‘automatically’ moves to its best option, this means scientifically spoken that in such process a ‘valuation or fitness function’ is detectable or describable, which evaluates a development into one direction as more attractive than a development into a different direction (relative to the given situation). This difference in attractiveness comes to give an orientation to the course of a process. Already in the 1940s, Sewall Wright did pioneering mathematical work in this area.⁶

2. ... AND THE SIGNIFICANCE THEREOF FOR A THEOLOGY OF NATURE

For theology, these searching forms of directionality suggest a possible alternative conception of the God-world relationship, in which the divine constantly arouses our desire in a constantly different way according to the changes in our situation, and where God is not an external designer, but acts as an ‘object of desire,’ as the ‘motive and motor of our utmost individual striving.’ In nature too. Though this perception has its roots in Aristotle and Aquinas, it also strikingly corresponds with Whitehead’s concept of ‘God’s primordial nature.’

As I have more extensively argued elsewhere, there is, despite certain dissimilarities, some interesting parallel between the role of God’s primordial nature with respect to the world as formulated in Whitehead’s metaphysics, and the role of a valuation or fitness function with respect to its dynamical system as it has been formulated in recent adaptive dynamics. Both are essentially mapping rules that assign value/ attractiveness/ preference to a set of eligible possibilities, thereby enabling a process to organize itself in an adaptive way.⁷

Even though in this picture the process involved shows some ‘directedness,’ the picture does not in any way refer to a predestined plan nor does it presuppose that the outcome is determined from the start. If seen in this way, God is not the giver and ‘fixator’ of purpose (with an outcome determined from the start), but God is the condition for the possibility of our own purposiveness (where ‘our’ is understood as encompassing all reality). And obviously the effect of this is not simply a straightforward success-story, but also an increase of our vulnerability (Whitehead, Munnik).⁸

IV. By way of conclusion

I deem this picture of God as guiding ‘object of desire’, comparable to the way a fitness function gives direction, far more promising than the picture put forth by the ID-theory. And this for the following reasons.

Purposiveness is brought back into the very heart of being and living, enabled and aroused by God.

This picture of God as ‘valuation function’ or as ‘object of desire’ *has no need* for gaps in the theory of evolution, but it rather considers the meandering evolution process as an example *par excellence* of a process that is unceasing and open-ended because it is always subject to the continuous pull of ‘desire,’ the attraction of what is preferable within a given situation.

If science needs a materialistic theory, let it be one in which matter is not the dead stuff of Descartes, but matter whose example we see in the living process of evolution.

Thus, this view *does demand* a renewed and better look at nature, the ‘physis’ (to which ‘physics’ owes its name). The proper feature of this ‘physis’ is that it seeks, desires, pursues a way.

If so, people will no longer need to consider their striving as an anomaly: The *whole* creation groans and tavails in pain, the pain of giving birth (Rom. 8, 22)!

Finally, the ID-theory links God in a one-sided way to order. It is the picture of God as ruler. But the difficult word ‘God’ represents so much more: love, desire, attention, the cry for help, judgment, resistance.

Notes

¹ William A. Dembski, *Intelligent Design: The Bridge Between Science & Theology*, Downers Grove, Ill.: InterVarsity Press, 1999.

² Michael J. Behe, *Darwin’s Black Box: The Biochemical Challenge to Evolution*, London: Free Press, 1996.

³ St. Augustine, *The Literal Meaning of Genesis*, translated and annotated by John Hammond Taylor, S.J., 2 vols. (New York: Newman Press, 1982), Vol 1, p.42-43.

⁴ Ian Barbour, ‘Evolution and Process Thought’, in: *Theology and Science* 3 (2005) 2, 161-178, 174.

⁵ See e.g. C. Rueffler, T.J.M. Van Dooren & J.A.J. Metz, ‘Adaptive walks on changing landscapes: Levins’ approach extended,’ in: *Theoretical Population Biology* 65 (2004), 165-178.

⁶ Sewall Wright, ‘Adaptation and Selection,’ in: *Genetics, Paleontology, and Evolution*, ed. by G.L. Jepsen, E. Mayr & G.G. Simpson, Princeton University Press, 1949, 365-389.

⁷ P. Oomen, ‘The possible significance of the notion valuation function in self-organizing systems for a discourse on God and self,’ (unpublished, paper at the *Sixth International Whitehead Conference*, Salzburg, Austria, July 2006 - available at: <http://www.whiteheadconference2006.at.tf/>). See also: P. Oomen, ‘Divine “Second Order” Design and Natural Self-Organization,’ in: *Studies in Science and Theology: Yearbook of the European Society for the Study of Science and Theology* 8 (2002), 3-16; Id., ‘No Concretion without God,’ in: F. Beets, M. Dupuis & M. Weber (eds.), *La science et le monde moderne d’Alfred North Whitehead: Actes des Journées d’étude internationales tenues à l’Université catholique de Louvain 2003*, Frankfurt / Lancaster: Ontos Verlag, 2006, 203-220. [=Chromatiques whiteheadiennes III].

⁸ Alfred N. Whitehead, *The Function of Reason*, Boston: Beacon Press, 1929. René Munnik, ‘Wat weerloos wordt: Over scheppingsgeloof en evolutieleer’, in: *Schrift* (1997) 171, 89-94.