The problem is that this GTEE alternative to Dooyeweerd appears to be saddled with the same problem type laws have. If things cannot evolve from one Dooyeweerd-type to another, neither can they evolve from one Klapwijkian indionmy to another. For as Klapwijk explains it, the GTEE holds that the appearance of a new level is not caused by any lower level as a totality, nor is it produced by gradual changes in a lower level, nor is there downward causation. So what, then, could possibly produce a new idionomic level of life forms?

You might think that at this point the answer would be "God," but it is not. Klapwijk rightly sees that move as invoking a "God of the gaps" interventionist explanation, and rejects it. But that leaves us with a theory in which "emergence" is pure mystery. It is not a name for a process, but for a puzzle. Indeed, it is more than a puzzle because, given the parameters of the theory, it recommends belief in something that *cannot* have a cause and yet is not God.

Roy Clouser

Bradley Monton, Seeking God in Science: An Atheist Defends Intelligent Design. Peterborough, ON & Buffalo, NY 2009: Broadview Press. 177 pages. ISBN 9781551118635.

This is a remarkable book, in a number of respects. First of all, its author is a card-carrying atheist but its goal is, as the subtitle says, to *defend* intelligent design (ID). Second, it actually does a *better* job at this than most pro-ID books whose authors have religious background views more hospitable to ID. Third, the book consistently avoids getting bogged down in the political and cultural issues associated with ID and keeps a relentless focus on the more important question whether ID is true. Fourth, throughout the book, the author is open-minded and fair about both the support for his own atheistic position and the force of the arguments for ID. The often confused and heated debates about evolution, creationism, and ID need the kind of coolheaded clear thinking this book exemplifies. Bradley Monton provides powerful proof of the usefulness of philosophy.

The book consists of four chapters. In chapter 1 Monton articulates the doctrine of ID. Chapter 2 discusses whether ID may count as science. In chapter 3 five arguments for ID are presented and evaluated. The book closes with a chapter about whether ID should be taught in schools. Although I will raise some critical questions below for the purposes of this review, there should be no doubt that I am very sympathetic to the project of this book and largely in agreement with many of the specific arguments it contains.

Chapter 1 offers some illuminating tweaking with various possible definitions of ID. Monton settles on the following: "The doctrine of intelligent design holds that certain global features of the universe are best explained by an intelligent cause, *or* that certain biologically innate features of living things are best explained by the intentional actions of an intelligent cause which is not biologically related to the living things, not by an undirected process such as

natural selection" (27). This definition best captures what ID proponents are after, or at least what they should be after if they want their position to be as strong as possible. Contrary to what many people assume, then, ID is not only about finding evidence of design in the biological evolution of living things on this planet, but also about cosmology and the origin of life. While I agree with Monton that ID ought to be understood in this broader sense, it should also be pointed out that the term 'ID' is not always used in this sense. Often, people use it to refer to the narrower class of arguments that try to find evidence for an intelligent cause in the evolution of living things.

Interestingly, Monton actually accepts the central claim in the aforementioned definition: He believes it is true that some features of the universe or living things are best explained by an intelligent cause. However, he does not accept the inference from ID being the *best explanation* to it being *true*. He thinks some features of the universe simply do not have any explanation at all; they are brute facts. This leads me to a question about his position. When discussing pro-ID arguments in chapter 3, Monton elaborates on various possible naturalistic explanations of seemingly intelligently designed phenomena. It wasn't always clear to me if he was merely holding these up for consideration to show that pro-ID arguments aren't watertight, or if he was making the stronger claim that the naturalistic explanations he discusses are in fact equally good or better explanations. The latter would be at odds with his admission in chapter 1 that ID provides the best explanation of the phenomena under discussion.

In chapter 2, Monton dissects the judge's ruling in the 2005 Dover trial that ID counts as religion, not science. Although the bottom line is that the entire issue whether ID is science is moot, because the really important question is whether it is true, the chapter still contains insightful discussions of the problems of methodological naturalism — i.e., the doctrine which holds that science may never appeal to non-natural causes — and it exposes various weaknesses in attempted defenses of the doctrine. Readers familiar with Alvin Plantinga's and Del Ratzsch's thinking on Christian science will recognize some of the arguments.

The core of the book is chapter 3. Monton considers the following ID arguments: (i) the argument from cosmic fine-tuning, (ii) the cosmological argument, (iii) the argument from the origin of life, (iv) an evolution-based argument (Michael Behe's irreducible complexity argument), and (v) an intriguing argument to the effect that we are living in an intelligently designed computer simulation. He finds all of these arguments (except the evolution-based one) somewhat plausible, but not enough to accept their conclusion. He doesn't consider the option that the arguments together might make a cumulative case for ID, but I suspect he wouldn't find this a promising idea.

Monton levels an interesting new objection to the fine-tuning argument (i). He argues that it is inappropriate for most of us to take a firm stand on the force of this argument, since we are not in an epistemic position to evaluate the evidence for fine-tuning properly. Only a few cosmologists are and they disagree in their judgment. I wonder, though, why Monton does not object to biological ID arguments on similar grounds. Presumably neither he nor many

other philosophers are particularly well positioned to evaluate the chemical and biological evidence pertaining to the origin of life and the power of unguided evolutionary processes. If that is correct, then we should tread carefully in endorsing or rejecting such arguments. Perhaps Monton nonetheless rejects evolution-based ID arguments because he believes there is more consensus in biology about the relevant issues than there is in cosmology about fine-tuning. Whether this assessment is correct, remains to be seen. As I understand it, many biologists now admit that natural selection alone does not suffice to explain biodiversity and they hypothesize various additional mechanisms (although none of these include ID).

Monton's evaluation of both the origin of life argument (iii) and the irreducible complexity argument (iv) leans on the possibility of our universe being spatially infinite. Contrary to popular belief, the Big Bang hypothesis does not include the claim that our universe is spatially finite and expanding; it might as well have been spatially infinite right from the start. Monton reports that current cosmology takes this latter option very seriously. An infinite universe blocks the inference to ID: Even if there is just the slightest chance of life and intelligent embodied beings like ourselves arising by naturalistic means, an infinite universe will contain an infinite number of planets with intelligent life (assuming other parts of the universe are roughly similar to our part).

Given the growing popularity of theistic evolutionism, also in the Netherlands, I found Monton's critical appraisal of theistic evolutionists' dismissal of ID refreshing. He takes Ken Miller and Denis Alexander to task for criticizing ID on the wrong grounds: ID is not anti-science, nor are ID arguments obviously fallacious arguments from ignorance or God-of-the-gaps arguments. I myself am often surprised to hear people announce that they reject ID and believe in theistic evolution instead. On Monton's definition of ID (quoted above), it is easy to see that theistic evolutionism counts as a form of ID, provided theistic evolutionists believe their doctrine on the grounds that it provides the best explanation for certain features of living things — which they certainly should, because it is mysterious on what other grounds, if not these, they would want to believe it.

Even though the final chapter will mostly be of interest to American readers, it also offers insights of general importance. Monton points out that a compelling answer to the question whether teaching ID is good or bad for students requires extensive empirical research on students' long-term intellectual, political, and sociocultural development. Absent such studies, proclamations on either the benefits or drawbacks of teaching ID must remain speculative. Monton also holds a plea for inquiry-based science education, as opposed to fact-based education. Teachers should foster an understanding of science as a dynamic critical enterprise, in which evidence is weighed and arguments are evaluated to arrive at theories and explanations that best approximate the truth. In such an approach there is nothing wrong with also discussing problems in evolutionary theory and evaluating the arguments for and against ID, as long as that is done in a non-proselytizing manner.

I wish that every scientist, philosopher, theologian, or public figure who wants to say something about ID would first pick up a copy of this book, study it carefully, and then reconsider whether she or he really wants to say it. I'm sure that would save us all a host of muddled arguments and unwarranted opinions.

Jeroen de Ridder

Alvin Plantinga and Michael Tooley, *Knowledge of God.* Malden, MA / Oxford 2008: Blackwell. x + 270 pages. ISBN 9780631193647.

This book offers the kind of sustained discussion one would wish to see more often: informed, intelligent, creative, to the point, and rigorous. Two highly distinguished philosophers, Alvin Plantinga and Michael Tooley, debate arguments for and against the existence of God and the rationality of belief in God. Both authors give an opening statement in which they present their initial arguments. This is followed by two rounds of reactions in which each of them critically engages the other's arguments. In this review I will summarize the main lines of argument while inserting some brief questions and evaluative comments.

In his opening statement, Plantinga starts with a familiar characterization of (Christian) theistic belief. A theist believes that a personal omnipotent, omniscient, and perfectly good God is the creator and sustainer of everything that exists. Relying on his proper functionalist account of knowledge, Plantinga goes on to argue that theistic belief is likely to be warranted if theism is true. This is important, for it means that objections to theism must attack its truth, not the possibility of rational belief in it.

The bulk of the chapter then presents an indirect argument for the truth of theism by arguing against one of its main rivals, *naturalism*: roughly the position that everything that exists is natural, from which it follows that neither God nor other entities with 'godlike' qualities exist. Plantinga doesn't mention that the cogency of this argumentative strategy depends on a hidden premise that the rival positions under discussion exhaust the possibilities. Some people may want to deny this and urge that Plantinga needs additional arguments to establish the truth of *theism* as opposed to polytheism, pantheism, or more fanciful non-naturalistic views.

The case against naturalism has three parts. (1) Naturalism cannot accommodate the notion of proper function. If naturalism is true, organisms and organs do not have proper functions. And that implies that derivative notions, such as health and sanity, have no application — which is absurd. The reason for this is that the notion of proper function only makes sense in the context of conscious design. Naturalistic analyses of proper function fail. I have two questions about this argument. First, is there really an *everyday* notion of proper function; isn't proper function to some extent a technical term that philosophers or scientists can define for their own purposes? Second, assuming there is an everyday notion of proper function, is its meaning sufficiently well-