Scientism and secularism ... and Scripture?

Secularism and Scientism: Learning to respond to a dangerous ideology

J.P. Moreland

Crossway, Wheaton, IL, 2018

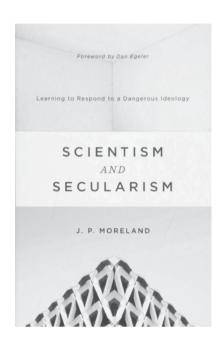
Shaun Doyle

Science is king. At least, that is the way science is presented in our secular culture today. No other way of knowing about the world is as highly celebrated or regarded as science. But this has led to an overweening reliance on science called *scientism*. How should Christians respond to this?

Scientism and Secularism aims to help Christians, according to the subtitle, in "Learning to Respond to a Dangerous Ideology". The author, J.P. Moreland, is Distinguished Professor of Philosophy at Talbot School of Theology at Biola University in La Mirada, California. And he offers many helpful ways to respond to scientism. Nonetheless, the content sometimes repeats itself, and it is hard to know what audience he was trying to target. The technical discussions, especially of epistemology and philosophy of mind, are likely to turn off some of the readers who most need to hear the core message of this book. Moreover, his commitment to deep time at crucial points also stunts a properly Biblebased response to this "dangerous ideology" of our day.

Chapter 1: The scientistic air we breathe

What is scientism? Moreland defines it, quoting philosopher of science Tom Sorrell:



"Scientism is the belief that science, especially natural science, is ... the most valuable part of human learning ... because it is much the most [sic] authoritative, or serious, or beneficial. Other beliefs related to this one may also be regarded as scientistic, e.g., the belief that science is the only valuable part of human learning" (p. 29).

Moreland discerns two forms of scientism from Sorrell. First, *strong scientism*, which says that something is true, rationally justified, or known *only* if it's a scientific claim that has been successfully tested by proper scientific methods. Second, *weak scientism* which formally acknowledges truths outside science, but still says that science is a far more authoritative and trustworthy way to know anything.

Scientism is the air our culture breathes. It pops up in all sorts of contexts. For instance, Moreland once told a nurse he had changed academic paths from chemistry to philosophy, and she wondered why he went from

40

studying 'hard facts' in chemistry to musing on 'private opinions' in philosophy (pp. 25–26). Examples of this divide between 'knowing' scientific facts about something and 'believing' non-scientific things crop up everywhere, such popular magazines and even in a California science standards document (pp. 26–29).

Chapter 2: How scientism affects us

Why does scientism matter? First, Moreland states that scientism is part of our culture's "plausibility structure"—a set of background assumptions that shapes what people consider plausible or implausible (p. 31). Christianity is a 'religion' and thus not 'scientific', so it's prejudged as unworthy of rational consideration.

Moreland also lists several culture shifts that have come from the widespread acceptance of scientism (pp. 33-38). Religion and ethics shift from knowledge to blind faith. People now guide their lives by the immediate satisfaction of desire rather than truth. People's ethics shift from duty and virtue to a do-no-harm minimalism. 'Freedom' gets redefined from 'the power to do what one ought' to 'the right to do whatever one wants'. And 'tolerance' gets redefined from 'putting up with someone you disagree with' to 'accepting all (non-scientific) views as valid'.

Scientism also affects the church (pp. 38–42). It undercuts our attempts to raise and keep our children in the faith. It is behind some of the biggest reasons why people leave the church, e.g. shallowness of thought, inability to express doubts or get answers to questions, and an anti-science attitude. In a culture where science is king, instead of developing a strong response to scientism, we instead have often settled for simplistic preaching and feel-good 'worship' rather than addressing the tough questions properly.



Figure 1. Philosophical assumptions ground science, so science can't be the only way to know things.

Chapter 3: How scientism changed the universities

Moreland then documents some of the changes that occurred in American universities between 1880 and 1930 which explain the rise of scientism. In the 1880s, for most people, including those in universities, "religious, especially Christian, claims and common-sense notions were placed on an equal footing as sources of knowledge along with scientific theories!" (p. 44).

What happened? God was the uniting anchor of truth for the diverse disciplines studied, hence 'university'. But over time a fact/value distinction came about, such that values were private, subjective, and culturally relative, whereas 'facts' were public, objective, and *empirical/scientific*. God was likewise regarded as a private opinion, and thus was cast aside as the uniter of truth.

However, Moreland's analysis doesn't really go back far enough. By the 1880s, many things in Western nations had changed in a decidedly scientistic direction that laid the groundwork for this social shift in the universities. The *vera causa* approach that emerged out of Newtonian physics was applied elsewhere, e.g.

to history, to the Bible, and most poignantly for displacing the Bible as the foundation for history—geology and biology.¹ A science-centric worldview had been competing with Christianity for well over a century before the universities shifted.²

Chapter 4: Scientism is self-refuting

The first big problem with scientism is that it is *self-refuting*. What is a self-refuting statement? Moreland helpfully explains:

"Such a statement has three features: (1) The claim establishes some requirement of acceptability for an assertion (such as having to be empirically verifiable). (2) The claim places itself in subjection to the requirement. (3) Then the claim falls short of satisfying the requirement of acceptability that the assertion itself stipulates. In other words, when a statement is included in its own subject matter (i.e., when it refers to itself) but fails to satisfy its own standards of acceptability, it is self-refuting" (p. 50).

A classic example is "All sentences are exactly three words long." This statement clearly fulfils all three of Moreland's criteria, and is thus self-refuting:

- 1. it establishes some requirement of acceptability—that every sentence is exactly three words long;
- 2. the statement is a sentence, so it puts itself under its own requirement for acceptability;
- 3. the sentence is more than three words long, so it fails its own requirement for acceptability.

Another example is the core claim of (strong) scientism: "Only what is testable by science can be true". As Moreland explains:

- Does this statement establish a requirement of acceptability?
 "Yes: it says that something must be testable to be *true*."
- 2. Does this statement place itself in *subjection* to the requirement? "Yes: it purports to convey *truth*."

3. Does this statement *fall short* of satisfying its own requirement? "Yes: this is a philosophical state-

ment about science that cannot itself be tested by science [emphases in original] (p. 51)."

So yes, (strong) scientism is self-refuting. It is *necessarily* false; it cannot be true. No amount of future research or discoveries can make it true. And it doesn't matter which skeptic says it—whether just a student or an academic professor—we don't need to be intimidated when people make statements like this.

Chapter 5: Scientism is the enemy of science

Not only is scientism self-refuting, but it's also the enemy of science. But how can that be, when scientism says that science is the only or best way to knowledge? Moreland points out that scientism is not science; it's philosophy (p. 55). He rightly points out that science rests on a bunch of philosophical presuppositions (figure 1). For example:

- 1. There is a mind-independent world 'out there'.
- 2. The deep structure nature of the world is orderly.
- 3. Objective truth exists.
- 4. We can reliably gain knowledge of the world, including scientific knowledge, through our sense and cognitive faculties.
- 5. Various types of values and 'oughts' exist (e.g. moral, rational, and aesthetic).
- 6. The laws of logic and mathematics exist.

As such, the conclusions of science can only be as strong as its presuppositions. But this very fact makes for a powerful argument against scientism:

 A successful argument for the claim that science is the paradigm of rationality must be based on the demonstration that the presuppositions of science are preferable to other presuppositions.

- 2. That demonstration requires showing that science, relying on these presuppositions, is better than its competitors at solving some problems and achieving some ideals.
- 3. But showing that cannot be the task of science.
- 4. It is, in fact, the task of philosophy.
- 5. Thus the enterprise of justifying the presuppositions of science by showing that, with their help, science is the best way of solving certain problems and achieving some ideals, is a necessary precondition of the justification of science.
- 6. Hence, philosophy, and not science, is a stronger candidate for being the paradigm of rationality. (p. 56).³

But what if someone claims science doesn't rest on any assumptions? That too is a *philosophical* claim that can only be analyzed by philosophy, not science. Science is bound behind and before by philosophy; it cannot escape it, and it's only as strong as the philosophy that undergirds it.

Chapter 6: Why weak scientism is no better than strong scientism

What about weak scientism? Can we really put science above every other discipline as the most authoritative? This is an idea that has infected a large part of the church. Moreland gives a bunch of examples of this, showing how it undermines biblical authority:

Homosexuality is caused by our DNA?

No problem. The Bible doesn't teach the immorality of homosexuality anyway.

We have misread it for two thousand years. Neuroscience shows there is no soul?

No problem. Dualism and the soul are Greek ideas not found in the Bible, which is more Hebraic and holistic.

A completely naturalistic story of evolution is adequate to explain the origin and development of all life? No problem. After all, the Bible isn't a science text.

Studies in the human genome suggested human life did not begin with Adam and Eve?

No problem. We can reread the historical narrative in a new way.

And on and on it goes. (pp. 72–73).

One glaring example was conspicuous by its absence: 'Scientists say the Earth is 4.5 billion years old.' And the response: 'Don't worry, the Bible doesn't really conflict with billions of years of "geologic time".'

The responses are even worse than "the Bible is wrong". Rather, to borrow Wolfgang Pauli's withering criticism of a fact-free physics paper, it amounts to "the Bible is not even wrong"—i.e. the Bible is no longer regarded as making any truth claims worthy of refuting.⁴

Nonetheless, Moreland points out that weak scientism gives more rational authority to the conclusions of science than the assumptions on which science rests (pp. 74–75). It's a weird inversion of rational authority that undercuts the very primacy of science that weak scientism seeks to establish.

Chapter 7: The availability of non-scientific knowledge

Moreland leaves aside his critique of scientism to point out that there are things we can know with greater certainty, and in different ways, than we know the claims of the hard sciences. He gives several examples; I will list some of them.

First, we can know logic and maths without appealing to sense experience, unlike science (p. 77). That's because they are *necessary* truths—2+2 *must* equal 4—whereas scientific claims are contingent.

Second, we have greater rational authority about what is happening inside our minds than anyone else does (p. 79). We know them by direct introspection. Even a neuroscientist can't know with greater certainty than me what's going on in my mind. If I don't know, they have no way to know.

Moral knowledge is another category (p. 80). Consider this selfevident moral truth: 'It's wrong to

torture babies just for the fun of it.' Society could abandon this truth, but it's practically inconceivable that anything could make believing it completely irrational in the next 50-100 years. However, we can easily imagine our model of the electron changing in the next 50-100 years, making it no longer rational to believe our current one. Science changes like that all the time. So, if a scientific claim is easier to rationally abandon than an obvious ethical claim, the ethical claim has greater epistemic weight than the scientific claim. Sometimes, ethics is more certain than science ever can be.

Chapter 8: When science exceeds its reach: a case study

Moreland next gives an example of science overreaching—the study of human consciousness. There are things we know about mental states, and we don't need neuroscience to know them. You're aware of them simply by introspection.

Inserting neuroscience into some of these issues, Moreland contends, distorts this reasonably simple picture by insisting that mental states are in some way physical states. He then canvasses a few options that have been offered: behaviourism,⁵ type identity theory,⁶ and functionalism.⁷ But none of these theories get at what e.g. pain *is*. Pain is a feeling of hurt—it's not identical to what causes it, what it does, or what it causes. Neuroscience has no special access to what you feel—but *you* do.

Moreland isn't against neuroscience; he just thinks it has limits: "Science is helpful in answering questions about what factors in the brain and body generally hinder or cause mental states to obtain, but science is largely silent about the nature of mental properties/states" (p. 94).

Chapters 9 and 10: Scientism and first philosophy

In the previous chapters, Moreland dismantled scientism, and showed that

science isn't the only, or even the best, way to know things. But what do we build in its place? Moreland's answer: "biblical studies and theology must join forces with a classic view of *first philosophy*" (p. 98).

First philosophy, Moreland explains, "is the notion that there is a realm of rational investigation that (1) is the proper domain of philosophy, (2) is independent of and, indeed, more basic or fundamental than science ... and (3) gives us knowledge of the topics studied in that realm, including knowledge of reality" (p. 98). In other words, first philosophy posits an autonomy thesis: philosophy asks questions that are outside the purview of science (e.g. are there such things as abstract objects?); and an authority thesis: on some issues both science and philosophy address, philosophical considerations carry more weight than scientific ones (e.g. the nature of time). He then goes on to analyze why first philosophy was abandoned, and then defend its validity.

Moreland then gives some examples of the autonomy and authority theses. On the authority thesis, he mentions Stephen Hawking's 'no boundary' model for the beginning of the universe to get around the need for a beginning for time even for a finite past (p. 113). However, support for the universe's beginning was stronger than support for Hawking's model. Moreover, Hawking's 'imaginary time' was metaphysically unintelligible, so his model is at best a useful fiction.

On the autonomy thesis, Moreland addresses issues in the philosophy of mind (p. 118). For instance, different metaphysics of mind can be empirically equivalent. If so, which one should we go with? Science can't tell us; we must appeal to philosophical arguments to establish the best explanation.

Second, who should define 'science' (p. 121)? Scientists, since they are practitioners, will typically think they are the best to define it. However, the practice of science doesn't require one puzzle over how to define what science

is. There is no scientific experiment, procedure, or observation that could resolve the dispute. Defining concepts and delineating their scope of reference is a matter for philosophers, not scientists.

As Moreland concludes, "we often have more rational evidence and authority for the carefully developed theological claim than scientists do for their conflicting claim" (p. 123).

Chapters 11 and 12: How do we explain things?

Following philosopher Richard Swinburne, Moreland distinguishes between two different types of explanations: scientific explanations and personal explanations. A scientific explanation explains a state or change of state in accordance with some law of nature and some initial conditions. It may also include some model that tells us why the universal law is true. On the other hand, "A personal explanation of some event or state of affairs intentionally brought about by a person (divine or otherwise) will employ notions such as the intention of the agent and the relevant power of

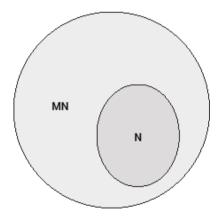


Figure 2. All metaphysical naturalists (N) are methodological naturalists (MN), but not all methodological naturalists are metaphysical naturalists. The problem is that word association between the two concepts is inevitable, and the term 'methodological naturalism' will always bias people in favour of *metaphysical* naturalism. (After National Center for Science Education¹²).

the agent that was exercized in causing the state of affairs" (p. 128).

In a murder trial, the jury ultimately seeks personal explanations: who did it? How? Did the killer actually have the capacity, at the right place and time? What was his intention? A scientific explanation, however, is not what *ultimately* interests the jury in a murder trial.⁸ Nobody wants to know the natural law and relevant formula to calculate the mechanics of how the bullet fired from the gun; they want to know who killed the victim (or, more specifically, whether the defendant did).

But how do we tell when science can't explain something? Basically, Moreland breaks such phenomena into two categories: those that are too odd, and those that are too big (p. 129). Moreland gives four criteria for telling if something is too odd to be explained scientifically (pp. 129–134):

- 1. When you have to add new laws just to make sense of the event (p. 129).
- 2. When you have correlations leaving you with numerous unwieldy brute facts (p. 131).
- 3. When you have new phenomena utterly unique from anything in the old theory (p. 132).
- 4. When you have phenomena contingently related to physical facts (p. 133)

What about too big? Moreland outlines five things that he says science cannot even in principle explain (pp. 135–158):

- The origin of the universe
- The origin of the fundamental laws of nature
- The fine-tuning of the universe
- The origin of consciousness
- The existence of moral, rational, and aesthetic objective laws, and intrinsically valuable properties.

In most cases, Moreland rehearses some standard arguments for God, such as the Kalām cosmological argument, the fine-tuning argument, and the moral argument. But he also explores how science fails to address these questions. For instance, with the beginning of the universe, since scientific explanations presuppose the existence of the universe,

they clearly can't apply to its origin, since that would presuppose what needs to be explained. The same is true for the laws of nature. Consciousness struggles to be explainable scientifically because the link between brain states and mental states is purely contingent. For normative principles like morality, beauty, and rationality, science is merely descriptive and so can't even speak to their truth or falsehood.

Chapter 13: Methodological naturalism, theistic evolution, and intelligent design

Methodological naturalism (MN) is "roughly, the idea that, while doing science, scientists must limit themselves to strictly naturalistic, materialistic explanations" (p. 160). It's different from metaphysical naturalism, which says that nature is all there is. One can follow methodological naturalism and not believe in metaphysical naturalism (figure 2). Moreland correctly points out that theistic evolutionists are among the staunchest defenders of this idea.

Moreland, however, rejects MN. For instance, MN has not made its case as a demarcation line between science and non-science. Moreover, intelligent agency, contra MN, is a part of science. Consider SETI, archaeology, or psychology. This even applies to God. Evolutionists often argue that if God were the designer of biology, organisms would be much better designed than they are, therefore evolution is a better explanation. But this assumes theological ideas have scientifically testable implications. And if theological ideas can be used to falsify God's activity in the natural world, why can't they be used to support God's activity in the natural world?

What of arguments for MN? The main one is the so-called 'God of the gaps' argument:

"This argument usually takes the following form: (1) God acts only when there are gaps in nature, (2) God is appealed to merely to fill up gaps in our scientific knowledge and cover our ignorance of naturalistic

mechanisms, (3) these gaps are used in apologetic, natural theology arguments to support Christian theism, (4) scientific progress is making these gaps increasingly rare, and thus, (5) this strategy is not a good one" (p. 168).

What does Moreland say in response (we have also previously said plenty ^{9,10})? First, God's causal activity isn't limited to gaps in our scientific knowledge. God constantly sustains the whole universe. Moreover, we might expect a discontinuity in nature where God acted directly. Miracles are best identified against a backdrop of robust natural laws, so we expect gaps due to divine agency to be small and rare.

Moreland also points out that some subjects are not primarily apologetics-focused; they simply consult more than scientific data to explain phenomena in nature. He doesn't list any examples, but many aspects of creation research fall into this category: Flood modelling, creation cosmology, and baraminology. Even if they are useful for apologetics at times, they are primarily about understanding history from a biblical perspective.

Moreland also mentions the common divide between operational and historical science; God is irrelevant to the former, but may be relevant to the latter. He also points out that ID is formally agnostic about who the designer is. And the ID argument is not an appeal to gaps in our knowledge, but is based on what we *do* know about chemistry, information, and the limits of mutation + selection.

Chapters 14 and 15: The importance of integrating Christianity and science

So then, how should we think about the relationship between Christianity and science? First, Moreland says, "about 95% of science and theology are cognitively irrelevant to each other (p. 173)."

What of the 5% where there is interaction? He says that most of it $(\sim3\%)$ gives evidential support

for Christian teaching. That leaves a minority (~2%) where there is an apparent conflict. He notes that little or none of this counts against God's existence or the core claims of the Gospel. However, most of the conflict revolves around inerrancy and interpretations of specific texts, especially Genesis 1–11.

But can we be rational and confident in the face of a consensus of experts who disagree with us? Moreland gives a few tips:

- Make sure there is not an alternative interpretation of the Bible that is interpretively reasonable and that resolves the tension.
- The presence of a band of highly trained, academically qualified scholars with a good track record for publishing in top journals or with highly regarded book publishers, and who are unified in rejecting the view.
- There are good historical, sociological, or theological explanations for why the expert majority holds to the problematic view.
- Given that Christianity is a highly rational worldview with much evidential and argumentative support, any view that cuts against central components of a Christian worldview should be rejected precisely due to that fact.

Amid explaining these points, Moreland rejects biblical creation. For him, the crucial reason why is point (1); he believes there are exegetically acceptable views of Genesis 1–11 that are compatible with deep time. He does however say that theistic evolution is exegetically unacceptable. As a result, he believes both young-age and old-age creationist views should be pursued.

We of course cannot agree with such an assessment. The Bible is as exegetically unfriendly to old-age creation as it is to theistic evolution. And there are several dangerous theological consequences of accepting deep time. Still, Moreland here is probably one of the best examples of charity toward young-age creation

that one will find among those who disagree with us:

"However, I happily acknowledge that there are numerous well-trained and sophisticated advocates of young earth creationism, and I believe it is a position that should continue to be developed and supported by biblical exegesis and scientific research" (p. 189).

Moreover, all Moreland's factors apply to deep time as much as they do to evolution. There are strong exegetical reasons to reject it. Moreland admits there are numerous well-trained and sophisticated defenders of biblical creation. There are good historical explanations for why deep time is the mainstream view rather than a simple acceptance of the evidence. Finally, the strong ties between biblical creation and the basics of the Gospel provide rational warrant for rejecting deep time in light of Christianity being a highly rational worldview.

One final plea

Moreland is right to call scientism "a silent and deadly killer of Christianity" (p. 197). And for the most part *Scientism and Secularism* does a powerful job refuting it. Biblical creationists would do well to understand the issues Moreland raises in this book.

Where it falls short, however, is in the positive integration of science and Christianity. The God of the Bible is the ground for science, so the Bible of God must be its constraint (figure 3). And this is true for *all*



Figure 3. The God of the Bible is the ground for science, so the Bible of God must be its constraint.

facets of science, including historical geology and astronomy. Moreland's objections to scientism and evolution only take us part of the way there. We need to go further. Genesis 1–11 is the foundation of the Bible, and defending it and exploring how it coheres with the rocks, fossils, and stars is the crucial task biblical creationists must pursue.

References

- Statham, D., Analogy and geology—the 'science' of Charles Lyell, J. Creation 28(3):115–119, 2014; creation.com/science-lyell.
- Sibley, A., Deep time in 18th-century France—part 1: a developing belief, J. Creation 33(1):85–92, 2019; part 2: influence upon geology and evolution in 18th and 19th century Britain, J. Creation 33(1):93–101, 2019.
- Moreland derived this argument from Kekes, J., The Nature of Philosophy, Rowman & Littlefield, Totwa, New Jersey, p. 158, 1980.
- 4. Sarfati, J., The reality of creation, *Creation* **36**(4):1, 2014; creation.com/reality-of-creation.
- Behaviourism identifies conscious states with body movements.
- Type identity theory says that mental properties (e.g. being in pain) are identical to physical properties (e.g. C-fibre firing)
- 7. Functionalism says that consciousness is what the
- 8. Of course, science can be used to exonerate or acquit the defendant. For instance, science could show that no bullet could reach the victim from where the accused was shown to be, or science could show another person's prints on the murder weapon. But the science serves to answer the personal question the jury is ultimately interested in: did the defendant kill the victim?
- Weinberger, L., Whose god? The theological response to the god-of-the-gaps, *J. Creation* 22(1):120–127, 2008; creation.com/gaps.
- Kastelein, N., Science of the gaps, creation.com/ science-gaps, 25 Apr 2017.
- For a full treatment, see Sarfati, J., Refuting Compromise, 3rd edition, Creation Book Publishers, Atlanta, Georgia, 2017.
- 12. The relationship between methodological and philosophical naturalism, *National Center for Science Education*, web archive. org/web/20100408193954/ncse.com/image/relationship-between-methodological-philosophical-naturalism, accessed 30 January 2020.

45