

Is Methodological Naturalism Necessary for Scientific Progress?

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Announcer:

Greetings and welcome to Mind Matters News. This week we're wrapping up our discussion with Angus Menuge and Robert Larmer about methodological naturalism. Dr. Larmer contributed a chapter on this subject to the book, *Minding the Brain*, of which Dr. Menuge was a co-editor. If you're interested in more on this topic, I'd highly recommend you check out the book. This is the third and final part of the series, so if you've not listened to the first two, I'd encourage you to do so. Enjoy.

Angus Menuge:

As a kind of a last-ditch attempt, some will say that, "Look, scientists just don't have any viable, practical alternative to methodological naturalism." They'll say, "Look, if it ain't broke, don't fix it. This is what we've done and that's all there is to it. We can't see any other way." But you think, "No, that's not actually correct." What is the alternative then? We talked about this a little before, but could you develop that a bit?

Robert Larmer:

Well, in my view, explanations should be based on how well they explain rather than being prescribed in advance, as necessarily being of a certain type. I want the freedom to go where the evidence leads. I don't want to have to first subscribe to a method that says, "No matter what the evidence is, here's what you have to come up with." So what is needed is not some a priori commitment to methodological naturalism, but a willingness to go where disciplined investigation of publicly available evidence combined with loyalty to fundamental explanatory principles leads.

Angus Menuge:

Yeah, that's very helpful. And I am thinking too, if we move upper level to the metaphysical or sometimes called philosophical naturalists, what they claim is that ultimately their philosophy is one that's supported by science, and that might seem somewhat plausible perhaps, but they also assume methodological naturalism. And here I think following Stephen Dille, you see that there's a problem. There's a problem you claim in saying that science supports naturalism, but you need to assume methodological naturalism. Just what's gone wrong here in your view.

Robert Larmer:

Yeah. The metaphysical naturalists very often attempts to justify the metaphysical naturalism on the basis that there's no evidence for entities other than the physical. And then using Occam's razor say, "Well, don't multiply entities needlessly." Now the problem with adopting methodological naturalism is you've taken on a method that guarantees that even if nonphysical causes exist, they can never be recognized.

So adopting methodological naturalism guarantees you're never going to find any evidence that would falsify metaphysical naturalism. In other words, if I'm saying, "Well, I adopt metaphysical naturalism because there's no evidence against it," and then I insist on adopting a method that says, that guarantees there can never be any evidence found against it, then I'm begging the question, I'm assuming the very thing I need to prove.

Angus Menuge:

Right. That's very good. It's a bit like saying that there aren't any small fish because they're never found in nets with large holes.

Robert Larmer:

Yes. That's very nice.

Angus Menuge:

Well, yeah, so that if we want to claim the evidence means something, then the method of gathering that evidence must be allowed to count both for and against the claim. And you're saying, no, they have basically set it up so they'd only ever notice the evidence that was for their claim.

Robert Larmer:

Yes. Sorry. Metaphysical naturalists want to claim that their justification for being metaphysical naturalists is very scientific in that it's the best account of reality, but they have guaranteed, if they adopt methodological naturalism, they've guaranteed that there's nothing that can challenge their hypothesis.

Angus Menuge:

That's very good. Well, let's try and summarize the main point. This is a wonderful chapter and I'm so happy that it occurs earlier in the book because it's pivotal to understanding that the evidence that's presented in many other chapters. What you say at the end is that methodological naturalism is at best superfluous, i.e., we don't need it and at worst, it's an outright obstruction to discovering the truth. Can you kind of help to tie things together and reinforce our understanding of this main takeaway?

Robert Larmer:

Well, when I say at best it's superfluous, I think actually all the real work done in science is done without methodological naturalism. It seems to me that methodological naturalism is only brought in as a rhetorical device to challenge say something like intelligent design being taken seriously or to challenge accounts of the mind that are non-physical. So I think that it's not needed.

At worst, I think it places a straitjacket on our explanatory options and guarantees that no matter where the evidence will lead, in reality, we're going to give a naturalistic explanation no matter how bad. And I guess, just what I'd like to say here as we're getting close to the end, it seems to me that there's nothing in science if we consider science to be a search for natural causes, there's nothing in science that prevents science from saying or coming to the conclusion that in searching for natural causes, we come to events which do not plausibly have a natural cause.

So it seems to me we've already done that in at least one instance, namely Big Bang cosmology. Our best cosmology takes us back to if there's a cause of the Big Bang, it can't be a physical cause. So our search for natural causes leads us right back to an absolute beginning where the cause would have to be non-physical. Similarly, if we look at the origin of life, I think the more we know, the harder it is to give an account in purely naturalist terms. In terms of what this book talks about as consciousness, I think that's true.

We have the hard problem of consciousness. You've got atheists who say, "Look, we don't have any account. And if you want to look at empirical data, we've come to take much more seriously near-death experiences," which are very, very difficult to explain in terms of natural causes. So other than some

kind of arbitrary insistence that we must explain things in terms of natural causes, it seems to me science points to, increasingly points to the idea of there being non-natural or supernatural causes that we must acknowledge.

Angus Menuge:

And really this just seems to be a more open-minded approach. Would you think that an alternative to methodological naturalism might be methodological neutralism or something like that, which kind of indicates that yes, there are certain explanatory virtues that we want. Explanations need to be consistent and coherent.

They need to have a wide scope and so forth, but then neutral at least as to the kind of cause that you might ultimately infer. There it seems like all bets should be off. Right? We should simply say that, "Well, that should be determined by the best explanation of the data that we find, and it shouldn't be determined by what we hope to find." Right? So do you have a preferred term for an alternative to methodological naturalism?

Robert Larmer:

Well, I'm not sure I have a preferred term. If I did have one, maybe methodological pluralism.

Angus Menuge:

Okay.

Robert Larmer:

But I think many people, many scientists would say that different areas of science employ different methods. And taking us back to the demarcation problem that we discussed earlier, I'm not surprised that the demarcation problem of trying to have some kind of rigid distinction between science and non-science, that that fails because it seems to me that good reasoning is good reasoning. Whether we're doing quantum mechanics or we're doing medieval history, we do have pretty good principles by which to evaluate evidence, and we have a pretty good handle on what constitutes fallacious reasoning.

So it does seem to me that if we simply apply that, if we take seriously those things we learn in critical thinking 101 and seek to apply those methods of rational thought to the data we gather, whether that data, as I say, be in history or in archaeology or in physics or in biology, that we will find good methods and that we will have a better chance of coming to recognize what the true causes of things are than if we in advance place some kind of arbitrary restriction that all explanation must be in terms of physical causes.

Angus Menuge:

Because you point out in the chapter that at the end of the day, as many scholars have said, Larry Laudan and others, it's much less important what we call science, that's just a verbal matter, than what we allow is simply a claim for which there is good evidence. Right?

Robert Larmer:

Yes. If something is true, it doesn't matter whether we call it scientific or non-scientific. The question is, is it in fact true? I think what happens is very often in our culture, there's this tendency to associate the term scientific with true and non-scientific with false. But that seems to me unfortunate. A good argument is a good argument independently of whether we call it scientific or unscientific. So let us be

interested in how good an argument is rather than in whether we're going to arbitrarily call it scientific or unscientific.

Angus Menuge:

Right. That's excellent, and I think that's an excellent place for me to stop. I think I've asked my questions.

Robert J. Marks:

Okay. Thank you, Angus. Thank you, Robert. I've been sitting here learning a lot listening to you guys, and again, as an outside person who isn't a trained philosopher, more in the area of mathematics and engineering, it seems to me that methodological naturalism is kind of a subset of, say, a Christian worldview, a theistic worldview.

Methodological naturalism, and you've got to tell me if I'm being naive here, simplifying too much, methodological naturalism asks how nature performed this task, whereas from a Christian perspective, maybe even a theist perspective, it is the question of not whether or God did it, but how he did it. He could use naturalistic sort of properties in order to achieve a goal.

And certainly we've polished this in history as we came from things like spontaneous generation to theories of germs and Darwin's idea that the cell was a big gob of goo as opposed to what we know now, that it's more like the complexity of Boeing 737. But again, it seems to me that methodological naturalism is a subset of the general worldview.

Not the general worldview, but the Christian worldview, which asks, again, not whether or God did it, but how God did it. Did he use the naturalistic properties or as Robert has written about that, was it a miracle? So those are the questions we had. So it seems to me from 5,000 feet, that one is a subset of another. What do you think? Am I off base here? Am I being naive, or is this a viable point of view?

Robert Larmer:

Well, I think the initial attraction of methodological naturalism, and indeed the term was coined by a Christian philosopher, Paul DeVries at Wheaton, though the term had also earlier been used by a personalist philosopher, Edgar Brightman, I believe. But the initial idea was, "Well, can't we all just get along? Can't we go into the lab? And given that God often does things instrumentally through secondary natural causes, those secondary natural causes may depend upon God for their existence. But can't we at the level of science just get along?"

So it doesn't matter if you're an atheist or a theist or an agnostic, we'll just adopt this neutral practice." That was its attraction. The problem is that it's not really neutral. If science is in a sense imperialistic in that anything in the physical world that happens, science should be open or able to investigate it. And if you prescribe that science must always give a natural explanation.

That is to say from the theist's viewpoint and explanation in terms of secondary causes, you are, as it were in advance, committing God to working in a certain way. Now, God could maybe do it solely through natural causes and never by direct intervention, but I want to be open to going where the evidence leads. So if the evidence suggests that on occasion God doesn't work instrumentally through secondary causes, but primarily directly through intervening and producing something nature would not otherwise produce, I want to be able to recognize that.

Robert J. Marks:

Okay. Understood. Understood. I think that that clarifies my position a little bit, so.

Angus Menuge:

Yeah. Another approach that some might have who are less dogmatic is to say that in areas of science where methodological naturalism has had good results, then perhaps it should be taken to be a rule of thumb. But that's very different from an infallible rule that under no circumstances whatsoever would you question or abandon. A rule of thumb just means, well, it'll be your default. And I think that as Robert was saying toward the end of the interview with me, I mean, there's nothing wrong with the search for natural causes.

There's nothing wrong with trying to see if there is one. What's wrong is assuming in advance there can't be anything other than a natural cause. So it's really the dogmatism with which the principle is held is the problem. If it was viewed as a rule of thumb or a defeasible guide in areas where it seems to have done well in the past, I think people could, to some degree, make their peace with it. But it hasn't worked that way unfortunately. It's been taken to be the gold standard.

Robert Larmer:

But I would say, I think Angus is right in that, but I would say that I don't think it's needed even as a rule of thumb. For example, I don't think we find Robert Boyle talking about methodological naturalism. I think he is just searching for what he takes to be the best explanation. And if we can explain things in terms of natural causes, then we shouldn't complicate matters.

But I don't think that scientists typically say, "Okay, I must adopt methodological naturalism because otherwise I would have to consider all these hypotheses." I think they just go about their business and say, "Look, what does Occam's razor say? What does Conciliation say? What does the method of competing hypothesis say?" So yes, if you want to have it as a tentative rule of thumb, I suppose that's okay, but I don't think it's needed. I think we can perfectly get on with our work without ever having to bring it into the discussion.

Angus Menuge:

Yeah. And I think that's true. When you look back to people like Kepler, for example, his understanding of a law of nature was actually part of God's providential plan. So he had an overtly design-based understanding of the laws of nature themselves, and that didn't stop him from making some great discoveries. So I think, yeah, the fact that there are great scientists who methodological naturalism never occurred to, seems to count against what I had just suggested. That's very good.

Robert Larmer:

I think also that a problem with methodological naturalism once you give it a lot of credence is design is not regarded in terms of natural causes. So you have people in BioLogos who are theists, and they will say, "Well, we perhaps believe in design, but design cannot be empirically detected. Design must be asserted by faith." So it seems to me methodological naturalism, it's going to have big implications, not simply for science, but for natural theology.

Robert J. Marks:

But haven't you already said that intelligent design is motivated and substantiated a lot by abductive reasoning?

Robert Larmer:

I have, but it's very often dismissed as it's not scientific because it invokes design and therefore runs counter to methodological naturalism.

Robert J. Marks:

Ah, okay. Oh, that's strange. Hey, thank you gentlemen. I have learned a heck of a lot. We've been talking to Dr. Robert Larmer about methodological naturalism, and this is the topic of his chapter in the book, *Minding the Brain*. For more information about the book and Dr. Larmer's chapter visit mindingthebrain.org. That's mindingthebrain.org. So until next time we meet on Mind Matters News, be of good cheer.

Announcer:

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