



Dialogue: Response

Can Many World Views Agree on Science?

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Methodological naturalism has been attacked and defended in this journal¹ and elsewhere. A naturalism which *a priori* rules out supernatural causations would seem to be problematic for Christians; however, there also seems to be a proper role for naturalism in science. Walter Thorson's article makes a good contribution examining naturalism's legitimacy and scope.

Legitimacy of Naturalism

Thorson makes several excellent points. For Christians, naturalism in science requires a theological basis which cannot be sidestepped by a simple distinction between philosophical and methodological naturalism. The most important biblical doctrine here is God's transcendence. God grants creation an authentic existence and a limited freedom to be itself. God gives humans a task of exploring and ruling creation. To Thorson's points, I would add the following thoughts.

What are the fundamental philosophical beliefs underlying science? Philosophers of science have written books to answer that question. A short summary might look like the following:

- (P1) Events in the natural world typically have (immediate) causes in the natural world. (If a tree falls and a sound is heard, then the sound was somehow caused by the falling tree and not by some "tree spirit" or "sound spirit.")
- (P2) Natural causes and effects have some regularity across space and time.
- (P3) They can be—at least in part—rationally understood.

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(P4) We cannot deduce from first principles nature's fundamental constituents and behaviors. We must augment logic and intuition with observations and experiments.

(P5) Studying nature is worthwhile.

These are metascientific beliefs. Atheistic or agnostic scientists have their own particular reasons for believing those statements. Why might a Christian believe P1–P5 to be true? Consider the following theological beliefs:

(T1) Creation is not pantheistic.

(T2) God is consistent, not capricious, in his governance of nature.

(T3) We are made in God's image and given abilities suitable for this world.

(T4) God was free to create as he wished. We are limited and fallen. Our preconceptions about how the world should work may not be the same as God's.

(T5) Nature is God's creation, so it has value.

A biblical view of God and nature can support P1–P5. Sound theology can motivate a Christian to look for naturalistic patterns of cause and effect in creation. A Christian scientist who looks for these naturalistic patterns is not acting "as if God doesn't exist." He or she really is acting like there is a God—not a capricious God, but the God of the Bible who made an orderly world and governs it in an orderly fashion.²

Scope of Naturalism

Thorson writes that divine agency is fundamentally inscrutable and, therefore, divine agency necessarily is outside of science's (limited) scope to detect. This seems to imply that a Christian should always seek (and hope to find) naturalistic explanations

every time he or she investigates the properties, behavior and formational history of the universe.³ Here I part company with Thorson's article.⁴

Science cannot prove that a miracle happened. Science cannot prove that miracles never happen. The relationship is more nuanced. Suppose God caused an event or series of events which scientists could empirically demonstrate to be highly improbable under *any* model employing only known natural laws. This would not prove that a supernatural event occurred. Other possibilities exist (e.g., unknown natural laws, super-human agency, many universes). So although supernatural agency cannot be proved through science, science can detect improbable events.

I believe there are good scientific and theological reasons for expecting that God probably did not act miraculously (at least not detectably) in biological history.

This does not mean that Christians ought to search for "improbable events," but neither should they be barred from searching. When sufficient scientific and theological reasons exist, Christians need not limit themselves to naturalistic explanations for events in the natural world.⁵ On this philosophical point, I agree with advocates of the "Intelligent Design" movement; however, I disagree with them regarding whether biological history is a good place to expect to find events which defy naturalistic explanations. I believe there are good scientific and theological reasons for expecting that God probably did not act miraculously (at least not detectably) in biological history.⁶ The discussion remains open. When conducted in the proper spirit, such discussions can be useful for understanding the legitimacy and scope of naturalism in science.

Non-reductionistic Naturalism

In Part II, Thorson argues that biological systems obey rules which are logical, coherent, and not reducible to physical laws. While reading this part, I sometimes worried that Thorson was going to propose the existence of new, quasi-vitalistic laws of nature. He does not. Thorson does give an eloquent argument for the usefulness of concepts such as *information*, *function* and *purpose* in biology.

I have two minor quibbles with Part II. First, it seems to uncritically accept Michael Behe's proposal that biochemical systems which display interlocking complexity could not evolve naturalistically. I believe the scientific evidence is going against Behe's hypothesis. Second, while

Thorson's article urges biologists to think in terms of *function* and *purpose*, it does not explicitly urge biologists simultaneously to seek the connections between this higher level of analysis and the lower level of physics and chemistry—to learn how these "bio-logical rules" are embodied in particular physical/chemical systems in particular organisms.

Thorson's article argues against extreme materialistic reductionism, reductionism which is not infrequently encountered in biology. He urges biologists to do more of what they are already doing—think in terms of information, function, and purpose—and to do such thinking openly, systematically, and unapologetically. While we must admit that the science of biology has advanced over the last few centuries in no small part because it rejected the flawed teleological arguments of the past, I believe that Thorson's article gets teleological thinking back into biology in the right way.

In summary, Christians and non-Christians may disagree about the ultimate purpose of living organisms; however, they *can* agree on the useful insights gained by studying living systems in non-reductionistic ways. Christians and non-Christians may disagree on the proper scope of naturalism in science; however, they *can* agree on whether a particular naturalistic model is successful or unsuccessful. Christians and non-Christians may disagree about why naturalism is legitimate in science; however, they *can* agree on a limited subset of relevant philosophical beliefs which allow them to work side-by-side and reach consensus on scientific results. Christians with a sound theological understanding of the legitimacy and scope of naturalism in science can fully participate in the scientific community in ways which glorify God. ◇

Notes

- ¹ For example, Nancey Murphy, "Phillip Johnson on Trial," *Perspectives on Science and Christian Faith* 45, no. 1 (March 1993): 33–4; and Richard E. Dickerson, "The Game of Science," *Perspectives on Science and Christian Faith* 44, no. 2 (June 1992): 137.
- ² For more details on this line of reasoning: <http://www.calvin.edu/~lhaarsma/MethNatHumanBehave.html>
- ³ The domain of science described as "the properties, behavior and formational history of the universe" comes from Howard VanTill, Davis Young, and Clarence Menninga, *Science Held Hostage* (Downers Grove, IL: InterVarsity Press, 1988), 17.
- ⁴ I am here critiquing my understanding of Thorson's article—an understanding which might or might not be an accurate reflection of Thorson's actual views.
- ⁵ For more details on this line of reasoning: <http://www.calvin.edu/~lhaarsma/MethNatHumanBehave.html> For some good philosophy of science on this topic, I recommend Del Ratzsch, *Nature, Design, and Science* (Albany, NY: State University of New York Press, 2001).
- ⁶ See, for example, Howard VanTill's writings on the concept of creation's *functional integrity*. Some of my own thoughts on the topic can be found at: <http://asa.calvin.edu/archive/evolution/199505-10/1371.html>