

Does the Success of Science by Itself Provide Strong Support of Naturalism?

ASA National Meeting —2011

Peter E. Payne

Naturalism, the view that the physical world is all that exists, is the dominant worldview within both the sciences and in philosophy. Many consider it the worldview of science and are convinced that the success of science itself provides strong support for naturalism. But does it?

To address the question and get beyond merely subjective judgments requires some clarity on terminology and issues involved.

"Strong Support"

First, what constitutes "strong support." What follows will build on the following contention:

Evidence provides strong support of a given thesis if:

1. The evidence supports the thesis (The thesis accounts well for—accords well with—the evidence.)
2. The thesis has some prior plausibility
3. There is no other thesis that:
 - (a) is also supported by the evidence
 - (b) is incompatible with the original thesis
 - (c) has some prior plausibility

In short, the claim to *strong* support requires an absence of serious alternatives.

Note: A serious alternative need not be one that is thought to be particularly likely, but one which has enough going for it that it shouldn't simply be dismissed.

Note: It is possible to challenge naturalism itself on either points #1 or #2 above, but for what follows, I will assume that naturalism does meet those conditions.

Note: One could argue that deism is an alternative to naturalism and that it meets the conditions above. However, deism will not be the focus here.

The question is, "Is theism (Judeo-Christian theism) such an alternative?" Does it meet the above conditions for being a serious alternative to naturalism?

"By itself"

The "by itself" in the initial question is significant because there are a variety of challenges to Judeo-Christian theism that do not arise out of science itself. These are relevant to question of the prior plausibility of theism (here short for Judeo-Christian theism), but the question here is, Does the success of science (including its) *by itself* provide strong support for naturalism?

The Success of Science and Theism: Four Issues

Since, by definition, theism and naturalism are incompatible and since the question of the prior plausibility of theism is a broader topic than can be adequately addressed here, that leaves the question as to whether theism accounts for, or accords well with, the success of science.

What then are the relevant issues concerning this question?

There are positive considerations that could be raised here—such as those aspects of the Judeo-Christian worldview that helped give rise to science and such things as the intelligibility of the natural world, the existence of minds, and the apparent fine-tuning of the basic physical constants—but for time sake I will focus on four issues that may be thought to weigh against the claim that theism accords well with the success of science:

1. The success of science in its scope
2. "Specific-point" miracles
3. Ongoing divine interaction with humans and the world
4. Specific issues of Christian or Jewish teaching or doctrine

Not much will be said here about the fourth point, but to the extent that a particular doctrine or biblical teaching is an essential part of Judeo-Christian theism, apparent conflict between it and the deliverances of science needs to be addressed.

The matter of "specific-point" miracles (to be explained) and that of ongoing divine interaction with the world are issues which, I would argue, are essential aspects of Judeo-Christian theism. And therefore if science gives strong reason to believe that miracles (exceptions to the laws of physics) have never occurred, and/or if it gives strong reason to believe that God does not interact with the minds of humans nor have an influence on events in the world, then theism does not accord well with science.

1. The Scope of the Success of Science

In nearly all aspects of the physical world science has been quite successful in providing explanations as to why things are as they are or happen as they do.

Although there are some significant questions that remain, e.g. with respect to issues of consciousness and mind, I would suggest that a decent inductive case can be made for supposing that within the regular function of the natural world there are no "gaps." I.e. there are no points where science cannot, and never will, be able to provide an account.

Does this accord well with theism?

Consider the following example.

Isaac Newton believed that God occasionally needs to adjust the orbits of the planets in order to keep them stable. (He thought this was needed to counter the gravitational effects planets have on each other.) A century later Pierre LaPlace showed that Newton was mistaken. (The gravitation effects of the planets over time cancel each other out.)

Now, the question: Should Christians have taken LaPlace's accomplishment as a threat to their faith?

Answer: no.

The reason: God is omnipotent and hence can create any possible world, and, being omniscient, he knows all the possibilities. Why should it be surprising then that God would choose to create a world in which physics dictates the stability of the planetary orbits rather than a world in which he needs to make periodic adjustments? We are not God, and asking what God would prefer can be rather problematic, but the point here is that from a human perspective, creating something, say, a machine, that is self-adjusting is—cost considerations aside—preferable to creating something that needs periodic adjustments. Hence, what LaPlace demonstrated accords well with the Judeo-Christian concept of God.

Now, extend this argument to all aspects of the natural world: plate tectonics, cellular division, whatever. Should it be surprising that God would create a gapless order of nature, a world which in its regular functioning has no need for periodic miracles to be sustained? Again, given the biblical concept of God, it seems the answer should be, no. Hence, not only is theism compatible with a gapless order of nature; it accords well with it. Indeed, for many, if not most, Christians engaged in the sciences, the success of science bears witness to the great wisdom and power of God.

Thesis A: Given the nature of God (as described in the Bible) it is not surprising that God does not need to do regular miracles to sustain the regular functioning of the natural world.

2. "Specific-Point" Miracles

Jews and Christians have believed in miracles, and still do—if they are at all orthodox. And some of these miracles are seem essential to the Judeo-Christian worldview. For Christians, the miracles of the incarnation and resurrection are cases in point.

Here a couple of distinctions are important:

- (1) the order of nature / specific events
E.g. the process human birth / a specific human case
- (2) order-of-nature miracles / specific-point miracles
E.g. (hypothetical) cellular differentiation / the virgin birth of Jesus

(I suggest that no miracles are needed in ordinary human birth, but a hypothetical example might be God needing miraculously to make cells differentiate in just the right way at the right time. That would be an order-of-nature miracle.)

An absence of "gaps" in a scientific understanding of the process leading from conception to birth does not tell us whether God could, or would, ever make an exception to this process. One might say that given our understanding of the human birthing process, the virgin birth would take a miracle, but that is just the question. In other words, an absence of order-of-nature miracles does not imply an absence of specific-point miracles.

Thesis B: *There is no strong inference from an absence of order-of-nature to an absence of specific-point miracles.*

Again, "strong" here will imply a lack of serious alternatives, but note that even apart from Judeo-Christian theism, the jump from a gapless order of nature to a gapless history is a significant step. I think that were there an absence of clear alternatives to naturalism the step would be warranted, but it is still not a small step.

There are several objections that the naturalist may raise with respect to Thesis B.

Objection #1: Science is concerned not merely with establishing laws describing the regular functioning of the order of nature. It is also concerned with accounting for what actually has happened and enabling inferences about what will happen. Indeed, it is concerned with enabling judgments about what can happen.

Objection #2: There is track record of science debunking miracle claims, and, in the absence of any clear confirmation of miracle claims, this provides strong reason for thinking that specific-point miracles never happen.

Objection #3: If specific-point miracles occur at all, it seems likely that they would occur often enough for clear confirmation of some of them.

[Note: Confirmation here would be that the event in question actually happened. That it be a miracle would be another step, but the idea is that surely some such events would seem so clearly to violate known physical laws that even most skeptics would acknowledge that miracles might occur.]

Response to Objection #1: It is quite right to note that laws of physics are not just statistical generalizations (or claims that some pattern has always been observed). They do have a *nomological* status. I.e. they are rules, "If A then B," and, as such, they permit inferences about specific events. Further their strength as rules is not simply based on an absence of exceptions to date. They are called "laws of nature" because it is believed that genuine laws of nature reflect an intrinsic order within nature. And by virtue of this intrinsic order, nature, left to itself, will always manifest the pattern in question. Put another way, genuine laws of nature delimit the range of the physically possible.

The crucial qualifier is that science itself cannot tell us whether the natural world is all that exists. Further, if there is more to reality than the natural world, science cannot tell us whether that reality is able to have effects upon or within the natural world. Given this, there needs to be the tacit acknowledgment that science itself cannot preclude the possibility of specific-point miracles. Even to entertain the possibility of the supernatural and to entertain the possibility of its having effects upon/within the natural world is to entertain the possibility that laws of nature are laws of *nature*, not absolute laws. And physical impossibility need not constitute absolute impossibility.

An aside: There is good reason to insist that miracle claims need to pass a higher bar of evidence than for claims about ordinary events, but to insist that the evidential bar be set higher than for any natural explanation, no matter how far fetched, surely reflects a prior dismissal of the possibility of the supernatural, treating it as having no plausibility at all, something that science itself does not warrant.

Response to Objection #2: There are two difficulties with this objection:

First, it is not at all surprising that there are miracle reports that are erroneous. There are people who fabricate such stories to gain personal attention; there are those who are so predisposed to believe in the miraculous that they interpret things as miracles when in fact they are not; there are those who over time embellish memories beyond what was originally experienced. What is important to note about this is that given such human tendencies, one can expect that there will be many reports of the seemingly miraculous whether or not genuine miracles ever take place. The implication of this is that being able to provide scientific debunkings of many of these reports, is irrelevant to the theoretical question as to whether genuine miracles could ever take place. And it also does not provide good grounds for concluding that no miracles have ever taken place.

To see this consider the question of whether extra-terrestrial intelligent life exists and whether any such being could or has visited the earth. The scientific debunking of many reports of sightings or encounters has no relevance to the theoretical possibility of an actual ET encounter and does not constitute strong evidence that an actual ET encounter has never occurred.

Of course, in both the ET case and in the case of miracles, if actual encounters/occurrences were common, then an absence of clear compelling cases would be a surprise. But if they are rare, then an absence of compelling cases is not surprising.

However, a second problem for Objection #2, is that claiming an absence of any clear confirmation of miracles isn't worth much if the height at which the evidential bar is set is driven by a prior conviction that the existent any supernatural agent is extremely implausible. Again, how high the bar ought to be set is a debatable issue, but there have been miracle reports which are not so easily dismissed. Hence there is the danger of reading the historical record in a way that simply presupposes the conclusion one is inclined from the start to accept.

It is worth adding at this point that some will claim that there is no natural way of being able to determine that a supposed miracle actually was a miracle. I can come back to that in the Q&A if so desired.

Response to Objection #3: For naturally occurring events, even if they are rare, their detection is usually something that is possible. But with regard to specific-point miracles there is a two-fold problem. One is that, since specific-point miracles are brought about by the will of an agent, and since in general there is no *a priori* way of knowing how often, if at all, an agent will do something of which it is capable, objection #3 is fairly weak. The second problem is that whereas natural events don't aim at hiding the fact of their occurring, it is quite possible for an agent to choose to act in less than obvious ways. These considerations do not remove all the force of Objection #3, but they do reduce it.

To this the naturalist can rightly object that Judeo-Christian theism is not a blank slate with regard to the character of God. The claims are made that God desires for people to know that he exists, that he cares about human welfare, and that he desires to restore their relationship with himself. Hence, whereas an absence of obvious miracles may not carry a lot of weight for theism very broadly construed, it can be taken as a serious problem for Judeo-Christian theism.

Response: Here we finally come to a serious objection, but three notes.

(a) The objection is basically that raised by the problem of evil and suffering and by the problem of divine hiddenness. But, again, although they are relevant to the prior plausibility of theism, these are not issues that arise out of science itself. They are issues that long preceded the rise of science.

[Note: There is not always a clear boundary here. One who looks closely at nature will note animal behaviors that can raise questions about the goodness of the natural world. For Darwin one was the wasp that lays its eggs in the paralyzed caterpillar. Science, one can argue, presents us with an amoral world. However, as with other facets of the problem of evil, the moral objection does not arise out of science alone.]

(b) Christian theologians and philosophers address this question. Whether the responses are satisfactory is a matter that cannot be addressed here.

(c) According to the biblical record obvious specific-point miracles are not common. They tend to concentrate around particular times and/or particular people with long periods with no record of obvious miracles. It appears, then, from the biblical record, that God chooses to do obvious miracles only rarely. (Some Christians would say that this is due simply to a lack of faith on the part of believers, but even examples of faith healing typically are not obvious cases of exceptions to natural law.)

3. Ongoing Divine Interaction with Humans and the World

Judeo-Christian theism not only affirms that God has at times in the past done obvious miracles; it also claims that God on an ongoing basis interacts with humans and has an influence in the natural world. However, if there are no gaps in the regular functioning of the order of nature, and if obvious miracles are rare, doesn't this run contrary to the belief in God's ongoing interaction with the world, namely with the belief that God is able to influence thoughts, answer prayers, act providentially, etc.?

My response has two parts. The first is to note that God can act in the world in several ways beyond simply setting up laws of physics as he chooses. He can:

- (a) Perform obvious miracles (on a scale easily observed)
- (b) Perform micro-miracles (on a scale not easily observed)
- (c) Act within quantum indeterminacy

In short, in addition to obvious miracles [option (a)] God can act in much more subtle ways.

To this, the naturalist will likely respond by saying that this sounds like intellectual cheating. It is retreating to a position that cannot be falsified and appears simply to be a way of refusing to acknowledge that there is no evidence of God acting in the world.

This brings me to the second part of my response. To suggest that God works in ways below the level of human detection is only intellectual cheating if in fact there is no good evidence that God does continue to interact with the world. If, however, there is good reason to believe that in various situations God has acted (cases with much stronger evidential value than those cases that can easily be chalked up to coincidence) ... if there are such cases, then there is no intellectual cheating. When one knows, or has good reason to believe, that something has happened, then the person need not know in what way it took place; it is sufficient simply to know that it could take place. And just as science does not itself preclude miracles in general, it does not preclude micro-miracles or God acting within the quantum level.

Conclusion

*The success of science by itself does not provide strong support for naturalism
if*

there are no irresolvable conflicts between science and Judeo-Christian doctrine or teaching where the doctrine/teaching is essential to Judeo-Christian theism.