

Whether ID is science isn't semantics

Judge John Jones gave two arguments for his conclusion that ID is not science. Both are unsound, says Alvin Plantinga

By Alvin Plantinga
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Judge John Jones' 139-page opinion in *Kitzmiller et al. v. Dover Area School District* raises questions that go far beyond the legalities of this specific case. I won't offer an opinion on whether the judge's decision is correct — although apparently he's never met an objection to intelligent design he doesn't like and some of his "findings" seem vastly more sweeping than is appropriate.

First, a general question: What sorts of issues can a judge decide just by fiat?

Jones rules, among other things, that:

- ID is just warmed-over creation science
- ID tries to change the very definition of science
- The scientific community has refuted the criticisms of evolution brought by the IDers
- ID involves a kind of dualism and that this dualism is doomed.

But how can one hope to settle these matters just by a judicial declaration?

Consider, for example, the claim that ID is just creation science in drag, as it were. That ruling is relevant in that previous court decisions have gone against creation science. But the kind of creation science those decisions had gone against is characterized by the claim that the world is a mere 6,000 to 100,000 years old, rather than the currently favored age of 4 billion or so years old.

Second, those creationists reject evolution in favor of the idea that the major kinds of plants and animals were created in pretty much their present form. ID, as such, doesn't involve either of these two things.

What it does involve, as you might guess, is that many biological phenomena are intelligently designed — indicated by their “specifiable complexity” or “irreducible complexity” — and that one can come to see this by virtue of scientific investigation.

Indeed, Michael Behe, a paradigmatic IDer and the star witness for the defense, has repeatedly said that he accepts evolution. What he and his colleagues reject is not evolution as such. What they reject is unguided evolution. They reject the idea that life in all its various forms has come to be by way of the mechanisms favored by contemporary evolutionary theory — unguided, unorchestrated and undirected by God or any other intelligent being.

Anyway, isn't this question — whether ID is just rewarmed creation science — a question for philosophical or logical analysis? Can one settle a question of that sort by a judicial ruling? Isn't that like legislating that the value of pi is 1/3 rather than that inconvenient and hard to remember 3.14?

And consider that presumably the judge means the scientific community has successfully refuted the criticism of unguided evolution brought by the IDers. Otherwise, what he says wouldn't be relevant. But again, is that the sort of thing a judge can legislate? A judge can declare until he's blue in the face that an objection has been successfully refuted. Couldn't it still be perfectly cogent? But this is not the place for that interesting question. Instead, let's examine the judge's reasoning in support of his decision. Here is part of his ruling:

After a searching review of the record and applicable case law, we find that while ID arguments may be true, a proposition on which the court takes no position, ID is not science. We find that ID fails on three different levels, any one of which is sufficient to preclude a determination that ID is science. They are: (1) ID violates the centuries-old ground rules of science by invoking and permitting supernatural causation; (2) the argument of irreducible complexity, central to ID, employs the same flawed and illogical contrived dualism that doomed creation science in the 1980's; and (3) ID's negative attacks on evolution have been refuted by the scientific community (p. 64).

The judge gives at least two arguments for his conclusion that ID is not science. Both are unsound.

First, he said that ID is not science by virtue of its “invoking and permitting supernatural causation.” Second, and connected with the first, he said that ID isn't science because the claims IDers make are not

testable — that is verifiable or falsifiable. The connection between the two is the assertion, on the part of the judge and many others, that propositions about supernatural beings — that life has been designed by a supernatural being — are not verifiable or falsifiable.

Let's take a look at this claim. Of course it has proven monumentally difficult to give a decent definition or analysis of verification or falsification. Here the harrowing vicissitudes of attempts in the 50s and 60s to give a precise statement of the verifiability criterion are instructive. But taking these notions in a rough-and-ready way we can easily see that propositions about supernatural beings not being verifiable or falsifiable isn't true at all.

For example, the statement "God has designed 800-pound rabbits that live in Cleveland" is clearly testable, clearly falsifiable and indeed clearly false. Testability can't be taken as a criterion for distinguishing scientific from nonscientific statements. That is because in the typical case individual statements are not verifiable or falsifiable.

As another example, the statement "There is at least one electron" is surely scientific, but it isn't by itself verifiable or falsifiable. What is verifiable or falsifiable are whole theories involving electrons. These theories make verifiable or falsifiable predictions, but the sole statement "There is at least one electron" does not. In the same way, whole theories involving intelligent designers also make verifiable or falsifiable predictions, even if the bare statement that life has been intelligently designed does not.

Therefore, this reason for excluding the supernatural from science is clearly a mistake. But, there is the judge's claim that science excludes reference to the supernatural, independent of concerns about verifiability and falsifiability. Reference to the supernatural just can't be part of science. This idea is sometimes called "methodological naturalism." But what is the reason — if any — for accepting methodological naturalism? Apparently, the judge thinks it is just a matter of definition — of the word "science," presumably. Here the judge is not alone. Michael Ruse, a philosopher of biology, said in his book *Darwinism Defended*:

The Creationists believe that the world started miraculously. But miracles lie outside of science, which by definition deals only with the natural, the repeatable, that which is governed by law.

Do Ruse and the judge really mean to suggest that the dispute can be settled just by looking up the term

“science” in the dictionary? If so, they should think again. Dictionaries do not propose definitions of “science” that imply methodological naturalism. Therefore, it looks as if Jones and those whose advice he followed are advancing their own definition of “science.” But how can that be of any use in an argument or controversy of this sort?

Suppose I claim all Democrats belong in jail. One might ask: Could I advance the discussion by just defining the word “Democrat” to mean “convicted felon”? If you defined “Republican” to mean “unmitigated scoundrel,” should Republicans everywhere hang their heads in shame?

So this definition of “science” the judge appeals to is incorrect as a matter of fact because that is not how the word is ordinarily used. But even if the word “science” were ordinarily used in such a way that its definition included methodological naturalism, that still wouldn’t come close to settling the issue.

The question is whether ID is science. That is not a merely verbal question about how a certain word is ordinarily used. It is, instead, a factual question about a multifarious and many-sided human activity — is the very nature of that activity such as to exclude ID?

Does this important and multifarious human activity by its very nature preclude references to the supernatural? How would anyone argue a thing like that?

Newton was perhaps the greatest of the founders of modern science. His theory of planetary motion is thought to be an early paradigm example of modern science. Yet, according to Newton’s own understanding of his theory, the planetary motions had instabilities that God periodically corrected. Shall we say that Newton wasn’t doing science when he advanced that theory or that the theory really isn’t a scientific theory at all?

That seems a bit narrow.

Many other constraints on science have been proposed. Jacques Monod, the author of *Chance and Necessity*, says that science precludes any form of teleology. Other proposed constraints are that science can’t involve moral judgments — or value judgments, more generally — and that the aim of science is explanation, whether or not this is in the service of truth.

Additional constraints that have been proposed in various contexts include: Scientific theories must in some sense be empirically verifiable and/or falsifiable; scientific experiments must be replicable; science can study only repeatable events; and science can't deal with the subjective but only with what is public and sharable.

Some say the aim of science is to discover and state natural laws. Others, equally enthusiastic about science, think there aren't any natural laws to discover. According to Richard Otte and John Mackie, the aim of science is to propose accounts of how the world goes for the most part, apart from miracles. Others reject the "for the most part" disclaimer. How does one tell which, if any, of these proposed constraints actually do hold for science? And why should we think that methodological naturalism really does constrain science? And what does "science" really mean?

I don't have the space to give a complete answer — as one says when he doesn't know a complete answer — but the following seems sensible: The usual dictionary definitions suffice to give us the meaning of the term "science." They suggest that this term denotes any activity that is:

- (a) a systematic and disciplined enterprise aimed at finding out truth about our world, and
- (b) has significant empirical involvement. Any activity that meets these vague conditions counts as science.

But what about methodological naturalism and all the rest of those proposed constraints? Perhaps the following is the best way to think about the matter: There are many related enterprises, all scientific in that they satisfy (a) and (b). For each of those proposed constraints, there is an activity falling under (a) and (b), the aim of which is in fact characterized by that constraint. For each or at any rate many of the proposed constraints there is another activity falling under (a) and (b), the aim of which does not fall under that constraint. Further, when people propose that a given constraint pertains to science just as such, to all of science, so to speak, they are ordinarily really endorsing or recommending one or more of the activities the aim of which is characterized by that constraint.

Now how does this work out with methodological naturalism? Well, there are some scientific activities that are indeed constrained by methodological naturalism. The partisans of methodological naturalism are endorsing or promoting those scientific activities and recommending them as superior to scientific activities not so constrained. But of course there are other scientific activities — Newton's, for example

— that are not so constrained.

What are the advantages and disadvantages of doing science in accord with methodological naturalism? There is a good deal to be said on both sides here. For example, if you exclude the supernatural from science, then if the world or some phenomena within it are supernaturally caused — as most of the world's people believe — you won't be able to reach that truth scientifically.

Observing methodological naturalism thus hamstring science by precluding science from reaching what would be an enormously important truth about the world. It might be that, just as a result of this constraint, even the best science in the long run will wind up with false conclusions.

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