Review of: "In the doing of science, what is the place for naturalistic philosophy? Implications for the teaching of science"

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Given the widely acknowledged failure of the demarcation problem, the authors cannot be faulted for claiming that the boundary between science and philosophy is, in their words, "fuzzy." (7). As Larry Laudan notes in his famous article, "The Demise of the Demarcation Problem,"

we have managed to conflate two quite distinct questions: What makes a belief well founded (or heuristically fertile)? And what makes a belief scientific? The first set of questions is philosophically interesting and possibly even tractable; the second question is both uninteresting and, judging by its checkered past intractable. If we would stand up and be counted on the side of reason, we ought to drop terms like 'pseudo-science' and 'unscientific' from our vocabulary; they are just hollow phrases which do only emotive work for us. … Insofar as our concern is to protect ourselves and our fellows from the cardinal sin of believing what we wish were so rather than what there is substantial evidence for … then our focus should be squarely on the empirical and conceptual credentials for claims about the world. The 'scientific' status of those claims is altogether irrelevant.

The authors raise, therefore, an important issue, namely how the findings of science are to be related to wider questions in philosophy. I caution them, however, about too easily asserting that "there is a natural affinity between naturalistic philosophy and the doing of science." (2) Historically, science developed in the context not of naturalism, but of theism. The doing and teaching of science is entirely possible without committing to naturalism.

Indeed, it can be argued that theism provides a firmer conceptual foundation than does naturalism for presuppositions necessary to the doing of science. For example, the authors note that science must presuppose a continuous person, that "being the same person is the only guarantee that what a person initiates doing, and what he/she finishes doing, is the same activity continuous over time" (4). It is far from clear, however, as the writings of naturalists such as Daniel Dennet and Paul and Patricia Churchland illustrate, that a thoroughgoing naturalism can accommodate this concept. Neither is it clear that naturalism can account for the existence of consciousness, much less allow that the qualia of consciousness have causal power.

Further, we are at a time in history where the findings of science may plausibly be argued to support theism rather than naturalism. Our best science points to the universe not only having had an absolute beginning, but also evidencing an extraordinary degree of fine tuning. Similarly, our increasing scientific knowledge reveals a staggering irreducible complexity of interlocked systems of sophisticated molecular machines, hitherto unthought of in living things. It is not at all clear that such complexity is best understood and explained in the context of metaphysical naturalism.

It is important, therefore, that naturalism not simply be presupposed as the world-picture (5) in which the scientific enterprise finds its most accommodating home. I agree with the authors in their advocacy of a teaching environment "where new questions can be posed, hypotheses proposed, and the results interpreted and debated in a multipartite dialogue" (11). Such dialogue, however, should be free to go wherever the evidence leads and not be shoehorned into a naturalistic metaphysic. Neither students nor teachers should be required to view science as requiring a prior commitment to naturalism.