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DISCUSSION

Response to Churchland

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Abstract: Paul Churchland argues that Plantinga's evolutionary argument against naturalism is unsuccessful and so we need not accept its conclusion. In this paper, we respond to Churchland's argument. After we briefly recapitulate Plantinga's argument and state Churchland's argument, we offer three objections to Churchland's argument: (1) its first premise has little to recommend it, (2) its second premise is false, and (3) its conclusion is consistent with, and indeed entails, the conclusion of Plantinga's argument.

In his recent reply to Plantinga's evolutionary argument against naturalism (henceforth "EAAN"), Paul Churchland charges Plantinga with committing a "glaring fallacy." He says that EAAN "innocently assumes that the (problematic) 'truth tracking character' of our *native* cognitive mechanisms is the only possible or available source of rational warrant or justification for evolutionary theory." What Plantinga has forgotten, Churchland claims, are "the artificial mechanisms for theory-creation and theory-evaluation embodied in the complex institutions and procedures of modern science." These artificial mechanisms include such modern marvels as microscopes, telescopes, microelectrodes, voltmeters, ammeters, and spectrometers, and such techniques as controlled experiments and double-blind studies. Now, we have difficulty seeing where Plantinga (or EAAN) assumes what he has been charged with assuming, particularly since EAAN doesn't refer to sources of warrant. We will briefly recapitulate EAAN, and then try to see where exactly Churchland thinks the argument goes wrong.

The argument, in highly abridged form, is as follows: according to contemporary evolutionary theory, we human beings have developed through

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such mechanisms as natural selection and genetic drift working on sources of genetic variation, the most popular being random genetic mutation. Natural selection discards most of these mutations, but others turn out to have adaptive value and enhance fitness; they spread throughout the population and thus persist. Now, if *naturalism*—the view that there is no such person as God or anything like God—is true, then there is no God, and thus no God to oversee this evolutionary process. But then we must ask the following question: is it at all likely that our cognitive faculties, given naturalism and their evolutionary origin, would have developed in such a way as to be *reliable*, that is, to furnish us with mostly true beliefs? Plantinga argues that it is not. That is, P (R / N & E) is low or inscrutable.[1] Hence, he argued, a reflective naturalist—one who sees that P (R / N & E) is low or inscrutable and believes N & E—has a defeater for R. Moreover she has an *undefeated* defeater for R, because anything that could defeat the defeater will involve some belief or other, and will thus be subject to the very same defeater as R is. And if she has an undefeated defeater for R, then she has an undefeated defeater for any belief that her cognitive faculties produce. If so, then she has an undefeated defeater for *any* belief she holds, including N & E itself. So belief in N & E is self-defeating; and since evolutionary theory is the only game in town for the naturalist, naturalism *simpliciter* is self-defeating.

So the question is: exactly where does Churchland think this argument has gone wrong? We aren't quite sure, but we think the following is at least close: Although the reflective naturalist has an undefeated defeater for R, she does not have a defeater for all the rest of her beliefs. That is because 'R' is the proposition that our cognitive faculties—faculties such as sense perception, memory, introspection, and reason—are reliable; but we can consider the operation of our cognitive faculties in certain limited circumstances, and we can ask if they are reliable when operating in *just those* circumstances. So let 'R+' be the proposition that when our cognitive faculties are operating in special circumstances that include the use of "artificial mechanisms for theory-creation and theory-evaluation embodied in the complex institutions and procedures of modern science," ("laboratory circumstances" for short), we form mostly true beliefs.[2] Then the claim is that although P (R / N & E) is low or inscrutable, and a reflective naturalist who believes this has an undefeated defeater for R, still, P (R+ / N & E) is not low or inscrutable; if that's so, says Churchland, then even a reflective naturalist, who has an undefeated defeater for R and hence for her beliefs that are products of her cognitive faculties *not* operating in laboratory circumstances, can go on rationally believing R+. Conclusion: although a reflective naturalist has an undefeated defeater for her beliefs that are products of her cognitive faculties *not* operating in laboratory circumstances, she doesn't get a defeater for the beliefs that *are* products of her cognitive faculties operating in laboratory circumstances, including her belief *that evolutionary theory is true*. The upshot then is that EAAN is unsuccessful and we need not accept its conclusion.

This reply suffers from three critical problems: (1) its first premise has

little to recommend it; (2) its second premise is false; and (3) even if everything in the reply were right, its conclusion is entirely consistent with, and indeed entails, the conclusion of EAAN. Let us start with the first problem. Why think that P (R+ / N & E) is both scrutable and high? Better yet, why think it's both scrutable and high if one thinks that P (R / N & E) is either inscrutable or low? It seems the thought is that while our cognitive faculties might very well be unreliable, in all likelihood the errors they lead to will be corrected for, or won't arise, when we are practicing science. But why think *that*? Consider the following examples:

> Chelm Institute of Technology: We observe a certain nonhuman population, and notice that their cognitive faculties are downright unreliable – their sense perception quite often leads them astray, their memorial beliefs are nearly all false, and they always reason from *p and if p then q* to ~*q*. Then we notice that they have developed all sorts of gizmos and gadgets that they believe will help them form true beliefs about the world around them; instruments that they believe will help them see things that are very small and very large, and even "hear" things that they can't normally hear! Of course, with all these instruments, they still have to look at an output dial and an image on a paper, but they're seeing further and deeper than they've ever seen before (or so they say). Moreover, they have developed what appear to be peer-reviewed journals, and they use methods of inquiry which, after years of thinking about the matter very hard, they have come to believe are quite good. They call the beliefs they form in such sophisticated settings their "schmientific beliefs."

What shall we think about their schmientific beliefs?[3] What is the likelihood that a given schmientific belief is true? We think the answer is pretty clear. We should think that it is quite unlikely that it is true. Even supposing that the instruments they develop actually work, they will remain as benighted as they would without them! Just imagine: one schmientist looks at a paramecium under a microscope, and forms the belief *there's an image of a tiger on this lens*; he also believes (correctly!) that *if there's an image of a tiger on the lens of a microscope, then there is a very small tiger under the slide*, and so naturally he infers that *it is not the case that there is a very small tiger under the slide*. He then sits down to write an article to send to *Schmience*, a leading peer-reviewed journal, about this exciting new discovery (can you believe, NO very small tiger under the slide?), and what he remembers is that *Jupiter is about the size of his house* . . . there is no need to continue. And note that there really is no reason to suppose that their instruments actually work in the first place; after all, *they* designed them.

Or we can consider a more moderate example—that is, one involving a more moderate cognitive malfunction—an extension of one Plantinga has discussed before[4]:

> Thoroughly Theistic Scientists: Suppose naturalism is true, but that belief in God has its adaptive advantages (as several naturalists have argued). So say a tribe of otherwise gifted creatures believe that everything (except God) is created by God; they think everything (except God) is a *creature*. Suppose further that all their beliefs are properly expressed by sentences

> whose subjects are definite descriptions expressing properties that entail the property of creaturehood, such as "That monkey creature is very smart." And suppose that their definite descriptions work the way Bertrand Russell thought definite descriptions work, so that "The winner of the marathon is flat-footed" abbreviates "There is exactly one winner of the marathon and he is flat-footed." Suppose finally that *they* have developed all sorts of gizmos and gadgets that they believe will help them form true beliefs about the world around them; instruments that they believe will help them see things that are very small and very large, and even "hear" things that they can't normally hear! Moreover, they have developed what appear to be peer-reviewed journals, and they use methods of inquiry which, after years of thinking about the matter very hard, they have come to believe are quite good. They call the beliefs they form in such sophisticated settings their "schmientific beliefs."

What shall we think about *their* schmientific beliefs? What is the likelihood that a given schmientific belief is true? Well, zero. All of their beliefs will be false, since we have supposed naturalism is true, and each of their beliefs is true only if naturalism is false.

And we could go on (and on) with more examples. So why should we think these sorts of examples are the exception rather than the rule? Why should we think, that is, that while it is true that *our* cognitive faculties are unreliable, it is likely that the beliefs they produce in laboratory circumstances are mostly true? Maybe our instruments and methodologies don't help at all; maybe they make matters even worse! Of course it *could* make things better, and a naturalist might well *hope* that it does, but we don't see why we should think that it does. It seems that P (R+ / N & E) is at best inscrutable. But then Churchland's first premise, i.e., that although P (R / N & E) is low or inscrutable, P (R+ / N & E) is not, has little to recommend it.

That's the first problem with the reply. Now for the other two problems. Note that Churchland agrees that the reflective naturalist has an undefeated defeater for R, and that consequently, the reflective naturalist has an undefeated defeater for any belief that is the product of our cognitive faculties when they are *not* operating in laboratory circumstances. But here's a question: what sorts of beliefs have this property, that is, the property of being such that it is the product of our cognitive faculties when they are *not* operating in laboratory circumstances (call this "the Property")? It's hard to know since the predicate "is operating in circumstances that include the use of artificial mechanisms for theory-creation and theory-evaluation embodied in the complex institutions and procedures of modern science," is quite vague. But presumably the following are paradigm examples: Alice's belief *that Alice just stubbed her toe*, Bill's belief *that* $1 + 3 = 4$, Larry's belief *that for any two propositions P & Q, the objective probability of P on P & Q is equal to 1*, a theist's belief *that God exists*, and a naturalist's belief *that there is no such person as God or any person like God* all have the Property (even if one of these beliefs happens to be formed when the subject is in the laboratory); but Hannah's belief *that that's an amoeba under the microscope* does not, nor does her belief *that evolutionary theory is true*.

So, if we're right about these paradigm cases, it *seems* that some of the beliefs Churchland deploys in his reply have the Property; in particular, Churchland's belief *that P (R+ / N & E) is high* has the Property (even if Churchland comes to believe this when in a laboratory). His belief about the objective probability of one proposition on another—just like Larry's more general belief *that for any two propositions P and Q, the objective probability of P on P & Q is equal to 1*—seems to be the product of a straightforward use of rational intuition; it doesn't result from the use of any artificial mechanisms. And the same is true in general for a reflective naturalist. So a reflective naturalist who has an undefeated defeater for R thereby gets an undefeated defeater for her belief *that P (R+ / N & E) is high*, since that belief of hers has the Property. She can't rationally believe *that P (R+ / N & E) is high*. By the same token, she can't rationally believe that the probability is middle-range, or low for that matter (if she did so, it would be the product of her ordinary cognitive faculties not operating in laboratory circumstances . . .). The only rational thing for her to do is to *withhold* with regard to the value of the probability. But then it seems that she has a defeater for R+, for the very same reasons that Plantinga gives in the original argument for the claim that a reflective naturalist has a defeater for R. So, contrary to the reply's second premise, if a reflective naturalist has a defeater for R, then she can't go on rationally believing R+, *even if P (R+ / N & E) is in fact high*.

The third problem is related, and is perhaps the most serious; it arises because of a consistent and constant confusion in Churchland's paper. Churchland confuses evolutionary theory, with which we have no quarrel, with the conjunction of evolution and *naturalism*, the view that there is no such person as God or anything like God. Thus, even in the abstract: "Alvin Plantinga argues that our cognitive mechanisms have been selected for their ability to sustain reproductively successful behaviors, not for their ability to track truth. This aspect of our cognitive mechanisms is said to pose a problem for the biological theory of evolution by natural selection in the following way." But Plantinga doesn't think there is a problem here for "the biological theory of evolution by natural selection." What he argues is that there is a problem here for the conjunction of that theory with *naturalism*. Later, Churchland says "Evolutionary theory, according to Prof. Plantinga, is thus self-refuting." Again, not so. Evolutionary theory by itself is not self-refuting; it is only its conjunction with naturalism that suffers from this defect. Plantinga's real target is naturalism; evolutionary theory, i.e. the scientific theory of evolution apart from philosophical or theological glosses, is perfectly consistent with theism and is not in itself problematic. Still later: "What compels our attention is a glaring fallacy in Plantinga's second argument. In rejecting evolutionary theory's claim to warranted acceptance of any kind. . . ." Again, Plantinga does not reject "evolutionary theory's claim to warranted acceptance."

This confusion is far from innocuous. It leads to the following problem with Churchland's reply: the *conclusion* of Churchland's reply is that although a reflective naturalist has an undefeated defeater for her beliefs

that have the Property, she doesn't get a defeater for the beliefs that *lack* the Property, including her belief *that evolutionary theory is true*. OK. Suppose that's true. But now remember that Plantinga's conclusion is not that belief *that evolutionary theory is true* is self-defeating, rather it's that belief *that naturalism is true* is self-defeating. And while it might be the case that a naturalist's belief *that evolutionary theory is true* lacks the Property, a naturalist's belief *that there is no person such as God or any being like God* (that is, her belief *that naturalism is true*) is one of the paradigm cases of beliefs that *do* have the Property. So Churchland's reply concedes that a reflective naturalist has an undefeated defeater for her belief that naturalism is true, i.e. that naturalism *simpliciter* is self-defeating.[5] And that's just the conclusion of EAAN. So Churchland's conclusion is consistent with the conclusion of EAAN. Indeed, it entails it!

In response to the last two problems, it is possible that Churchland would say that one or other (or both) of a naturalist's beliefs *that P (R+ / N & E) is high* and *that naturalism is true* don't have the Property. That is, he might say that one or other (or both) of those beliefs is the product of a naturalist's cognitive faculties operating in special circumstances that include the use of artificial mechanisms for theory-creation and theory-evaluation embodied in the complex institutions and procedures of modern science. If he would, then it seems to us that either he would be saying something false, or that he would be using the predicate "is the product of a naturalist's cognitive faculties operating in special circumstances that include the use of artificial mechanisms for theory-creation and theory-evaluation embodied in the complex institutions and procedures of modern science" in such a way that we would have great difficulty discerning to which beliefs the predicate applies. But then we would have difficulty understanding what his reply *is*. And we suspect we wouldn't be alone. But let's say we can get around this; suppose Churchland just *stipulates* a meaning for the predicate such that, according to that meaning, it applies to the beliefs in question. OK. But then this only exacerbates the first problem. The first premise—that P (R / N & E) is low or inscrutable and yet P (R+ / N & E) is high—would not even be prima facie plausible. Why think that although the probability that one's reasoning, sense perception, memory, introspection, etc. are generally reliable (on N & E) is either low or inscrutable, there is a high probability (on N & E) that we will form true beliefs about the value of certain objective probabilities and/or about whether there is any such person as God? We can't think of a good reason.

Churchland concludes with what he says is a bit of lighthearted mischief: "if Mother Church can achieve such a lofty aim, at least for its more deserving persons, why shouldn't Mother Science achieve the much more modest aim of finding Rational Warrant at least for its more deserving theories?" But mother church has an extremely important Ally—an Ally who, according to naturalism, mother science lacks. Of course if theism is true, as we suppose it is, then mother science does indeed confer warrant, and is indeed a magnificent display of the image of God in us human beings.

NOTES

1. R' is the proposition that our cognitive faculties are reliable, 'N' the proposition that naturalism is true, and 'E' is the proposition that we have evolved according to the suggestions of contemporary evolutionary theory.

2. Or at least in most worlds in which we are operating in such circumstances. Note what R+ is *not* equivalent to: it is not equivalent to the claim that when our cognitive faculties are operating in circumstances that include the use of advanced instruments and the employment of the scientific method, then our cognitive faculties are reliable. That would require a disposition to produce mostly true beliefs in *similar* circumstances, circumstances that don't include the use of advanced scientific instruments and the employment of the scientific method. We suppose this would be so if whenever we used advanced scientific instruments, our native cognitive faculties improved (perhaps all the instruments emit some sort of particle that has this wonderful effect). But we don't think Churchland is claiming that's likely on N & E!

3. For convenience, we have co-opted their word 'schmientific' for use in our discourse.

4. Beilby, J., ed., *Naturalism Defeated?: Essays on Plantinga's Evolutionary Argument Against Naturalism* (Ithaca, NY: Cornell University Press, 2002), p. 260.

5. More precisely, his reply concedes that a reflective naturalist *who believes N & E* has an undefeated defeater for her belief *that naturalism is true*. But again, since evolutionary theory is the only game in town for the naturalist, this concession implies that naturalism *simpliciter* is self-defeating.