

## Conditional Probability and Defeat\*

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Here is an outline of Alvin Plantinga's "Evolutionary Argument Against Naturalism".<sup>1</sup> The probability of one's own cognitive faculties' being reliable (R specified to oneself<sup>2</sup>)—given both metaphysical naturalism (N) and evolution (E)—is low or inscrutable.<sup>3</sup> That  $P(\text{R specified to oneself}/\text{N\&E})$  is low or inscrutable gives the devotee of N&E a defeater for R specified to herself.<sup>4</sup> That defeater is undefeated. And that implies that the evolutionary naturalist has a defeater for all her other beliefs, including N.<sup>5</sup>

In this paper, I will focus on only one claim, a claim at the very heart of the Evolutionary Argument:

**The Crucial Claim** If  $P(\text{R specified to oneself}/\text{N\&E})$  is low or inscrutable, then one who believes N&E has a defeater for R specified to herself or himself.

If The Crucial Claim is not true, the Evolutionary Argument is unsound.

### I

One might think that The Crucial Claim is obviously and sort of trivially true. For one might mistakenly endorse:

**The Obviously False Claim**  $(p)(q)$  If  $P(p/q)$  is low or inscrutable, then one who believes  $q$  has a defeater for  $p$ .

The Obviously False Claim's virtue is that accepting it would allow us to conclude right away that The Crucial Claim is true. But its vice is its truth value. Consider:

$p$ =I was thinking about Plantinga's evolutionary argument yesterday afternoon

q=the sun is larger than the earth

I suppose  $P(p/q)$  is low. Or perhaps it is better to say it is inscrutable. Yet I am still warranted in believing that p. For there is no defeater for p anywhere in the neighborhood of q. Note that if q were a defeater for p, it would presumably be an undefeated defeater (and so p would be irrational for me, which it isn't). After all, I don't have any defeater for the claim that  $P(p/q)$  is low/inscrutable; nor do I have a defeater for the claim that q. I happily embrace both claims, and recognize that there is no need to defeat either in order to preserve the rationality of p. For they are irrelevant to the rationality of my believing that p.

The Obviously False Claim is not more or less on target, right in its general idea, only a little chisholming away from perfection, vulnerable only to cleverly contrived counterexamples. The Obviously False Claim is utterly misguided and confused. Note that my counterexample is not particularly clever. It involves no funny trick, no funny relation between purported defeatee and wannabe defeater that blocks the normally justified inference from conditional improbability or conditional inscrutability to defeat. Quite the contrary. Counterexamples of this sort can be manufactured at will.

Imagine I'm dealt the following poker hand: Seven of clubs, ace of hearts, six of diamonds, queen of spades, and six of spades. I see these cards in my hand; I'm warranted in believing I have been dealt exactly those five cards. Is this belief defeated because I also know that being dealt exactly that hand is wildly improbable on many other things—indeed on virtually every other thing—I know? Certainly not. Suppose again I am warranted in my memory that I once presented—with willful and shameless disregard for the word limit—a paper at the Central APA that was exactly 3,004 words long. Suppose someone tells me that the probability of my presenting a paper of exactly that length at the APA is low or inscrutable on the fact that I am under seven feet tall. Does my memory belief thereby have a defeater? Not even close.

I emphasize the falsity and complete confusion of The Obviously False Claim not as an

objection to Plantinga, for he explicitly rejects The Obviously False Claim (ND, 38-40). Rather, I emphasize it because I want us to see that, in general, inferences from low or inscrutable conditional improbability to defeat are unjustified. Once we see that, we should also see that anyone who endorses this sort of inference in a particular case owes us an explanation as to why, in that case, the inference is justified. At least, such an explanation is owed unless that case is one in which it is intuitively obvious that the inference is justified. But I do not think The Crucial Claim is intuitively obvious. So the burden of proof is on one who would endorse it.

## II

I think Plantinga would agree that he should not simply assume The Crucial Claim. And he does, in fact, argue for it. His argument involves analogies. He suggests cases where low or inscrutable conditional probability seems to lead to a defeater, and then suggests that the evolutionary naturalist's position is, regarding R specified to herself, relevantly analogous to those cases. Thus, he argues, those cases support The Crucial Claim.

Note that we won't get support for The Crucial Claim from just any case of a low or inscrutable  $P(p/q)$ 's implying that q is a defeater for p. For the mere fact—if it is a fact—that there are cases in which a low or inscrutable  $P(p/q)$  implies that q is a defeater for p shows only that some instances of The Obviously False Claim are true. But this alone no more supports The Crucial Claim than it does any and every other instance of The Obviously False Claim. That is, it does not support The Crucial Claim at all.

So if Plantinga is to muster support for The Crucial Claim by way of analogies, those analogies must involve more than the fact that the defeatee is improbable or inscrutable on something else one believes. The defeatee in the analogy must, in some further and deeper way, be relevantly epistemically analogous to the evolutionary naturalist's belief in R specified to herself. For this reason, I will focus my discussion on Plantinga's analogies that seem most likely to be of sufficient depth, those that involve an alleged case of R's being defeated.<sup>6</sup>

So—to consider one of the central analogies Plantinga invokes—suppose that all we

know about the members of a hypothetical population is that their cognitive faculties came about as a result of naturalistic evolution. Suppose also that we accept that the probability of those faculties' being reliable, given that they came about by purely naturalistic processes, is low or inscrutable. Plantinga then asks:

What would then be the appropriate attitude toward R (specified to that hypothetical population)? Someone who accepts N&E and also believes that the proper attitude toward  $P(R/[N\&E])^7$  is one of agnosticism clearly enough has good reason for being agnostic about R as well. She has no other source of information about R (for that population); but the source of information she does have gives her no reason to believe R and no reason to disbelieve it. The proposition in question is the sort for which one needs evidence if one is to believe it reasonably; since there is no evidence the reasonable course is to withhold belief. (1993, 229)

Plantinga thinks that we should be agnostic about R specified to the hypothetical population. But this is not because R, specified to that population, is defeated. Perhaps surprisingly, his discussion of the hypothetical population contains no mention of defeaters. Rather, Plantinga recommends agnosticism because, first, there is no evidence for R specified to that population; and, secondly, we could be reasonable in believing R for that population only if we did so on the basis of evidence.

And as Plantinga shifts from the hypothetical population to the question of whether the evolutionary naturalist is reasonable in believing R specified to herself, his focus is still lack of evidence, not defeaters:

But now suppose we again apply the same sort of reasoning to ourselves and our condition. Suppose we think N&E is true: we ourselves have evolved according to the mechanisms suggested by contemporary evolutionary theory, unguided and unorchestrated by God or anyone else. Suppose we think, furthermore, that there is no

way to determine  $P(R/[N\&E])$  (specified to us). What would be the right attitude to take to R? Well, if we have no further information, then wouldn't the right attitude here, just as with respect to that hypothetical population, be agnosticism, withholding belief? (1993, 229)

Let's grant Plantinga what seems correct. Evidence is required for us to be reasonable in believing R with respect to that hypothetical population, evidence that we lack. And so, lacking that evidence, we are unreasonable in believing R specified to that population. But this would imply that the evolutionary naturalist is likewise unreasonable in accepting R specified to ourselves—or, more to the point, that the evolutionary naturalist is likewise unreasonable in accepting R specified to herself—only if belief in R specified to oneself required evidence to be reasonable.<sup>8</sup> But, by Plantinga's own lights, belief in R specified to oneself does not require evidence to be reasonable, for it is properly basic (cf. (ND, 50-53) and (Plantinga, 1993, 233-234)). Thus, again by Plantinga's own lights, the case of the hypothetical population in no way impugns the evolutionary naturalist's belief in R specified to herself.

### III

There is another, more telling, objection to Plantinga's argument involving the case of the hypothetical population, an objection that does more than hoist Plantinga with his own petard. For even setting aside the claim that R specified to oneself is properly basic, we should still agree that, prior to believing N&E, one who is now a devotee of N&E was initially warranted in believing R specified to herself.<sup>9</sup> That is, we should all grant that she was warranted—either in a properly basic manner or in some other way—in believing R specified to herself before believing those things that, according to Plantinga, generate a defeater.<sup>10</sup>

As a result, if N&E imply a defeater, N&E must dislodge the evolutionary naturalist from this initially favorable epistemic position regarding R specified to herself. There is, however, no initially favorable epistemic position regarding R specified to the hypothetical population. This

crucial difference—and here is the “more telling” objection—undermines any relevant epistemic analogy between the hypothetical population and the evolutionary naturalist, and so undermines the hypothetical population’s usefulness in defending The Crucial Claim.

Let’s see if we can come up with a genuine epistemic analogy, inspired by the case of the hypothetical population. And we should try to construct our case so that it—unlike the original case of the hypothetical population—involves R’s being defeated, thus increasing the likelihood that our case will be of use in justifying The Crucial Claim, itself a claim about defeat.

Consider the revised case of the hypothetical population. In the revised case, as in the original, one comes to believe that the members of a hypothetical population were produced by naturalistic evolutionary processes, and, moreover, that the probability of their faculties’ being reliable, given that they were so produced, is low or inscrutable. But unlike the original case, in the revised case one is initially warranted—before the question of the population’s origin ever occurred to one—in believing that the members of that hypothetical population have reliable cognitive faculties. Indeed, let’s stipulate that, in the revised case, one is initially as warranted and as confident in believing R specified to the members of that population as one is in believing R specified to oneself.

One’s epistemic situation regarding R specified to the hypothetical population, in this revised case, does seem analogous to the evolutionary naturalist’s epistemic situation regarding R specified to herself. But this is not to say that the revised case gives us a reason to endorse The Crucial Claim. For it is not clear—given our revisions—that one has a defeater for R specified to the hypothetical population.

Consider the fact that one is as initially warranted in believing R specified to the population as one is in believing R specified to oneself. Perhaps we should imagine that one has interacted with the members of that population, living among them. (This seems a standard way to become warranted in believing R specified to some group of persons.) In such a case, it is not at all clear that R specified to the members of that population really is subject to a defeater when one comes to believe that they evolved in such a way that the probability of their being reliable,

on their so evolving, is low or inscrutable.

To better see the point here, note that, for all I have said so far, the “hypothetical population” could be human beings other than oneself. So suppose one’s initial noetic structure includes believing, with warrant and conviction, that other humans with whom one has interacted have reliable cognitive faculties. Suppose that one also comes to believe that these other humans have evolved by way of naturalistic processes, and moreover that  $P(R \text{ specified to others}/N\&E)$  is low or inscrutable. It’s not obvious that one now has a defeater for others’ reliability. Nor would anything relevant to defeat of R seem to change if we discovered that these “others” were actually alien impostors masquerading as humans. (It could happen.)

And, realistically, it’s hard to imagine anyone who would accept that one has a defeater for R specified to others in the sort of case just noted who does not already accept that the evolutionary naturalist has a defeater for R specified to herself. For anyone who thinks that the revised hypothetical population provides one with a case of defeat will have to accept:

**The Analogous Claim<sub>1</sub>** If  $P(R \text{ specified to others}/N\&E)$  is low or inscrutable, then one who believes N&E has a defeater for R specified to others.

But it seems that anyone who does not already accept The Crucial Claim will not accept The Analogous Claim<sub>1</sub>, whether the “others” are one’s kith and kin or a non-human race one has come to believe, with warrant, has reliable cognitive faculties. Any argument for The Crucial Claim that requires The Analogous Claim<sub>1</sub> is bound to be question-begging, or so nearly question-begging as to make no nevermind.

As originally presented in Warrant and Proper Function, the case of the hypothetical population is not epistemically analogous to the situation in which the evolutionary naturalist finds herself. Once the case is repaired so as to be analogous, it fails to be an obvious case of R’s being defeated. (Remember, the Obviously False Claim is false.) Moreover, and perhaps more importantly, it fails to be a case that will persuade one to accept The Crucial Claim who does not already accept it.

## IV

Plantinga considers other analogies in defense of The Crucial Claim:

Suppose I believe that I have been created by an evil Cartesian demon who takes delight in fashioning creatures who have mainly false beliefs (but think of themselves as paradigms of cognitive excellence): then I have a defeater for my natural belief that my faculties are reliable. Turn instead to the contemporary version of this scenario, and suppose I come to believe that I have been captured by Alpha-Centaurian superscientists who have made me the subject of a cognitive thought experiment in which the subject is given mostly false beliefs: then, again, I have a defeater for R. (ND, 11)

For the points I'll raise in this paper, there is no difference between the Cartesian demon and the Alpha-Centaurian superscientists. I'll focus on the demon; what I say about it applies, mutatis mutandis, to the Alpha-Centaurians.

Suppose that I came to believe—somehow—that I was the product of a malicious Cartesian demon, a demon all of whose creations have mainly false beliefs and so, presumably, unreliable cognitive faculties. In such a case, I think Plantinga is right that I would be in some sort of epistemic trouble. Suppose further that in such a case I have a defeater for R with respect to myself. It is easy to see how the defeat is supposed to go here. I've come to believe that the demon's creations do not have reliable cognitive faculties. I also believe I am one of that demon's creations. And so I come to believe that I do not have reliable cognitive faculties. In the most straightforward way possible, I come to believe that R specified to me is false.

Plantinga cannot insist that the devotee of N&E reason to a defeater for R, specified to herself, in this straightforward way. For Plantinga does not suggest that his arguments show that the evolutionary naturalist must believe the very strong claim that the products of N&E are—not just probably but—actually unreliable. It is this very strong claim that is analogous to the claim that one is produced by an evil demon whose products actually have unreliable cognitive



faculties. So, even granting Plantinga what he says about  $P(R/N\&E)$ 's being low or inscrutable, the hypothesis that N&E is true is not analogous to the hypothesis that we are created by a demon who has given us unreliable faculties.<sup>11</sup> Here, as with the original case of the hypothetical population, the advertised epistemic analogy fails to hold.

If Plantinga wants to trade on an analogy between N&E and an evil demon story, he must replace the standard evil demon hypothesis with another. Let the revised evil demon hypothesis be that replacement, tailor-made for Plantinga's purposes. According to the revised demon hypothesis, we are all the creations of a revised demon. It is not part of that hypothesis that all of the revised demons products are actually unreliable, but we do know that  $P(R$  specified to ourselves/revised demon hypothesis) is low or inscrutable. And—to preserve the central elements of the analogy with the evolutionary naturalist's belief in  $R$  specified to herself—according to the revised demon hypothesis, one is initially warranted in believing  $R$  specified to oneself.

If the revised evil demon hypothesis is to do its work for Plantinga, a believer of that hypothesis would have a defeater for  $R$  specified to himself. But while the standard evil demon hypothesis clearly and obviously places one in epistemic jeopardy, it is not so obvious that the revised evil demon hypothesis does. For it is not obvious that the following is true:

**The Analogous Claim<sub>2</sub>** If  $P(R$  specified to oneself/revised demon hypothesis) is low or inscrutable, then one who believes the revised demon hypothesis has a defeater for  $R$  specified to herself or himself.

To get a better feel for what—besides the falsity of The Obviously False Claim—might make one suspicious of The Analogous Claim<sub>2</sub>, imagine one is initially warranted in believing that someone else has reliable cognitive faculties, but then comes to believe the revised demon hypothesis as applied to that person. For example, I am now warranted in believing  $R$  specified to my brother. Suppose I come to believe that my (alleged!) brother is actually the product of a (revised) demon. Do I now have a defeater for  $R$  specified to my brother? Presumably, I would

have such a defeater only if:

**The Analogous Claim<sub>3</sub>** If P(R specified to someone else/revised demon hypothesis) is low or inscrutable, then one who believes the revised demon hypothesis about someone else has a defeater for R specified to that other person.

I think The Analogous Claim<sub>3</sub> is far from obviously true, keeping in mind that part of what we build into the revised demon hypothesis is the relevant initial warrant. For, after living with my brother for all those years while we were growing up, just seeing that his cognitive faculties are reliable, it seems that the reasonable moral of the revised demon hypothesis, applied to my brother, is that he beat the odds.

If you are not convinced, consider this. Suppose I have used a particular telephone, without incident, for years, and so am warranted in believing that phone is reliable. I then learn that phones made by company C—the company that made my phone—are almost all unreliable. Given my initial warrant in believing the phone’s reliability, the obvious response to this news is that I lucked out. Given my noetic structure, involving initial warrant, this news constitutes no defeater at all for my belief in my phone’s reliability. (It constitutes no defeater, not a defeated defeater. If it were a defeated defeater, there would have to be a defeater-defeater around. But there is not. For I still believe my phone was made by company C, and I still believe that P(my phone’s being reliable/my phone’s having been manufactured by company C) is low.)

As it goes with the phone, so I think it goes with my brother. And so I reject The Analogous Claim<sub>3</sub>. (Another reason to reject The Analogous Claim<sub>3</sub> might be its similarity to The Analogous Claim<sub>1</sub>, which one might already reject.) Once The Analogous Claim<sub>3</sub> is rejected, it seems like The Analogous Claim<sub>2</sub> ought to go too. And if we reject The Analogous Claim<sub>2</sub>, then the revised evil demon case actually undermines, rather than supports, The Crucial Claim. Thus we have the makings of an argument against The Crucial Claim.

One might object that this argument against The Crucial Claim is wholly unpersuasive—or perhaps even almost question-begging—on the grounds that there is not enough epistemic

distance between the denial of The Analogous Claim<sub>2</sub> and the denial of The Crucial Claim. One might object that, realistically, no one would deny the one who does not already deny the other. I think this objection has some force. But note that if this objection is a good one, it also shows that the attempt to defend The Crucial Claim by way of The Analogous Claim<sub>2</sub> is at best unpersuasive, at worst question-begging.

## V

The cases that Plantinga actually offers for our consideration—the standard demon hypothesis, the original case of the hypothetical population—are, I think, clearly cases in which R (specified to oneself or to others) is defeated or unreasonable or jeopardized in some way. I have argued, however, that the cases Plantinga actually offers are not, in the form in which he originally presents them, epistemic analogues of the situation in which the devotee of N&E finds herself. And once the cases are tweaked into shape, so as to be epistemically analogous, they are no longer cases in which it is obvious that R—specified to others, oneself, whomever—has a defeater.

Moreover, the reason one would be inclined to doubt whether the revised demon hypothesis or the revised case of the hypothetical population involves a defeater for R is, I think, the very same reason one would doubt whether the evolutionary naturalist has a defeater for R. One sees that at the heart of each of the “revised” cases is an inference from conditional improbability or inscrutability to defeat. Given that one knows that The Obviously False Claim is false, one suspects that such an inference—whether the inference involves the demonic or the Darwinian—might be mistaken. Also, the inferences in question might seem to some objectionably similar to The Crucial Claim, thus tainting an argument by way of these analogies with at least the suspicion that the question is being begged.

So I think Plantinga has not successfully defended The Crucial Claim. This does not mean that The Crucial Claim is false. Perhaps it is true. One response to my arguments above might be to assert The Crucial Claim, without argument, as a premise in the Evolutionary

Argument. After all, Plantinga's original strategy of defending The Crucial Claim by way of analogous cases presupposes that there are some cases in which it is intuitively obvious that conditional improbability or inscrutability implies defeat. Perhaps, one might respond, the low or inscrutable  $P(R \text{ specified to oneself}/N\&E)$  is itself just such a case. But this response seems mistaken. For, as I noted earlier in the paper, I don't think that The Crucial Claim is intuitively obvious.

How could The Crucial Claim be defended by argument? One could develop cases in which it is obvious that conditional improbability/inscrutability implies defeat, and, moreover, clear that the evolutionary naturalist's belief in  $R$  specified to herself is epistemically analogous to the defeatee in those cases. I have argued that, so far, Plantinga has not successfully done this. In fact, I think this approach is probably a dead end. For once we build  $p$ 's initial warrant into one's noetic structure, I cannot think of a single case in which it is intuitively obvious, or even intuitively plausible, that  $q$  is a defeater for  $p$  solely on the basis of a low or inscrutable  $P(p/q)$ .

A second, and I think more promising, approach would be to defend a general principle about when  $p$ 's being improbable or inscrutable on  $q$  implies that  $p$  is defeated by  $q$ , a principle that sanctions The Crucial Claim. This principle would presumably state what must be added to conditional improbability/inscrutability to get defeat. Plantinga has hinted at one ingredient of such a principle: "Among the crucially important facts, with respect to the question of the reliability of a group of cognitive faculties, are facts about their origin" (ND, 11). So perhaps an appropriate general principle will say that  $R$ 's low or inscrutable probability on a claim relevantly related to the origin of one's faculties implies that that claim is a defeater for  $R$ .

As I said, I think the first approach is probably a dead end. At least, I can't think of any intuitively plausible cases of the relevant sort. And I confess utter failure at coming up with a plausible general principle that would sanction The Crucial Claim. So the bad news, for the Evolutionary Argument Against Naturalism, is that I don't know how to help it along. But this news probably isn't so very bad. For the Evolutionary Argument's champion is surely more resourceful than I am and is likely to succeed where I have failed.

**Notes**

\*Thanks to Michael Bergmann, Eugene Mills, Alvin Plantinga, Michael C. Rea, and Donald P. Smith.

<sup>1</sup>The original version of that argument appears in Plantinga (1993, 216-237) and is further developed in his “Naturalism Defeated” (hereafter ‘ND’).

<sup>2</sup>Plantinga is not always explicit about the fact that he is arguing that the evolutionary naturalist has a defeater for R specified to herself. But Plantinga’s conclusion that the evolutionary naturalist’s own beliefs—including her belief in N—are subject to an undefeated defeater follows only if R specified to herself is defeated.

<sup>3</sup>Plantinga (1993, 220n7) says we could think of the relevant probability as either epistemic or objective, although he favors the latter. Nothing in my paper depends on taking the probability here one way rather than the other.

<sup>4</sup>I leave open whether the alleged defeater for R is N&E alone or N&E conjoined with the belief that  $P(R/N\&E)$  is low or inscrutable. For stylistic reasons I will, however, occasionally say things like “Plantinga thinks N&E defeats R”.

<sup>5</sup>Fred Dretske (1970) and Robert Nozick (1981) argue that one’s knowledge of particular bits of fact—such as that one is sitting in a chair—is consistent with one’s not knowing whether one is a brain in a vat. But Plantinga argues that if one is not reasonable in believing R with respect to oneself, one has an undefeated defeater for all one’s other beliefs. Similarly, if one is not reasonable in believing that one is not a brain in a vat, Plantinga’s arguments would seem to

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show that—pace Dretske and Nozick—one has an undefeated defeater for everything else one believes; and so thoroughgoing skepticism follows.

<sup>6</sup>Because an analogy that supports The Crucial Claim requires more than defeat via conditional improbability or inscrutability, we can ignore any analogies that don't have the requisite “more”, such as, e.g., the case involving widgets (1993, 230-231). What, exactly, is required for a defeatee to be relevantly analogous to the evolutionary naturalist's belief in R specified to herself? It's hard to say. Maybe the defeatee's involving a belief forming faculty is enough. For that reason, I'll address the following analogy in this note:

Compare the case of a believer in God, who, perhaps through an injudicious reading of Freud, comes to think that religious belief generally and theistic belief in particular is almost always produced by wish fulfillment. Such beliefs, she now thinks, are not produced by cognitive faculties...aimed at truth; instead, they are produced by wish fulfillment, which...does not have the function of producing true beliefs.

Suppose she considers the objective probability that wish fulfillment, as a belief-producing mechanism, is reliable. [Suppose she concludes that probability is low or inscrutable.] But then...she has a defeater for any belief she takes to be produced by the mechanism in question.

...But now suppose we return to the person convinced of N&E who is agnostic about  $P(R/[N\&E])$ ; something similar goes for him. He is in the same position with respect to any belief B of his, as is that believer in God. (Plantinga, 1993, 230-231)

Note that in the wish fulfillment case, one first ceases to believe that a certain faculty—in this case, wish fulfillment—is “aimed at truth”. Once one has reached that conclusion, Plantinga argues, one then has a defeater for any belief produced by that faculty.

This case would be analogous to the evolutionary naturalist who ceased to believe that her cognitive faculties were aimed at truth. But Plantinga is not entitled to assume that the

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evolutionary naturalist has ceased to believe this. (Presumably anyone who accepts R specified to himself will accept that his cognitive faculties are, unlike wish fulfillment, in some important sense aimed at truth.) And note that the evolutionary naturalist's accepting that P(her faculties' being aimed at truth/N&E) is low or inscrutable is a far cry from her ceasing to believe that they are, in fact, aimed at truth. It is also a far cry from her having a defeater for their being aimed at truth. At least, one would have to argue that such a defeater follows; such an argument is likely to parallel the defense of The Crucial Claim itself.

<sup>7</sup>In the passage quoted, Plantinga is actually concerned with P(R/N&E&C), where C is a proposition setting out some of the main features of our cognitive system. But in ND, he drops C because he now thinks "the additional complexity unnecessary" (5). To avoid needless complexity, I too will drop C and will even replace 'N&E&C' with 'N&E' in quoted passages.

<sup>8</sup>'Evidence' here means propositional evidence. Plantinga's argument involving the hypothetical population would not be strengthened by taking non-propositional evidence into account. For the evolutionary naturalist—if R specified to herself is properly basic—presumably has non-propositional evidence for R specified to herself, even though she lacks it for R specified to the hypothetical population.

<sup>9</sup>Certainly Plantinga should grant this. At least, it would be unfortunate if Plantinga's argument asked us to start with the claim that the evolutionary naturalist is not warranted in accepting R specified to herself, even before she comes to believe any alleged defeaters. And if we are entitled to assume that the devotee of N&E was never warranted in accepting R specified to herself, why bother arguing that R specified to herself is defeated?

<sup>10</sup>A sufficient condition for a belief B's being "initially" warranted "prior" to being defeated by D would be if B was actually warranted at some time temporally prior to a time at which, first, one comes to believe D and, secondly, D is a defeater for B. This the simplest case and I will

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consider cases of only this sort in the text. But there are surely atemporal notions of “initially” and “prior” lurking nearby, and these atemporal notions are probably the more fundamental and important ones (Cf. ND, 53-56).

<sup>11</sup>Plantinga also suggests one need not believe the evil demon hypothesis in order to have a defeater for R; rather, says Plantinga, R is defeated just so long as “for all I know or believe [the evil demon hypothesis] is true” (ND, 12). But suppose the evolutionary naturalist initially knows R specified to herself. She can then rule out both the evil demon hypothesis and the strong claim that the products of N&E are actually unreliable by way of something she knows (and so believes), that something being R itself. Plantinga is in an unenviable dialectical position if he must first claim that the evolutionary naturalist does not know R specified to herself in order to then argue that she has a defeater for R.

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