



An Evolutionary Argument Against Naturalism

Alvin Plantinga

In a talk given at [The Veritas Forum](#) at Oregon State University in January 1996, Professor Alvin Plantinga presents an evolutionary argument *against* naturalism. In a complex, but important philosophical argument, he argues that it is not rational to accept belief in naturalism and evolution, because such beliefs provide no rational basis for trusting our cognitive faculties.

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The lecture notes below accompany Professor Plantinga's talk and provide some quotes that are not fully given in the audio talk.

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The following is the outline of the lecture given by Prof. Plantinga entitled "An Evolutionary Argument Against Naturalism".

A. THE PROBLEM

theism: we human beings have been created by a wholly good, all powerful and all knowing person: one who has knowledge, aims and intentions and acts to accomplish them. God and creation

naturalism: the theistic picture minus God. Carl Sagan, Stephen Jay Gould, David Armstrong, the later Darwin, John Dewey, Bertrand Russell

cognitive faculties: the powers or faculties of capacities whereby we have knowledge or form belief: memory, perception, reason, maybe others

theism and the reliability of cognitive faculties

Thomas Aquinas:

Since human beings are said to be in the image of God in virtue of their having a nature that includes an intellect, such a nature is most in the image of God in virtue of being most able to imitate God (ST Ia q.93 a.4);

and

Only in rational creatures is there found a likeness of God which counts as an image As far as a likeness of the divine nature is concerned, rational creatures seem somehow to attain a representation of [that] type in virtue of imitating God not only in this, that he is and lives, but especially in this, that he understands (ST Ia q.93 a.6).

Most of us think (or would think on reflection) that at least a function or purpose of our cognitive faculties is to provide us with true beliefs. Moreover, we go on to think that when they function properly, in accord with our design plan, then for the most part they do precisely that.

Faculties much better adapted to reach the truth in some areas than others; elementary arithmetic and logic, and the perception of middle-sized objects under ordinary conditions. Remembering certain sorts of things:

Things get more difficult, however, when it comes to an accurate reconstruction of what it was like to be, say, a fifth century BC Greek (not to mention a bat). And working at the limits of our powers: contemporary cosmology, for example. Still...

But isn't there a problem, here, for the naturalist? At any rate for the naturalist who thinks that we and our cognitive faculties arrived upon the scene after some billions of years of evolution (by way of natural

selection, genetic drift, and other blind processes working on such sources of genetic variation as random genetic mutation)?

Richard Dawkins (according to Peter Medawar, "one of the most brilliant of the rising generation of biologists") once leaned over and remarked to A.J. Ayer at one of those elegant, candle-lit, bibulous Oxford college dinners that he couldn't imagine being an atheist before 1859 (the year Darwin's *Origin of Species* was published); "...although atheism might have been logically tenable before Darwin", said he, "Darwin made it possible to be an intellectually fulfilled atheist." *The Blind Watchmaker*. Dawkins goes on:

All appearances to the contrary, the only watchmaker in nature is the blind forces of physics, albeit deployed in a very special way. A true watchmaker has foresight: he designs his cogs and springs, and plans their interconnections, with a future purpose in his mind's eye. Natural selection, the blind, unconscious automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of all life, has no purpose at all. If it can be said to play the role of watchmaker in nature, it is the blind watchmaker.

--Dawkins

Now Dawkins thinks Darwin make it possible to be an intellectually fulfilled atheist. But perhaps Dawkins is dead wrong here. Perhaps the truth lies in the opposite direction. Their ultimate purpose survival: not production of true beliefs.

Patricia Churchland:

[Churchland's emphasis]. Truth, whatever that is, definitely takes the hindmost.

W.v.O. Quine and Karl Popper, Popper: since we have evolved and survived, we may be pretty sure that our hypotheses and guesses as to what the world is like are mostly correct. And Quine says he finds encouragement in Darwin:

There is some encouragement in Darwin. If people's innate spacing of qualities is a gene-linked trait, then the spacing that has made for the most successful inductions will have tended to predominate through natural selection. Creatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind.

Quine finds a great deal more encouragement in Darwin than Darwin did: "With me," says Darwin, "the horrid doubt always arises whether the convictions of man's mind, which has been developed from the mind of the lower animals, are of any value or at all trustworthy. Would any one trust in the convictions of a monkey's mind, if there are any convictions in such a mind?"

Quine and Popper on one side and Darwin and Churchland on the other. Who is right? But can we sharpen the question? What, precisely, is the argument about? Darwin and Churchland seem to believe that (naturalistic) evolution gives one a reason to doubt that human cognitive faculties are reliable (produce mostly true beliefs): call this 'Darwin's Doubt'. Quine and Popper, on the other hand, apparently hold that evolution gives us reason to believe that human cognitive faculties *do* produce for the most part true or verisimilitudinous beliefs. How shall we understand this dispute?

B. DARWIN'S DOUBT

One possibility: perhaps Darwin and Churchland mean to propose that a certain *conditional* probability is low: the probability of human cognitive faculties' being reliable, given that human cog faculties have been produced by evolution (Dawkin's *blind* evolution, unguided by the hand of God or any other person). If (naturalistic) evolution is true, then our cognitive faculties will have resulted from blind mechanisms like natural selection, working on sources of genetic variation such as random genetic mutation. And the ultimate purpose or function (Churchland's 'chore') of our cognitive faculties, if indeed they *have* a purpose or function, will be survival - of individual, species, gene, or genotype. But

then it is unlikely that they have the production of true beliefs as a function. So the probability of our faculties' being reliable, given naturalistic evolution, would be fairly low. Popper and Quine, on the other side, judge that probability fairly high.

P(R/N&E)

N is metaphysical naturalism. (Crucial to metaphysical naturalism, of course, is the view that there is no such person as the God of traditional theism.) E: human cognitive faculties have arisen by way of evolution (as conceived by contemporary evolutionary science). R: the claim that our cognitive faculties are reliable

And the question is: What is the probability of R, given N&E? Darwin and Churchland propose that this probability is relatively low, while Quine and Popper think it fairly high.

1. THE DOUBT DEVELOPED

Suppose we think, first, not about ourselves and our ancestors, but about a hypothetical population of creatures rather like ourselves on a planet similar to Earth. (Darwin proposed that we think about another species, such as monkeys.) Suppose these creatures have cognitive faculties, hold beliefs, change beliefs, make inferences, and so on; and suppose these creatures have arisen by way of the selection processes endorsed by contemporary evolutionary thought. What is the probability that their faculties are reliable? What is P(R/N&E), specified, not to us, but to them? According to Quine and Popper, rather high: belief is connected with action in such a way that extensive false belief would lead to maladaptive behavior, in which case it is likely that the ancestors of those creatures would have displayed that pathetic but praiseworthy tendency Quine mentions.

But: first, perhaps it is likely that their *behavior* is (or was) adaptive; but nothing follows about their *beliefs*. Everything depends upon the way in which their behavior is related to their beliefs.

(a) maybe their beliefs do not cause their behavior. (Epiphenomenalism: T.H. Huxley) If so, they would be *invisible* to evolution; and

then the fact that they arose during the evolutionary history of these beings would confer no probability at all on the idea that they are mostly true, or mostly nearly true, rather than wildly false. Indeed, the probability of their being mostly true would have to be estimated as fairly low; the probability that a randomly chosen large set of propositions contains vastly more true beliefs than false beliefs is low. (It *could* be that one of these creatures believes that he is at that elegant, bibulous Oxford dinner, when in fact he is slogging his way through some primeval swamp, desperately fighting off hungry crocodiles.) J.M. Smith: "A few years ago, he wrote that he had never understood why organisms have feelings. After all, orthodox biologists believe that behavior, however complex, is governed entirely by biochemistry and that the attendant sensations - fear, pain, wonder, love - are just shadows cast by that biochemistry, not themselves vital to the organism's behavior...." *Time* Dec. '92

(b) beliefs do indeed cause behavior, but only by virtue of their *electro-chemical* properties, not by virtue of their *content*. This possibility is said to be the "received opinion" by Rob Cummins (*Meaning and Mental Representation*); if you accept materialism re minds, it's hard to see any alternative.

(c) A third possibility: it could be that beliefs cause behavior by way of content but is *maladaptive*. Again, low.

(d) the beliefs of our hypothetical creatures cause their behavior and also adaptive. Probability (on this possibility together with N&E) that their cognitive faculties are reliable?

Not as high as you might think. Beliefs don't causally produce behavior *by themselves*; it is beliefs, desires, and other factors that do so together. Then the problem is that clearly there will be any number of *different* patterns of belief and desire that would issue in the same action; and among those there will be many in which the beliefs are wildly false. Paul is a prehistoric hominid; the exigencies of survival call for him to display tiger avoidance behavior. There will be many behaviors that are appropriate: fleeing, for example, or

climbing a steep rock face, or crawling into a hole too small to admit the tiger, or leaping into a handy lake. Pick any such appropriately specific behavior B. Paul engages in B, we think, because, sensible fellow that he is, he has an aversion to being eaten and believes that B is a good means of thwarting the tiger's intentions.

But clearly this avoidance behavior could result from a thousand other belief-desire combinations: indefinitely many other belief-desire systems fit B equally well. Perhaps Paul very much *likes* the idea of being eaten, but when he sees a tiger, always runs off looking for a better prospect, because he thinks it unlikely that the tiger he sees will eat him. This will get his body parts in the right place so far as survival is concerned, without involving much by way of true belief. Or perhaps he thinks the tiger is a large, friendly, cuddly pussycat and wants to pet it; but he also believes that the best way to pet it is to run away from it. Or perhaps he confuses running *towards* it with running *away* from it, believing of the action that is really running away from it, that it is running towards it; or perhaps he thinks the tiger is a regularly reoccurring illusion, and hoping to keep his weight down, has formed the resolution to run a mile at top speed whenever presented with such an illusion; or perhaps he thinks he is about to take part in a 1600 meter race, wants to win, and believes the appearance of the tiger is the starting signal; or perhaps Clearly there are any number of belief-cum-desire systems that equally fit a given bit of behavior.

Trying to combine these probabilities in an appropriate way, then, it would be reasonable to suppose that the probability of R, of these creatures' cognitive systems' being reliable, is relatively low, somewhat less than 1/2.

Now return to Darwin's Doubt. The reasoning that applies to these hypothetical creatures, of course, also applies to *us*; so if we think the probability of R with respect to *them* is relatively low on N&E, we should think the same thing about the probability of R with respect to *us*. Something like this reasoning, perhaps, is what underlay Darwin's doubt. So

we should think that $P(R/N\&E)$ for us is low. And if we accept N&E, this gives us a *defeater* for our belief in R: a reason to doubt it, to be agnostic with respect to it. If R is unlikely or improbable given the way our faculties have come to be, then we have a reason to reject or withhold R.

C. THE ARGUMENT AGAINST NATURALISM

1. THE DOUBT DEVELOPED AGAIN

Of course the argument for a low estimate of $P(R/N\&E)$ is pretty weak. In particular, our estimates of the various probabilities involved in estimating $P(R/N\&E)$ with respect to that hypothetical population were pretty shaky. So perhaps the right course here is simple agnosticism: that probability is inscrutable; we just can't tell what it is.

This also seems sensible. What would then be the appropriate attitude towards R (specified to that hypothetical population)? Someone who accepts N&E and also believes that the proper attitude towards $P(R/N\&E)$ is one of agnosticism, clearly, has good reason for being agnostic about R as well.

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? If this probability is inscrutable, then we have a defeater for R, just as in the case where that probability is low.

So $P(R/N\&E)$ is either low or inscrutable; and if we accept N&E, then in either case we have a defeater for R.

2. SOME ANALOGIES

(a) A believer in God comes to believe that such belief is produced by wish fulfillment.

Suppose she considers the objective probability that wish fulfillment, as a belief producing mechanism, is reliable: low or inscrutable: such that we can't tell what it is. In either case she has a defeater for any belief she takes to be produced by the mechanism in question: reason to reject it, not to hold it, to withhold it.

(b) the widgets on the assembly line: the second kind of widget case: here she doesn't come to believe that the probability of a widget's being red, given that it looks red, is low; instead, she is agnostic about that probability.

(c) you come to think you have been created by a malignant Cartesian demon that takes pleasure in deceiving those he creates: Most of the beliefs held by his creatures are false. Then you have a defeater for any belief you hold. And the same goes whether you think the probability in question is low or inscrutable.

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 the above believer in God. He is in the same condition as the person who comes to think she has been created by that Cartesian evil demon. So he too has a defeater for B, and a good reason for being agnostic with respect to it.

3. THE ARGUMENT

for N&E, a reason to doubt or be agnostic with respect to it. If he has no independent evidence, N&E is self-defeating and hence irrational.

Could he get a defeater for this defeater - a defeater-defeater? Maybe by doing some science, by, e.g., determining by scientific means that his faculties really are reliable?

But of course that would *presuppose* that his faculties are reliable. Thomas Reid (*Essays on the Intellectual Powers of Man*):

If a man's honesty were called into question, it would be ridiculous to refer to the man's own

word, whether he be honest or not. The same absurdity there is in attempting to prove, by any kind of reasoning, probable or demonstrative, that our reason is not fallacious, since the very point in question is, whether reasoning may be trusted.(276)

Is there any sensible way at all in which he can argue for R? Any argument he might produce will have premises; and these premises, he claims, give him good reason to believe R. But of course he has the very same defeater for each of those premises that he has for R

So this defeater can't be defeated.

We could also put it like this: any argument he offers, for R, is circular or question begging. Naturalistic evolution gives its adherents a reason for doubting that our beliefs are mostly true; perhaps they are mostly mistaken; for the very reason for mistrusting our cognitive faculties *generally*, will be a reason for mistrusting the faculties that produce belief in the goodness of the argument.

Hence the devotee of N&E has a defeater D for N&E - a defeater, furthermore, that can't be defeated. So N&E is self-defeating, and can't rationally be accepted.

One who contemplates accepting N, and is torn, let's say, between N and theism, would reason as follows: if I were to accept N, I would have good and ultimately defeated reason to be agnostic about N; so I shouldn't accept it. (An argument for the irrationality of N, not for its falsehood.)

The traditional theist, on the other hand, has no corresponding reason for doubting that it is a purpose of our cognitive systems to produce true beliefs, nor any reason for thinking the probability of a belief's being true, given that it is a product of her cognitive faculties, is low or inscrutable. She may indeed endorse some form of evolution; but if she does, it will be a form of evolution guided and orchestrated by God. And *qua* traditional theist - *qua* Jewish, Moslem, or Christian theist - she believes that God is the premier knower and has created us human beings in

his image, an important part of which involves his giving them what is needed to have knowledge, just as he does.

The conclusion to be drawn, therefore, is that the conjunction of naturalism with evolutionary theory is self-defeating: it provides for itself an undefeated defeater. It is therefore unacceptable and irrational.

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