AN ANALYSIS OF STEPHEN LAW'S OBJECTION TO ALVIN PLANTINGA'S EVOLUTIONARY ARGUMENT AGAINST NATURALISM

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Abstract

The most controversial premise of Alvin Plantinga's EAAN is the first: the probability of our cognitive faculties being reliable given naturalism and evolution is low. Stephen Law objects that this premise rests on the assumption that naturalists are committed to the view that beliefs cause behavior by virtue of their neurophysiological properties and independently of their content—a false assumption, according to Law. If the naturalist holds that belief content determines behavior, then the first premise of Plantinga's argument is false because adaptive behavior suggests true beliefs. Here I defend Plantinga's EAAN. I grant Law's claim that the naturalist need not hold that beliefs cause behavior independently of content, but I argue that adaptive behavior does not suggest true beliefs since there are many false beliefs that cause adaptive behavior.

Plantinga argues in his recent book, *Where the Conflict Really Lies*, that the conjunction of naturalism and evolution cannot be rationally accepted because it acquires a universal defeater for all our beliefs. In the first section of this paper, I will present Plantinga's argument for this thesis. In the second section, I will consider an objection against Plantinga's argument raised by Stephen Law, the claim that Plantinga's argument assumes that the naturalist is committed to the view that beliefs affect behavior in virtue of their neurophysiological properties but independently of their content—a view that the naturalist need not hold. Finally, I will argue that Law's objection against Plantinga fails, that even if we concede that the naturalist may hold that beliefs affect behavior partly in virtue of their content, naturalistic mechanisms still have no truth tracking powers when it comes to choosing between equally adaptive but incompatible beliefs.

Plantinga: The Evolutionary Argument Against Naturalism (EAAN)

In chapter 10 of *Where the Conflict Really Lies*, Plantinga explores the main thesis for his book: the claim that one cannot rationally accept both naturalism and evolution. His argument can be summarized as the following premises:

1. The probability of our cognitive faculties being reliable given naturalism and evolution is low. [P(R/N&E) is low]
2. Anyone who accepts (believes) N&E and sees that P(R/N&E) is low has a defeater for R.
3. Anyone who has a defeater for R has a defeater for any other belief she thinks she has, including N&E itself.
4. If one who accepts N&E thereby acquires a defeater for N&E, N&E is self-defeating and can't rationally be accepted.

   Conclusion: N&E can't rationally be accepted.[1]

Plantinga argues most extensively for the first premise of this argument, probably because it is the most controversial of all, and it seems that if he can get that premise, then the rest of the argument is close

[1] Plantinga, Alvin. *Where the Conflict Really Lies: Science, Religion, and Naturalism*. New York: Oxford University Press, 2011. 345.

to being straightforward common sense. It is also the case that Law's objection is raised against the first premise, so I will follow suit and explore this premise in this section.

Premise 1 states that if naturalism and evolution are both true, the probability that our cognitive faculties are reliable—that they are truth-tracking and that they produce true beliefs at least more than two thirds of the time—is low. This is what is known as the conditional probability of a proposition P on the condition that another proposition, Q, is true. How does Plantinga argue for this claim?

First of all, Plantinga notes that it is a common view among naturalists that human beings are wholly material beings. Human beings are just human bodies, nothing more. Plantinga notes that under such a view of human persons, a belief would be "a long-standing event or structure in [the] brain or nervous system."[2] This implies that beliefs have two sets of properties, the first set being its neurophysiological properties, such as the property of involving such and such neurons, and the second set being its content, which is in the form of propositions and determines whether the belief is true or false.

After clarifying the position of the naturalist and what it entails, Plantinga claims that the naturalist who believes in evolution must give up the assumption that her cognitive faculties are reliable because according to evolution, our faculties develop to aim at adaptive behaviors (those behaviors that are conducive to the four Fs: feeding, fleeing, fighting, and reproducing).[3] But under the naturalist view, it is the neurophysiological properties of a belief that affects behavior, thus it follows that evolution, in picking out the behaviors that are adaptive, searches out for beliefs with neurophysiological properties that produce adaptive behaviors without regarding the content of those beliefs. For this reason, evolution has geared our cognitive faculties to produce beliefs that are conducive to adaptive behavior, not truth. In fact, there is no reason for supposing that the beliefs produced by our cognitive faculties are true, for our cognitive faculties aim at adaptive beliefs, regardless of truth.

Law's Objection

At this point, one might wonder whether Plantinga's argument depends on the claim that the neurophysiological properties of a belief determine the behavior of an organism independently of the belief's content. For example, is Plantinga thinking that under naturalism and evolution, a person may have the desire to live as long as possible and have the belief B, which contains the proposition that jumping from the top of a 5-story building would extend his life, but the neurophysiological properties of which causes the person, instead, to flee from burning buildings? If Plantinga's argument does depend on this claim, then it seems a bit too much to think that the naturalist must be committed to such a view. After all, why should the naturalist think that the neurophysiological properties of a belief determine the behavior of an organism independently of the belief's content?[4] Why can't it be the case that the neurophysiological properties of a belief determine behavior through the belief content? Indeed, Law claims that this is the mistake Plantinga makes: he overlooks the possibility that "there exist certain conceptual links between belief content and behavior" such that it is false to claim that given naturalism, natural selection chooses beliefs by virtue of its neurophysiological properties and independently of the content.[5]

However, if Plantinga grants the naturalist that the neurophysiological properties of a belief determine behavior through the belief content, then there is much more work to be done to show that P(R/N&E) is low. After all, the naturalist might object that beliefs often give rise to adaptive behavior because they are true. My belief that lions will eat me causes the adaptive behavior of running away from lions, thus helping me to survive, but the same belief (the belief that has the same neurophysiological properties) would not have been adaptive had its content been false. If, for instance, the belief's content was that lions are weak animals that make good meals, the belief would not lead to adaptive behavior; I would be holding a false belief that leads to my destruction.[6]

[2] Ibid. 320
[3] Ibid. 315
[4] Law, Stephen. "Naturalism, Evolution, and True Belief." *Analysis* 72.1 (2012): 43-44. *Philosopher's Index*. Web. 1 Aug. 2013.
[5] Ibid. 41
[6] Ibid. 45

Other critics of Plantinga (such as Griffiths and Wilkins 2010) argue even further, claiming that in scientific inquiry it is common to opt for the simplest explanation that is available from the empirical evidence. In this case, they claim that the simplest explanation for why the beliefs we have acquired from our cognitive faculties lead to adaptive behavior is because they are true.[7] Insofar as truth is conducive to adaptive behavior, and our cognitive faculties aim at adaptive behavior, it follows that our cognitive faculties also aim at truth.[8] In short, then Law's objection amounts to the following claims: 1) that the content of a belief has bearing on behavior, so that natural selection is not blind to truth and 2) our beliefs cause adaptive behavior because they are true. Granted, our faculties may not be aiming at truth for its own sake, but it does end up getting truth anyway when it aims at adaptability. Given this naturalist objection, can we still save premise 1?

Response to Law

I think we can still save premise 1. The probability of our cognitive faculties being reliable given naturalism and evolution is low. [P(R/N&E) is low],[9] and I think an answer to this objection actually strengthens the argument for premise 1 such that given naturalism and evolution, not only do we lack a reason to think that our faculties track truth, we have a reason to think that our faculties cannot track truth. My aim in this section is to show that even if we grant that the content of a belief has bearing on behavior, natural selection is still blind to truth, and that adaptability does not entail, nor is it correlated with truth (that Law's second claim is false).

Consider the process of evolution as it is commonly understood in biology. According to evolution, we have many of our biological features we have today due to a combination of descent with modification, random mutation, and natural selection. Take, for example, a pair of male and female squirrels. Suppose these two squirrels mate and out of the many baby squirrels they produce, one, through random mutation, acquires a certain biological feature that other squirrels have never had: parachute-like membranes that extend between their limbs. These membranes allow the mutated squirrel to glide in the air and travel from one tree to another in this manner, an adaptive feature, no doubt. Suppose then a group of squirrel-eating foxes migrate to the area where these squirrels live and consume many of the squirrels, but not the mutated squirrel, for its aerial advantage allows it to flee from the earthbound foxes. This is the process of natural selection; the features that allow an organism to survive are the ones that get passed down through the surviving organism's genes. Completing the story, we have the mutated squirrel surviving the foxes long enough to mate with other squirrels and pass down its genes, including its parachute-like membrane. Hence we have the flying squirrel.

How does this apply to premise 1 of our argument? We can start by claiming that the same type of story is the only one available for cognitive faculties given naturalism and evolution. The punch line here is that in the naturalist's evolutionary story, there is simply no space for truth-tracking powers. If the naturalist wants to claim that our beliefs are reliable, she must somehow show that in the evolutionary story, our faculties developed the disposition to produce not only adaptive, but also true beliefs. This cannot be done. First, let us consider where such a space would have to be found if it exists at all. If such a space for the production of true beliefs is to be found, it must be in the "powers" at work in the story (random mutation, descent with modification, and natural selection) or in the conjunction of these "powers." Presumably, such a space cannot be found in random mutation or in descent with modification. Random mutation, under a naturalist perspective, is exactly as its name says it is: random. It refers to how the qualities that a particular organism develops do not have any causal relation with its adaptive requirements. Similarly, descent with modification does not have any powers to choose between beliefs at all, it simply says that the belief may be one that exists in the offspring, but not in either parents of that offspring. This leaves us with natural selection.

[7] Griffiths, Paul E., and John S. Wilkins. "When Do Evolutionary Explanations of Belief Debunk Belief?" *PhilSci-Archive*. N.p., 19 Apr. 2010. Web. 15 Jan. 2014. <http://philsci-archive.pitt.edu/5314/>.
[8] Ibid. 46
[9] Plantinga, Alvin. *Where the Conflict Really Lies: Science, Religion, and Naturalism*. New York: Oxford University Press, 2011. 345.

Can natural selection choose between beliefs? I believe that it can. Let us briefly revisit and revise the story of our squirrels and focus in more on natural selection. Suppose instead of one mutated squirrel, we have 3 squirrels with different mutations. First, we have the squirrel with the parachute-like membranes. Second, we have a squirrel with yellow eyes. Third, we have a squirrel with an extra front tooth. The rest of the story can remain the same; squirrel-eating foxes come along and consume the second and third squirrel, but not the first. Here we have natural selection at play. Nature selects which feature survives and gets passed on to the next generation, selecting the features that are most adaptive by killing off the members of the species with non-adaptive mutations. In this case, the feature of having parachute-like membranes is selected by natural selection because it is adaptive, unlike yellow eyes and an extra tooth.

A similar story can be told about beliefs, or rather, cognitive faculties.[10] Natural selection selects the cognitive faculties that are disposed to producing adaptive beliefs. However, given that there are many false beliefs that are adaptive and many true beliefs that are not adaptive, and given that for any adaptive true belief, there exists an equally adaptive belief that is incompatible with it, natural selection, under naturalism, is inadequate in terms of coming up with faculties disposed to producing true beliefs. For example, I have often thought that if the squirrels around Calvin College have beliefs, one of those beliefs would be, "all humans are out to get us." I would never harm a squirrel. This belief is therefore false and the faculty that produced it is unreliable to this extent. However, I do think that there are other humans who are out to hurt these poor creatures, and insofar as this belief compels them to flee from all humans, it is adaptive. After all, though I may not desire to harm squirrels, I do not feel compelled to do all in my power to help them flourish either, so their false belief that I am out to get them and the unreliable faculty that produced it do not cost them much in terms of adaptability. In fact, one can even go further in this story to claim that if Calvin squirrels acquire the true belief that some, but not all humans are out to get them, it may end up being a belief that is less adaptive than the false belief that all humans are out to get them. After all, the squirrel with the true belief might end up trusting the wrong humans.

Let us suppose an even weirder story. Suppose that all female Calvin students are indeed out to get squirrels and destroy them. On the other hand, all male Calvin students simply do not care about the matter one way or another and cannot be bothered to do anything related to squirrels. Now if Calvin squirrels have faculties disposed to producing the belief that all Calvin students are out to get them, they would have a false belief, but this false belief would be adaptively equivalent to the true belief that only female Calvin students are out to get them. Natural selection, however, cannot choose between the two beliefs. It cannot say, "ah, here we have two equally adaptive beliefs, one of them being true, the other being false, I will therefore choose to eliminate the false belief." The only way natural selection can do this would be to kill off the squirrels with the cognitive faculties that are disposed to producing the false belief, but given that the false belief and the true belief are adaptively equivalent, natural selection cannot do this. A similar story can be applied to human beings: we will find that there are many beliefs that are equally adaptive—some false and others true—and natural selection does not have the resources to choose to eliminate only the cognitive faculties that are disposed to producing false beliefs.

Conclusion

I have examined one of the many objections against Plantinga's claim that P(R/N&E) is low. There are many other objections that can be raised against it, but if what I have argued is true, then Plantinga's argument would have a robust response to the naturalist who claims that the simplest explanation we have for why we have adaptive beliefs is that those beliefs are true. The response would be: "no." In fact, the opposite is true. Given naturalism and evolution, natural selection aims for mere adaptive properties in choosing beliefs. If the naturalist wants to claim that our faculties produce true beliefs, she must posit some other principle, a fourth power on top of the ones I mentioned, one that tracks truth. This fourth power must have the ability to tell the difference between true and false beliefs that are equally adaptive. The naturalist, then is left with 4 options: 1) posit a fourth power that has the ability to tell the difference

[10] I am indebted to Chris Pearson and Joseph Matheson for emphasizing that beliefs do not get passed down to offsprings, it is faculties that get passed down.

between true and false beliefs that are equally adaptive, 2) discard Law's objection and come up with a different objection against the claim that P(R/N&E) is low, 3) raise an objection against one of the other premises in Plantinga's argument, or 4) admit that there is deep conflict between science and naturalism.

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