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NOTES & COMMENTS

Darwin's "horrid" doubt, in context

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Abstract Proponents of Alvin Plantinga's evolutionary argument against Naturalism (EAAN) often quote Charles Darwin's 3 July 1881 letter to William Graham to imply Darwin worried that his theory of evolution committed its adherents to some sort of global skepticism. This niggling epistemic worry has, therefore, been dubbed 'Darwin's Doubt'. But this gets Darwin wrong. After combing through Darwin's correspondence and autobiographical writings, the author maintains that Darwin only worried that evolution might cause us to doubt (a) particularly abstruse metaphysical and theological beliefs, and (b) beliefs arrived at by 'intuition' rather than evidence-based reasoning. He did not worry that unguided evolution should lead us to doubt all of our beliefs in the way Plantinga and others have implied that it does.

Keywords Alvin Plantinga · Charles Darwin · Darwin's doubt · Intuition · Metaphysical beliefs

1 Introduction

In 1993, Templeton prize-winning philosopher Alvin Plantinga published *Warrant and Proper Function*—the second instalment of his three-part book series on the epistemology of warrant. In its twelfth and final chapter, Plantinga made the (then) outlandish claim that belief in metaphysical Naturalism, combined with belief in

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contemporary evolutionary theory, was epistemically self-defeating. How so? Plantinga's defence of this claim comes in two steps.

First, Plantinga points out that, according to evolutionary theory, natural selection selects only for adaptive *behaviour*, not for true *beliefs*. For an illustration, consider the case of Paul—an early hominid. Natural selection 'wants', for example, for Paul not to get eaten by tigers. Or at least, not get eaten by tigers long enough to pass on his genes. Because of this, natural selection only 'cares' that Paul display certain tiger-avoidance behaviours. But the beliefs those behaviours are based on, if they're based on beliefs at all, needn't be true. For example, Paul might believe he is about to take part in a cross-country sprint and believes that the tiger is the starting signal. In this way, he could display adaptive, tiger-avoidance behaviour (i.e. running away from a very nasty tiger), while holding entirely false beliefs. This example is far-fetched, of course; but it goes to illustrate Plantinga's point—that there need not be any correlation between adaptive behaviour and having a preponderance of true beliefs. And since you'd probably need a preponderance of true beliefs to consider yourself cognitively reliable, Plantinga claims that, given the truth of evolution and the hypothesis that it has not been somehow guided towards the production of cognitively reliable humans, the probability of our cognitive faculties being reliable is low (or at least inscrutable, meaning that we don't know what the probability is).

Second, Plantinga argues that this fact gives the evolutionary naturalist an undercutting defeater for nearly all of her beliefs. And what is an undercutting defeater? It's a belief that, when adopted, gives the believer reason to disbelieve other beliefs of theirs on account of the source of those beliefs. For example, suppose I, wanting to know the time, look at the clock. The clock tells me that the time is twelve thirty. Consequently, I come to believe that the time is twelve thirty—clocks usually tell the time, and this clock tells me that the time is twelve thirty. But then, a trusted friend, whose religion prohibits him from lying, tells me that the clock in question is broken. At thirty minutes past midnight, some three months ago, the clock stopped ticking. So, assuming I'm a reasonable person, how should I change my beliefs in light of this new information? Well, assuming I have no reason to doubt my friend's testimony, I should give up my belief that the time is twelve thirty. Sure, the time *might* be twelve thirty. But I now no longer have any good reason to think it is. In the same way, argues Plantinga, the combination of belief in evolution and belief in Naturalism should cause the evolutionary naturalist to disbelieve the deliverances of her cognitive faculties. They might be true; they might be false. But the belief in evolutionary naturalism gives the evolutionary naturalist a reason to doubt the reliability of her cognitive faculties. Therefore, since all of her beliefs are produced by her cognitive faculties, she has reason to doubt nearly all of her beliefs. And since her beliefs include evolution and Naturalism, she should give up those beliefs, too. Thus, evolutionary naturalism is epistemically self-defeating. It shoots itself in the foot, so to speak.

Plantinga's argument has spawned an enormous body of literature, with philosophers of mind, evolutionary biologists, philosophers of biology, philosophers of religion, epistemologists, experts in probability and other such specialists debating the

merits and drawbacks of Plantinga's approach.[1] The implications of EAAN are enormous. Seeing as how nearly all naturalists accept some version of the theory of evolution, EAAN, if sound, threatens to render *all* of their worldviews self-defeating.

In order to back up his first claim (that the probability of our cognitive faculties being reliable, given Naturalism and evolution, is either low or inscrutable) Plantinga uses a three-pronged strategy of rational arguments, colourful analogies, and appeals to expert witnesses. Of this last category, by far the most surprising of these was Charles Darwin, from whom Plantinga digs up the following passage: "With me 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 anyone trust in the convictions of a monkey's mind, if there are any convictions in such a mind?" Existential stuff. And how does Plantinga interpret this passage? "Darwin…seem[s] to believe that (naturalistic) evolution gives one a reason to doubt that human cognitive faculties produce for the most part true or [sic] beliefs: call this 'Darwin's Doubt'" (Plantinga 1993, p. 219).

Why Plantinga decided to quote Darwin in support of his argument is obvious. It's a rhetorical slam-dunk. As Richard Allen Peters explains, "…he [Plantinga] could hardly have found a psychologically more effective means of inspiring analogous doubt in contemporary evolutionary naturalists; if even Darwin could admit evolutionary theory as a cause for self-doubt, then his followers should at least prepare to do the same" (Peters 2010, p. 14).

From the get-go, Plantinga's argument was met with a tsunami of critical pushback. So great was the potential threat of Plantinga's evolutionary argument against Naturalism (EAAN) to the naturalist project that there was hardly a naturalist in town who didn't want to take a crack at shooting it down. One such critic was Evan Fales. In a 1996 article, Fales argued, contra Plantinga, that given Neo-Darwinism we should expect our cognitive faculties to be generally reliable truth finders. In a footnote to Plantinga's use of the aforementioned Darwin quote, Fales points out that the context of the original letter "makes it quite clear that the kind of 'convictions' Darwin has in mind are general theoretical hunches supported by intuitions of some sort, rather than conclusions clearly reasoned from evidence" (Fales 1996, p. 437n6).

Plantinga has recognized this point, writing that "Evan Fales and Omar Mirza [another philosopher] have pointed out that Darwin probably had in mind, here, not everyday beliefs such as that the teapot is in the cupboard, but something more like religious and philosophical convictions". As well as Fales and Mirza, Eric Russert Kraemer has made much the same point, though in a good bit more detail than Fales's (Kraemer 2002).

Fales and Russert's contextualizations of 'Darwin's Doubt' are, however, crucially incomplete. Fales uses only the space of a single footnote to make his case,

[1] See, for example, James Beilby's (2002) volume, *Naturalism Defeated?: Essays on Plantinga's Evolutionary Argument Against Naturalism*, which includes Plantinga's exposition of the original argument, essays by eleven of the argument's critics, and then a section in which Plantinga responds to each of them in turn.

and only references Darwin's letter to Graham as an example of when 'Darwin's Doubt' occurs. Kraemer's is more in-depth; but though he looks at Darwin's correspondence with both Graham *and* T. H. Farrer, and also quotes at length from Darwin's *Autobiographies*, his analysis is very brief, little if any background information is offered, and he neglects to mention Darwin's correspondence with Asa Gray, which evidences that a not-yet-mature form of the "horrid doubt" had been in Darwin's mind at least since 1860. I am not, in any way, shape or form, throwing shade on either Fales's or Kraemer's papers. A historical examination of 'Darwin's Doubt' was neither of their intentions in the first place. Fales's is a critique of Plantinga's EAAN, and Kraemer's attempts to argue against Theism with a new twist on the age-old problem of suffering. This article contributes to the ever-growing literature on Plantinga's EAAN—a spanner in the wrench of modern evolutionary epistemology—by giving, at long last, a full corrective to a polemical misinterpretation of Darwin's views that is all but omnipresent in this particular body of literature.

I have done this source by source, going down in chronological order. All considered, I show that for Darwin, 'Darwin's Doubt' only threatened (a) abstruse metaphysical or theological beliefs, and (b) beliefs arrived at by means of intuition rather than those reasoned directly from arguments or evidence—not, as per EAAN, *all* beliefs.

2 Letter to Asa Gray: 22 May, 1860

It was in 1855 that Darwin first wrote to Asa Gray. It was a simple query about the list of Alphine plants included in Gray's *Manual of the Botany of the Northern United States*. Gradually, from the correspondence which developed thereafter, the content and focus of Darwin's questions to Gray began to reveal the evolutionary project to which he was dedicating himself. By 1857, Gray was one of the few friendly correspondents privy to the ground-breaking ideas which, in 1857, would be published in the *Origin of Species*.[2]

Sympathetic to Darwin's theory, he was eager to help Darwin to get the *Origin* published for the American market. First, Gray went to negotiate with a Boston publishing house, Ticknor and Fields, where he already had some connections. But Gray didn't pursue this course of action for very long. Pirated copies of *Origin*—from D. Appleton's & Company, another publishing house—were already being sold in Bookstores all across New York. So Gray stopped his negotiations with Ticknor and Fields and began negotiations with Appleton's instead. And they agreed, in exchange for a legitimate contract and Darwin's written endorsement, to stock the shelves of America's bookstores with 2,500 copies of *Origin*, which they did in May of 1860.

As his share of *Origin*'s initial profits, Gray mailed Darwin a cheque for £21. Darwin's 22 May reply—the letter of interest here—opens by thanking Gray for this "very pleasant remittance" (Darwin Correspondence Project 2814). Emphasising his

[2] For an in-depth summary and analysis of the Darwin/Gray correspondence, see Browne (2010).

astonishment at "all the kind trouble you [Gray] have taken for me", he asks that Gray pass on his thanks to Appleton's for all their "generosity". Noting his surprise at how well *Origin* is selling (both in England and America), Darwin turns to reflect on the feedback from the most recent letters and reviews he had been receiving.

And many of his critics were saying the same thing. That the *Origin* was too atheistic by half. "I am bewildered", he told Gray. "I had no intention to write atheistically". But Darwin was ready to admit that he wasn't much of a theist, either. "There seems to me too much misery in the world", he explains. Specifically, he was thinking about the problem of animal suffering. "I cannot persuade myself that a beneficent and omnipotent God would have designedly created the Ichneumonidæ with the express intention of their feeding within the living bodies of Caterpillars, or that a cat should play with mice". Darwin admits, however, that he is "inclined to look at everything as resulting from designed laws". Caught between these two warring inclinations, Darwin ends up playing the agnostic card: "I feel most deeply that the whole subject is too profound for the human intellect. A dog might as well speculate on the mind of Newton. Let each man hope & believe what he can".

To be clear, Darwin is not, in his comparison of man with dog, meaning to imply that the natural, human inclination towards spirituality is a sign of humanity's unintelligence. Quite the contrary. In the *Descent of Man*, Darwin wrote that.

> The feeling of religious devotion is a highly complex one, consisting of love, complete submission to an exalted and mysterious superior, a strong sense of dependence, fear, reverence, gratitude, hope for the future, and perhaps other elements. No being could experience so complex an emotion until advanced in his intellectual and moral faculties to at least a moderately high level" (Darwin 1906, 146)

Humanity's propensity to want to grapple with unseen spiritual agency isn't a sign of intellectual weakness; it's a sign of intellectual strength. Nevertheless, just as in the letter to Gray, Darwin follows this passage in the *Descent of Man* with yet another comparison between the mind of man, and the mind of dog: "Nevertheless, we see some distant approach to this state of mind [i.e. religious devotion] in the deep love of a dog for his master, associated with complete submission, some fear, and perhaps some other feelings…. Professor [Wilhelm] Braubach goes so far as to maintain that a dog looks on his master as on a god" (ibid.). Darwin is saying that the human capacity for religion is foreshadowed by other, less cognitively advanced animals (like dogs, for example). Not that religious devotion is somehow an intellectual deficiency.[3]

So what *is* Darwin suggesting in his letter to Gray? He is suggesting that certain theological matters are just as incomprehensible to the human intellect as Newtonian physics is to the canine intellect. Perhaps they may be dimly apprehended, but never fully comprehended. Here, Darwin's cross-species analogy is telling. Just as the mind of a dog, which arose by evolution, has not been equipped by natural

[3] For an exploration of Darwin's analogies between humans and dogs, see Chidester (2009), and for a good summary of Darwin's psychology of religion, see Bradley (2020, p. 281).

selection to handle certain abstruse, higher order abstractions—case in point: Newtonian physics—so too have human minds, which arose in much the same way, been left unequipped to handle other, more advanced, higher order abstractions—case in point: the God question.

3 Autobiographies

In the Spring and Summer of 1876, Darwin began jotting down some autobiographical reflections and anecdotes. Once completed, they would eventually be published as his *Autobiographies*. Not that he wanted them to be published, of course. His short and unevenly dispersed autobiographical reflections, which would be heavily edited and censored by his immediate family, were meant for their eyes, and their eyes only. But they were, eventually, released to the public, giving the rest of us a window into Darwin's private thoughts and recollections.

In the section on religious belief, Darwin recounts the gradual lessening of his religious conviction over the course of his life. He recalls that even when he was on the voyage of the Beagle being ridiculed by his shipmates for "quoting the Bible as an unanswerable authority on some point of morality" (Barlow 1958, p. 85), he was forming doubts about the reliability of the Old Testament, both as a source of historical facts and of moral wisdom. From then on out, Darwin continued to spot seemingly insurmountable difficulties for the intellectually sincere believer, from "the suffering of millions of the lower animals throughout almost endless time" (90) to the untrustworthiness of miracle claims in the New Testament. Darwin was particularly disturbed by the Christian notion of eternal conscious torment (Hell) for "the men who do not believe". That, Darwin notes, would include his father, his brother, and almost all of his best friends. "And this", writes Darwin, "is a damnable doctrine" (87).

Darwin also, in this chapter, considers the various arguments for the existence of God. Some of the arguments, like Paley's argument from design or arguments from religious experience, he has very little truck with. One argument Darwin does feel drawn to, however, "follows from the extreme difficulty or rather impossibility of conceiving this immense and wonderful universe, including man with his capacity of looking far backwards and far into futurity, as the result of blind chance or necessity" (92). Reflecting on this, Darwin reports feeling "compelled to look to a First Cause having an intelligent mind in some degree analogous to that of man; and I deserve to be called a Theist" (92–93). But though this sort of reasoning attracts Darwin, he isn't fully swung by it, and becomes even less so as time goes on. "This conclusion was strong in my mind about the time, as far I can remember, when I wrote the *Origin of Species*; and it is since that time that is has very gradually with many fluctuations become weaker" (93).

In the end though, Darwin isn't fully swayed by Theism or by Atheism, choosing to suspend judgement as an agnostic. Why? Because, according to Darwin, humans might simply not be cognitively equipped to answer questions relating to God and his existence. Might not many of our metaphysical notions arise not from reliable reasoning, but from inherited experience? Might not belief in God, for many of us

anyway, be a belief so impressed upon us in childhood that it is as impossible to shake off as it is for a monkey to shake of its fear of snakes?[4] And it is here, among these wonderings, that 'Darwin's Doubt' crops up once again: "But then arises the doubt—can the mind of man, which has, as I fully believe, been developed from a mind as low as that possessed by the lowest animal, be trusted when it draws such grand conclusions?" (93).

By "grand conclusions", of course, Darwin doesn't mean just any old conclusions. He isn't thinking of banal conclusions like 'I had a batch of waffles for breakfast this morning'. He doesn't even appear to mean "grand conclusions" like 'humans came about by evolution'. Here, in this passage, 'Darwin's Doubt' is directed only to questions relating to God and his existence.

4 Letter to William Graham: 3 July, 1881

In November of 1864, the first meeting of the X-club was convened. Founded by T. H. Huxley (AKA "Darwin's bulldog"), the X-club was a private dining club consisting of, other than Huxley, eight great men: palaeontologist and zoologist Georg Busk, chemist Edward Frankland, geometer Thomas Archer Hirst, explorer and botanist Joseph Dalton Hooker, Liberal politician and anthropologist John Lubbock, philosopher of evolution Herbert Spencer, mathematician and physicist William Spottiswoode, and physicist John Tyndall. What united these sharp minds was not only a devotion to science in general, but a devotion to the emerging Victorian philosophical creed of scientific naturalism. Fortified by the findings of Darwin, and vocally defended by members of the X-club, scientific naturalism held that science, without reference to supernatural entities or religious dogmas, was to be the premier mode of human inquiry.

This new, sceptical creed, which was undergirded by a tripartite cosmology of the atomic theory of matter, the conservation of energy, and evolution (Turner 1974, pp. 9–35), was not without sceptics of its own. And William Graham was one of them. A philosopher, political economist, and lecturer of mathematics at St Bartholomew's Hospital, he published, in 1881, *The Creed of Science: Religious, Moral, and Social*—the most comprehensive treatment of the new-fangled scientific naturalism in print at the time.

Graham was no science denier. When scientists converged on a theory, he tended to take their word for it. But he resented the attempts of scientists who overstepped the bounds of their disciplines—like those who would try to extract a social philosophy from the workings of natural selection. He also resisted their elitist tendencies;

[4] The comparison of sincerely held religious belief to the primal instincts of monkeys and snakes was particularly distressing to Emma Darwin, Charles's wife. In a letter to her son Francis, Emma writes: "There is one sentence in the Autobiography which I very much wish to omit, no doubt partly because your father's opinion that *all* morality has grown up by evolution is painful to me; but also because where this sentence comes in, it gives one a sort of shock—and would give an opening to say, however unjustly, that he considered all spiritual beliefs no higher than hereditary aversions or likings, such as the fear of monkeys towards snakes." (Barlow 1958, 93n2).

if scientific debates were to be had, they should be had not only among the educated elite, but had in the public square too, communicated in such a way as to be accessible to the intelligent lay-reader. The subtleties of Graham's arguments, though they won't be discussed here, were much discussed by the growing community of scientific naturalists to whom the book was addressed. Since Darwinism was central to the new 'scientific worldview', it's not surprising that Darwin read Graham's book with great interest.

When Darwin sent Graham a letter full his thoughts on the *Creed of Science* on 3 July 1881, he had not yet read the book in its entirety. ("[N]ow that I am old I read very slowly", he told Graham [Darwin Correspondence Project 13230]). Nevertheless, Darwin found it to be "admirably written", and thanked Graham "heartily" for the pleasure reading it had given him. "It is a long time since any other book has interested me so much", Darwin wrote.

But Darwin wasn't entirely persuaded by Graham's book. The "chief" disagreement Darwin had was with Graham's assertion "that the existence of so-called natural laws implies purpose". ("In fact", Graham had argued in the *Creed of Science*, "wherever Science discovers the reign of law, whether in physical, physiological, or social phenomena, there too reigns purpose" [Graham 1884, p. 43]). This was a pill that Darwin couldn't swallow. "I cannot see this", he told Graham. "Would there be purpose if the lowest organisms alone destitute of consciousness existed in the moon?" (Darwin Correspondence Project 1320).

But Darwin didn't disagree with everything the *Creed of Science* had to say. "Nevertheless", he told Graham, "you have expressed my inward conviction, though far more vividly and clearly than I could have done, that the Universe is not the result of chance". In other words, while Darwin didn't think that Graham had established the existence of objective purpose, he had nonetheless given a strong case against the view that the universe, in all its majesty, had arisen by way of chance. But, despite this, 'Darwin's Doubt' still lingered on:

> But then with me 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?

This is the most rhetorically powerful exposition of 'Darwin's Doubt' in all of Darwin's writings. It is also, read in isolation, a little vague. Is it just any old conviction produced by man's mind which is cast into doubt? Or is it only a certain type of conviction? Stripped of its context, the passage doesn't answer that question. But, when read along with the rest of the letter, it seems to suggest that certain "convictions", in particular, those arrived at by intuitions of the human mind rather than rational argument or empirical evidence, simply cannot be relied upon as trustworthy.

Graham's reply to Darwin is of interest too. Like most readers, Graham could not fail to feel the force of Darwin's words. But on an intellectual level, Graham wasn't all too impressed. "I utterly fail to perceive the force of such an argument", he told

Darwin.[5] Though Graham claimed to be aware of arguments, like the one Darwin had suggested, against the reliability of human intuition, he couldn't see those sorts of arguments being bolstered by the fact of man's evolutionary origins. Most importantly, as far as Graham was concerned, the theory of evolution threw no suspicion on man's more advanced facilities of cognition – in particular, his faculties of reason and data collection.

5 Letter to T. H. Farrer: 28 August, 1881

Darwin wasn't the only sharp mind who found the *Creed of Science* interesting. Thomas Henry Farrer, an English civil servant and statistician, also had some thoughts on the book of his own. Farrer wrote to Darwin in late August, telling him that he'd just "read Grahams book with very great interest" (Darwin Correspondence Project, 298). Though Farrer found the *Creed of Science* to be "very valuable as a protest against dogmatism scientific, agnostic or otherwise", he felt that Graham had quite unfairly portrayed Darwinism as being a complete cosmology, which explained not just the existence of biological complexity, but everything else too. Farrer was also uncomfortable with Graham's use of "chance" in connection with evolution. "No thinking man in these days conceives of "Chance" as anything but a name for our ignorance".

Darwin got back to Farrer sharpish, telling him how glad he was that he too (Farrer) had enjoyed Graham's book. Darwin broadly agrees with the assumptions behind Farrer's critiques, finding Graham's implication that evolution is a cosmology to be a "monstrous exaggeration", and agreeing entirely with Farrer's conception of "chance" (Darwin Correspondence Project, 299). That said, Darwin makes a small caveat, charitably pointing out that Graham was probably using "Chance" correctly, in the same way that Darwin himself used it in his own work.

Then, Darwin conveys to Farrer the same tangle of speculations he conveyed to Graham in April. He wrote, again, that it is almost incomprehensible to conceive of the universe as an outcome of chance, existing without design or purpose. But, again, he follows this up by complaining that "The whole question seems to me insoluble":

> for I cannot put much or any faith in the so-called intuitions of the human mind, which has been developed, as I cannot doubt, from such a mind as animals possess; & what would their convictions or intuitions be worth?— There are a good many points, on which I cannot quite follow Mr. Graham.

What should be noted here is that Darwin's Doubt simply *cannot* be understood as applying to everything. The reason why Darwin couldn't put much or any faith in the

[5] The text of this letter was kindly made available to me by the Darwin Correspondence Project. As of yet, this letter hasn't been published, digitally or in print, by the Darwin Correspondence Project. The Darwin Correspondence Project is under no circumstances responsible for any errors still remaining in the transcription.

so-called intuitions of the human mind was because it developed from such minds as animals possess—a proposition which, Darwin tells Farrer, he *cannot* doubt.[6] If Darwin had meant to say that evolution implied some sort of radical global skepticism, then the above passage would have been flagrantly self-contradictory. On the one hand, Darwin would have been affirming that he could not doubt evolution, and, on the other, would have been affirming that evolution caused him to doubt everything he believed—including evolution. To read Darwin's Doubt in such a way would be unnatural and uncharitable in equal measures.

6 Conclusion

As we have seen, 'Darwin's Doubt', in Darwin's mind, only threatened the reliability of human cognition in dependably arriving at particular kinds of true beliefs. Namely, beliefs arrived at by intuition in the absence of evidence, and particularly abstruse metaphysical or theological beliefs. Those sorts of beliefs aside, Darwin didn't doubt the general reliability of human cognitive faculties in producing, say, true *scientific* beliefs. And since science depends upon cognitive faculties such as perception and memory, Darwin likely didn't doubt the general reliability of those faculties, either. Thus, when read in context, Darwin's Doubt does not lend support to EAAN in the way many of its proponents have claimed that it does.[7]

[6] "[C]an we doubt", Darwin wrote in the *Origin*, "…that individuals having any advantage, however slight, over others, would have the best chance of surviving and of procreating their kind?" (Darwin 2008, p. 63). Clearly, the answer to this rhetorical question is meant to be a hard 'no'.

[7] This is not meant to be a dig at Plantinga's argument. Indeed, I find it quite persuasive. Whether or not Darwin's half-baked philosophical views lend credence to EAAN is immaterial. EAAN should be judged on its own merits, regardless of what Darwin might or might not have thought.

Funnily enough though, there has been a move in recent years to reformulate EAAN so that it calls into question *only* the reliability of human cognitive faculties in the production of abstruse, metaphysical beliefs—similar to 'Darwin's Doubt' as Darwin himself understood it. For example, Tyler McNabb argued in a 2015 paper that Plantinga's EAAN could be made impervious to certain types of objections by narrowing the scope of the argument so that it only targets metaphysical beliefs (McNabb 2015).

Later, in 2016, when Naturalism got its own *Blackwell* Companion, one of the contributors, Thomas M. Crisp, took a fairly similar tack to McNabb (Crisp 2016). Crisp's approach starts by pointing out that abstruse metaphysical beliefs (e.g. string theory, relativity, Naturalism, etc.…) are produced by abstract, abductive reasoning. But, argues Crisp, given naturalism, this cognitive capacity was likely retained because it was adaptive for humans living in the Pleistocene era—an era in which beliefs about things like string theory, relativity, and naturalism couldn't have been less relevant to human survival. Given this, we have reason to doubt that our cognitive faculties are reliable at forming true metaphysical beliefs, and we should therefore judge the probability of our cognitive faculties having evolved naturalistically to give us reliable metaphysical-belief-forming capacities as being inscrutable (meaning we don't know what it is). In an on-camera interview with YouTube apologist Cameron Bertuzzi, McNabb admits to preferring Crisp's approach over his own (Capturing Christianity 2017).

(My anonymous peer-reviewer pointed out to me, quite rightly, that another modern-day analogue to this kind of skepticism about abstruse metaphysical beliefs is Mysterianism—the position that human minds are cognitively unequipped to solve the hard problem of consciousness [see McGinn 1989]).

Compliance with ethical standards

Conflicts of interest The author declares no conflicts of interest.

Ethics approval My permission form for the use of DCP-LETT-13268 is hyperlinked here: Use of Project materials (002).doc.

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Consent for participation I consent to participation.

Consent for publication I consent to the publication of this manuscript in *History and Philosophy of the Life Sciences*.

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