

UNIVERSITY PRESS

ORIGINAL ARTICLE

Calum Miller's attempted refutation of Michael Tooley's evidential argument from evil

Michael Tooley 💿

Department of Philosophy, University of Colorado at Boulder, Boulder, CO 80309, USA Email: Michael.Tooley.7@gmail.com

(Received 13 January 2022; revised 14 July 2022; accepted 15 July 2022)

Abstract

In his article, 'What's Wrong with Tooley's Argument from Evil?', Calum Miller's goal was to show that the evidential argument from evil that I have advanced is unsound, and in support of that claim, Miller set out three main objections. First, he argued that I had failed to recognize that the actual occurrence of an event can by itself, at least in principle, constitute good evidence that it was not morally wrong for God to allow events of the kind in question.

Miller's second objection was then that, in attempting to show that it is unlikely that God exists, I had failed to consider either positive arguments in support of the existence of God or possible theodicies, and thus that I was unjustified in drawing any conclusions concerning the probability that theism is true in the light of the *total* evidence available.

Miller's third and final objection was that one of the approaches to logical probability that I employed – namely, that based upon a structure-description equiprobability principle, rather than a state-description equiprobability principle – was unsound since it has clearly unacceptable implications.

In response, I argue that all three of Miller's objections are unsound. The third objection, however, is nevertheless important since it shows that my type of argument from evil cannot be based merely on the evils found in the world. One must also consider good states of affairs, and their relations to bad ones. I show, however, that that deficiency can be addressed in a completely satisfactory manner.

Keywords: evil; evidential; argument; probability; God

Introduction

In his article 'What's Wrong with Tooley's Argument from Evil?', Calum Miller's goal was to show that my equiprobability-based evidential argument from evil is unsound, and to support that conclusion, Miller offered three main arguments. In the first, he argued that I failed to recognize that the actual occurrence of an event can itself, at least in principle, constitute good evidence that it was not morally wrong for God to allow events of the kind in question.

Miller's second objection was that in arguing that it is unlikely that God exists, I failed to consider either positive support for the existence of God or possible theologies, and thus that I was unjustified in drawing any conclusion concerning the probability that theism is true in the light of the *total* evidence available.

© The Author(s), 2022. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

2 Michael Tooley

Miller's third and final objection was that the structure-description equiprobability approach that I employed in arriving at probabilities leads to unacceptable consequences.

I shall argue that none of Miller's three objections are successful.

Evidential arguments from evil

Current evidential arguments from evil are of at least two main types. First, there are arguments inspired by the following passage in David Hume's *Dialogues Concerning Natural Religion*:

There may *four* hypotheses be framed concerning the first causes of the universe: *that* they are endowed with perfect goodness; *that* they have perfect malice; *that* they are opposite and have both goodness and malice; *that* they have neither goodness nor malice. Mixed phenomena can never prove the two former unmixed principles; and the uniformity and steadiness of general laws seem to oppose the third. The fourth, therefore, seems by far the most probable. (Hume 1779/1993, 114)

The key idea in Humean-inspired arguments from evil is that one can show that theism is unlikely to be true by arguing that some alternative hypothesis, logically incompatible with theism, is more probable than theism.

The first such Humean-inspired argument was developed by Paul Draper (1989), and involved comparing theism with the following 'Hypothesis of Indifference' (Draper 1989, 332/1996, 13):

HI: neither the nature nor the condition of sentient beings on earth is the result of benevolent or malevolent actions performed by nonhuman persons.

Draper subsequently developed and defended this type of argument further in later articles (2008, 2009, 2013, 2014a, and 2014b). Then, more recently, Wes Morriston (2014) constructed an alternative Humean-inspired argument in which he considered three hypotheses, all of which postulate the existence of an omnipotent and omniscient being, who is either (1) perfectly benevolent (theism), or (2) perfectly malevolent (demonism), or else (3) perfectly indifferent to good and evil, and Morriston asks, 'How do these hypotheses fare when we consider the 'mixed phenomena' of good and ill in our world?' (2014, 225) Morriston then argues, first, that his indifference hypothesis is more probable than both theism and demonism, and second, that skeptical demonism fails to undermine his Humean argument against demonism, and that, for similar reasons, sceptical theism fails to undermine his Humean argument against theism.

A different kind of evidential argument from evil, which I have set out on three occasions (Tooley and Plantinga 2008, Tooley 2012, and Tooley 2019), uses a substantive theory of inductive logic or logical probability to formulate an argument that, unlike Humean-inspired arguments from evil, involves no comparison with any specific hypotheses, neither ones involving some personal cause of the universe, nor purely naturalistic ones. Instead, equiprobability principles are used to derive an upper bound on the probability that God exists given the evils found in the world – a probability that depends on how many evils there are, but which is extremely low indeed.

Equiprobability-based evidential argument from evil

This second type of argument has the following structure. First of all, let E be a single event that, given only its known rightmaking and wrongmaking properties, would be morally

wrong to allow. It follows that the probability, given only that information, that it would be morally permissible to allow E to occur, given *the totality* of its rightmaking and wrongmaking properties, both known *and unknown*, must be less than $\frac{1}{2}$. Secondly, given N events, each of which, judged only by its known rightmaking and wrongmaking properties, would be morally wrong to allow, the probability, given only that information, that *none* of those N events would be morally wrong to allow, given the *totality* of its rightmaking and wrongmaking properties, both known and unknown, is of the order of 1/(N+1)

There is, then, an upper bound on the probability that God exists, given the evils found in the world. That upper bound, moreover, is extremely low, since of the billions of persons and sentient non-persons that have existed, the proportion that have *never* suffered seriously in ways where the known wrongmaking properties of allowing that suffering outweigh the known rightmaking properties is surely very small. Accordingly, N must be extremely large, and thus the probability 1/(N + 1) of there being an omnipotent, omniscient, and perfectly good person must be very low indeed, relative to the evidence in question.

Calum Miller's first two objections: an overview

In his 'Introduction', Miller briefly describes the first two objections that he will advance against that type of argument:

Here, I offer a detailed critique of Tooley's argument. I offer some improvements to the argument, as well as some reasons to think that the argument is more fundamentally mistaken. In particular, Tooley's first argument that the probability of any given prima facie evil being ultima facie evil is greater than 0.5 fails to consider all the relevant evidence. I will argue that the fact that an event has happened can, at least in principle, be good evidence that the permission of that event by God is morally permissible. More importantly, the extent to which the occurrence of a prima facie evil state of affairs confirms or disconfirms the thesis that the permission of that state of affairs would be morally permissible by God depends crucially on the probability of theism given all the other evidence we have. Unless Tooley has some other argument to demonstrate that theism is sufficiently improbable given the rest of our evidence, then his argument does not succeed in establishing the overall improbability of theism. (Miller 2021, 209–210)

Miller's first objection is thus that I have failed to recognize that 'the fact that an event has happened can, at least in principle, be good evidence that the permission of that event by God is morally permissible'. His second objection is that I have also failed to consider 'the probability of theism given all the other evidence we have'. (*ibid.*, 209–210)

Neither objection, I shall argue, is sound. As regards the first, I shall show that the logical form of the propositions involved in my argument – namely, that they involve either names or definite descriptions of *actual* events – itself entails that the occurrence of an event cannot, *on its own*, alter the probability that allowing the event in question is morally permissible.

I shall also argue, however, that the latter is the case *independently* of my argument, and that the contrary view arises because one is implicitly expanding the relevant evidence to include positive arguments for the existence of God.

The upshot is that the mere 'fact that an event has happened' cannot alter the probability that God's permitting the event in question is morally permissible: that requires, instead, the conjunction of the proposition that the event has happened together with a proposition asserting that there are good arguments for the existence of God. But I would certainly not question the claim that that *conjunction* can alter the relevant probability. Miller's first objection has, therefore, no force against my argument.

Miller's second objection is that 'the extent to which the occurrence of a prima facie evil state of affairs confirms or disconfirms the thesis that the permission of that state of affairs would be morally permissible by God depends crucially on the probability of theism given all the other evidence we have'. (*ibid.*, 210) In response, I shall show that it is not true that, in my argument from evil *as a whole*, I have failed to consider relevant evidence bearing upon the probability that God exists.

The unsoundness of Miller's first objection

Let us now consider how Miller develops his first objection. First of all, he refers in his argument to the following proposition:

(2) For any action whatever, the logical probability that that action is morally wrong, all things considered, given that the action has a WMP that we know of, and that there are no RMPs that are known to be counterbalancing, is greater than one half. (*ibid.*, 212)

- where 'WMP' is short for 'wrongmaking property', and 'RMP' is short for 'rightmaking property'.

Miller's discussion begins as follows:

A more serious problem

This leads us to the most fatal problem of Tooley's argument from single cases. The issue is not, in fact, with his argument from premise (2) That is fine as far as it goes. Conceive of an action that it seems it would be wrong for God to permit – perhaps, permitting every created human to suffer eternal conscious torment. Most of us would confidently agree that it is likely that this is impermissible. And if someone objected that there might be unknown RMPs outweighing the prima facie wrongness of this action, we would respond that there might well be, but the likelihood is still that the action is impermissible. So to that extent Tooley's suggestions pertaining to the equiprobability of similarly weighted unknown RMPs and WMPs are not particularly objectionable. The problem, however, is that Tooley does not just say that, in the absence of such an event occurring, we should judge that prima facie evils are ultima facie evils. His argument seems to require that we must say the same once such an event has actually occurred. (*ibid.*, 216–217)

What is one to say about this? First of all, the argument from evil in question focuses upon *an actual event*: the Lisbon earthquake – call it L – and it involves two propositions, which can be put as follows:

p: The *known* rightmaking and wrongmaking properties of allowing L are such that those known wrongmaking properties outweigh the known rightmaking properties.

q: The weight of all the wrongmaking properties of allowing L, *both known and unknown*, taken together, is greater than that of all of the rightmaking properties of allowing L, *both known and unknown*, taken together.

I then offered a proof that the probability of q given p is greater than 0.5, and, in response, not only does Miller not object to any of the calculations involved in the proof, he also says that 'Tooley's suggestions pertaining to the equiprobability of similarly weighted unknown RMPs and WMPs are not particularly objectionable' (*ibid.*), where it is

precisely the equiprobability principles in question that are at the heart of the proof, and that lead to the conclusion stated in proposition (2) above.

Second, given that the term 'L' in proposition p is a definite description referring to an actual event – the Lisbon earthquake – proposition p trivially entails the following proposition:

r: Event L is an event that actually occurred.

But if p entails r, then p is logically equivalent to (p & r), and this entails:

s: The probability of q given (p and r) = the probability of q given p.

So adding the proposition that the Lisbon earthquake actually occurred cannot, contrary to what Miller claims, affect the probability in question.

The upshot is that the *logical form* of proposition p itself – the fact that it contains a definite description referring to an actual event – shows that Miller's claim, namely, that adding to proposition p the proposition that the event in question actually occurred can change the probability that q is the case, cannot possibly be true.

What is the source of Miller's mistaken view?

What is one to make, then, of Miller's contention that learning that a certain type of event is actual – such as a 'Lisbon earthquake' *type* of event – can make a difference to the probability that the weight of all of the wrongmaking properties of allowing such an event, *both known and unknown*, taken together, is greater than the weight of all of the rightmaking properties of allowing such an event, *both known or unknown*, taken together? Clearly, Miller must be thinking in terms of a quite different type of argument from my evidential argument – apparently, some sort of argument in which one focuses upon *the mere possibility* of a certain type of event, so that it is left open whether that type event has ever occurred or ever will occur, and what Miller is claiming is that the probability that God would permit an event *of that kind* – for example, *a* 'Lisbon earthquake' type of event – depends on whether there has been an actual event of that kind.

Let us explore, then, that issue, starting with the following probabilistic statement of the relevant sort, and one that seems promising, since it is a statement that comes out true given my equiprobability-principle-based approach:

(1) P(It would not be wrong for God to allow an event of the 'Lisbon earthquake' sort) is less than 0.5.

Consider now whether things might change if one learned that there is an actual event of the 'Lisbon earthquake' sort. To do that, one needs to consider the corresponding posterior probability statement, which is also true given my equiprobability-principle-based argument from evil:

(2) P(It would not be wrong for God to allow an event of the 'Lisbon earthquake' sort/ There is an actual event of the 'Lisbon earthquake' sort) is less than 0.5.

But then, given that Miller holds that 'the fact that an event has happened can, at least in principle, be good evidence that the permission of that event by God is morally permissible' (Miller 2021, 210), and given that God would allow an event of the 'Lisbon earthquake' sort only if doing so were morally permissible, it would seem that Miller must hold that (2) does *not* follow from (1), and thus that (2) might very well be false even though (1) is true.

Why might someone think this? Consider a person who thinks the ontological argument is sound. Then that person, in thinking that they are considering (2), might

unconsciously be importing the proposition that the ontological argument is sound, and thus really be considering instead:

(3) P(It would not be wrong for God to allow an event of the 'Lisbon earthquake' sort/ (There is an actual event of the 'Lisbon earthquake' sort *and* the ontological argument is sound)) is less than 0.5.

Proposition (3), of course, is clearly false, since the conjunction (There is an actual event of the 'Lisbon earthquake' sort *and* the ontological argument is sound) entails that God *allowed* an event of the 'Lisbon earthquake' sort, so that rather than (3) being true, one has instead

(4) P(It would not be wrong for God to allow an event of the 'Lisbon earthquake' sort/ (There is an actual event of the 'Lisbon earthquake' sort *and* the ontological argument is sound)) is equal to 1.

Notice, in addition, that if one shifts from the a priori probability statement (1) to the following, related, a posteriori probability statement (5) involving the proposition that the ontological argument is sound:

(5) P(It would not be wrong for God to allow an event of the 'Lisbon earthquake' sort/ The ontological argument is sound) is less than 0.5.

one has a proposition that, like proposition (1), is true.

The upshot is that someone who thought that the ontological argument was sound might, in thinking that they were considering propositions (1) and (2), both of which are true, actually be considering propositions (5) and (3) respectively, and then, since (5) is true, while (3) is false, would mistakenly conclude that while proposition (1) is true, proposition (2) is false.

I have put things in terms of someone who thinks that the ontological argument is sound to simplify the discussion, but the point is a perfectly general one. As long as one thinks that there is *some argument or other* for the existence of God that raises the probability that God exists above its a priori probability, the acceptance of that view may very well result in one's wrongly concluding, as Miller does, that the mere occurrence, *on its own, and not conjoined with any argument in support of the existence of God*, of an event of the type in question – such as a Lisbon earthquake type of event – makes a difference to the probability of its being wrong for God to allow such an event. It is thus only when one unconsciously adds on a proposition to the effect that there is some sound argument in support of the type in question is altered, with how great a difference it makes depending upon the strength of the support that the positive argument in question provides for the proposition that God exists.

Miller's second objection

Let us turn, then, to Miller's second objection, which he describes at the very beginning of his article:

More importantly, the extent to which the occurrence of a prima facie evil state of affairs confirms or disconfirms the thesis that the permission of that state of affairs would be morally permissible by God depends crucially on the probability of theism

given all the other evidence we have. Unless Tooley has some other argument to demonstrate that theism is sufficiently improbable given the rest of our evidence, then his argument does not succeed in establishing the overall improbability of theism. (Miller 2021, 210)

Let *p* now be the proposition that there are N events, each of which, judged simply by its *known* rightmaking and wrongmaking properties, it would be morally wrong to allow. It follows from my argument that the probability that God exists, given only proposition *p*, is of the order of 1/(N + 1), whereas given some sound theistic argument A, the probability that God exists – call it *k* – might instead be very high indeed, and, in any case, certainly *much* greater than 1/(N + 1). But then, surely it is reasonable to believe that the probability that God exists, given both proposition *p* and argument A, will presumably lie between *k* and 1/(N + 1), and could very well be greater than one half.

Moreover, as Alvin Plantinga and other philosophers have maintained (Walls & Dougherty 2018), there are *many* arguments for the existence of God, and as more and more of these are taken into account, surely the probability that God exists will increase, moving further and further away from the value 1/(N + 1), thereby making it ever more plausible that the probability that God exists is ultimately greater than one half, thereby entailing that atheism is not an acceptable view.

Before addressing this argument, however, one should also note another, very closely related point that Miller makes, one that arises in connection with the following, *initial premise* in my argument:

(1) Any action of choosing not to prevent the Lisbon earthquake has a known WMP such that there are no RMPs that are known to be counterbalancing' (Miller 2021, 210)

In discussing this premise later, Miller says,

Note, therefore, that Tooley does not give a detailed defence of premise (1) – conceded by this variety of sceptical theist – that any action of choosing not to prevent the Lisbon earthquake has a known WMP such that there are no RMPs known to be counterbalancing.⁷ Of this premise, Tooley writes:

[This statement] makes a claim that would be challenged by philosophers who respond to the evidential argument from evil by offering a theodicy. Nevertheless, the claim seems very reasonable, given the relevant facts about the world, together with the moral knowledge that we possess. For what rightmaking properties can one point to that one has good reason to believe would be present in the case of an action of allowing the Lisbon earth-quake, and that would be sufficiently serious to counterbalance the wrong-making property of allowing more than 50,000 ordinary people to be killed? (Tooley and Plantinga 2008, 122)

This relatively cursory dismissal of theodicies will be seen as deeply unsatisfactory by many philosophers, and is a relatively conspicuous shortcoming of Tooley's argument. There are many intelligent, educated people who are sincerely persuaded that they are aware of some reason which justifies the suffering in the world. One might think that the goods of free will, forgiveness, or redemption are all such important goods that, were they to be instantiated, would outweigh the wrongmaking properties of the action of allowing the negative corollaries of such goods to obtain. It is not obvious that these

8 Michael Tooley

goods are justifying, but Tooley has not demonstrated that they are not. Importantly, Tooley needs this premise to be certain for his argument to work. (Miller 2021, 213–214)

Miller's second objection is thus that there are two types of relevant considerations that I have either ignored or failed to address in anything like a satisfactory way: first of all, positive arguments in support of the existence of God, and second, possible theodicies that, if sound, show that what initially appear to be *prima facie* evils turn out to have counterbalancing rightmaking properties.

As we shall see shortly, neither charge is justified, and Miller's second objection is therefore unsatisfactory. Before turning to that, however, let us consider what conclusion Miller thinks one should draw, and the scope of that conclusion.

The conclusion Miller draws from his second objection

What conclusion should be drawn given Miller's contention that I fail to consider either positive arguments for the existence of God or the probabilities of the many theodicies that have been advanced? If one considers Miller's extended formal discussion on pages 216–221, it is evident that his view is that a *much more complicated probabilistic* argument is needed than what I offered.

Thus, for example, in formulating 'a simple Bayesian argument' (Miller 2021, 221) that someone might propose in attempting to rescue my argument, Miller discusses the following equation, where 'T' is short for 'theism', 'L' for 'The Lisbon earthquake occurred', and 'W' for 'It would be wrong for God to permit a Lisbon earthquake' (*ibid.*, 217):

$$\frac{P(T|L)}{P(\sim T|L)} = \frac{P(L|T)}{P(L|\sim T)} \times \frac{P(T)}{P(\sim T)}$$

As this equation illustrates, Miller thinks that one needs a probabilistic argument incorporating such things as the a priori probability P(T) that theism is true – something that my probabilistic argument certainly fails to provide. Moreover, as the following passage makes clear, Miller thinks that doing that alone will not be sufficient, since one will also need to consider 'independent evidence' for the existence of God:

The best case scenario, in the absence of a discussion of prior probability and independent evidence, is that L supports atheism to some extent. But many theists already grant this premise, and it is not typically thought to deal theism a mortal wound. So a simple Bayesian reconstruction of Tooley's argument suggests that it is not powerful. (*ibid.*, 221)

Miller's contention, then, is that at the very least, my type of probabilistic argument will need to incorporate values for the posterior probabilities that theism has given *each* of the many arguments for the existence of God, and then, first of all, one will have to find some way of arriving at the a posteriori probability that God exists given *the totality* of those arguments, and second, one will also need to find some way of arriving at the *overall probability* that God exists, given the combination of the probability that the existence of God has given those arguments and the probability that the non-existence of God has relative to my equiprobability-based argument.

A daunting task indeed! So, if Miller's objection is right, anyone who tries to resurrect the type of argument from evil that I set out is embarking on an extremely arduous intellectual journey.

The scope of Miller's second objection

The only evidential argument from evil that Miller considers is my equiprobabilityprinciple-based argument. But *if* the conclusion just described is correct, could not Miller equally well argue that *Humean-style* evidential arguments – advanced by Paul Draper (1989, 2008, 2009, 2013), and by Wes Morriston (2014) – suffer from the same weakness? For do they not also fail to assign any evidential weight to *arguments for the existence of God*, or to *theodicies* that many believe suffice to show that all the evils in our world are logically necessary, either for goods we are aware of, or to avoid possible evils we can foresee? Consequently, in failing to take these things into account, are not those Humean-inspired arguments also unsound, violating as they do the requirement that the probability ultimately assigned to any proposition be based upon the *total evidence* available?

Response to Miller's second objection: a three-part structure for evidential arguments from evil

What, if anything, is wrong with Miller's second objection to my argument from evil? The answer is that Miller fails to discuss what I have said, first of all, about the *overall structure* of a complete and satisfactory argument from evil, and then, second, both about possible theodicies and about arguments in support of the existence of God.

Thus, as regards the former, in Tooley (2012), I said that three tasks are involved:

Formulating a satisfactory evidential argument from evil, however, has also proved to be very difficult, and so the question arises whether there is, in the end, *any* satisfactory version of the argument from evil.

To show that there is, three tasks need to be carried out. First of all, one needs to argue that there are states of affairs in the world that, no matter how carefully one considers them, are morally problematic in the following way: when one considers the moral status of allowing any of the states of affairs in question, and reflects upon the rightmaking and wrongmaking properties that there is good reason to believe such an action would have, the wrongmaking properties outweigh the rightmaking properties. So the claim here is that if one considers, for example, the actions of not preventing the Lisbon earthquake, or the Holocaust, when one could have done so, any rightmaking properties that one has good reason to believe such actions would possess are not sufficiently significant to outweigh the known wrongmaking properties, such as allowing ordinary people to undergo enormous suffering or death.

Secondly, one needs to show that facts of the preceding sort about the evils to be found in the world do indeed make it more likely than not that God does not exist.

Finally, it also needs to be shown that neither an appeal to the idea that belief in the existence of God can be non-inferentially justified, nor an appeal to positive evidence or arguments in support of the existence of God, can overcome the *prima facie* case against the existence of God provided by the existence of such evils, so that, as a consequence, even when all the ways in which one might attempt to show that belief in the existence of God is justified are taken into account, it still remains the case that the non-existence of God is more likely – and perhaps much more likely – than the existence of God.

In this essay, I shall not address either the first or third of these tasks in any detail. (Tooley 2012, 144–145)

In short, I certainly hold that in formulating an evidential argument from evil, one must determine whether either possible theodicies or arguments in support of the

rationality of believing in the existence of God undermine the evidential argument from evil in question. Miller needed to consider, then, what I had said on those two matters, but failed to do so.

In the case of the *Knowledge of God* debate volume – which contains the only discussion of mine to which Miller refers – I did say relatively little as regards either the first or third tasks. This was especially so in the case of theodicies – but not surprisingly, since although Plantinga, who had previously been deeply sceptical of theodicies, had come to accept a religiously based, supralapsarian ('O Felix Culpa') theodicy at that time (Plantinga 2004), he made no appeal to that theodicy in our debate.

Then, in the case of arguments in support of the existence of God, I focused mainly on offering arguments against Plantinga's view that belief in the existence of God is non-inferentially justified ('properly basic') (Tooley and Plantinga 2008, 241–246), although I also discussed arguments claiming to show that belief in the existence of God was inferentially justified. As regards the latter, I started by noting that 'most arguments for the existence of a deity do not provide grounds for holding that the deity in question is even morally good, let alone morally perfect, and so they provide no counter at all to the argument from evil' (*ibid.*, 246).

That observation, moreover, is not an unfamiliar one, since other proponents of evidential arguments from evil have made the same point. Thus, as regards pro-theistic arguments, Paul Draper points out that

many traditional and contemporary arguments for theism, including many versions of the cosmological argument, the teleological argument, and the argument from consciousness, may not solve the theist's problem even if they are sound and recognized by the theist to be so. For they at most purport to show that an omnipotent and omniscient being exists [which ID entails] – not that that being is morally perfect. (Draper 1989, 347/1996, 26)

I then briefly addressed the ontological argument – which Plantinga had previously extensively defended – and there I raised two objections, including that the ontological argument can be *exactly paralleled* to show that there is an omnipotent, omniscient, and perfectly *evil* being, thereby generating a contradiction (Tooley and Plantinga 2008, 246–247).

Finally, I also commented briefly on arguments from religious experiences and from miracles. As regards the former, I considered (*ibid.*, 244–246) the idea that religious experiences can provide the basis for one's being non-inferentially justified in believing in the existence of God, and here my basic point was that equally thoughtful and well-informed people who have grown up in very different religious cultures – for example, Hindu and Christian – have religious experiences that support incompatible religious beliefs, and thus that there is good reason for concluding that such experiences are not veridical. I did note, however, that it might be claimed that mystical experiences differ in this regard, and thus that further discussion would be needed of an appeal to such experiences (*ibid.*, 246).

Finally, there is the crucial case of miracle claims, where I referred to several careful studies that have been carried out by writers such as A. D. White (1896, chapter 13, part 2), Louis Rose (1971), William Nolen (1974), and others, which I claimed provide excellent reasons for concluding that it is extremely unlikely that miracles actually occur.

Much more recently, in my book *The Problem of Evil* – whose publication in 2019 may well have been after Miller finished writing his article – I discussed arguments from miracles at greater length, citing many more relevant studies, including scientific experiments, as well as arguments from religious experiences – especially mystical experiences – and

offered reasons for holding that neither provide support for the existence of God (Tooley 2019, 34–35).

My view, then, is that there are no arguments that raise the probability of the existence of God above its a priori probability. But what is its a priori probability? In the *Knowledge of God* book, I began by focusing on just three possibilities concerning the moral character of an omnipotent and omniscient deity – namely, perfect goodness, perfectly malevolence, and complete indifference to good and evil – and I argued that those properties should be treated as a priori equally probable, which entails, even leaving aside the a priori improbability of any kind of omnipotent being, that the a priori probability that God exists cannot be greater than 1/3. I then went on to say,

A serious downward spiral is now on the horizon, since it might be argued that there are an infinite number of possibilities between the extreme of being perfectly good and that of being perfectly evil. If all of those possibilities are on a par with the three originally cited, then the probability of there being an omnipotent and omniscient being that realizes any particular possibility will be infinitesimal, and so the *a priori* probability that God exists will be infinitesimal. (Tooley and Plantinga 2008, 92)

Now I did not *assert* at that point that I believed that that argument is correct, but in my later book *The Problem of Evil* I advanced, as my first equiprobability principle, the following principle:

Equiprobability Principle 1: Families of Properties

If properties F and G belong to a family of properties, where a family of properties is a set of mutually exclusive and jointly exhaustive properties, all either basic properties or else structurally the same at every level of analysis, then the *a priori* probability that x has property F is equal to the *a priori* probability that x has property G. (Tooley 2019, 50)

This principle implies that the a priori probability that God exists is infinitesimal, so if I am right in claiming both that no arguments for the existence of God raise the probability of God's existence above its a priori probability, and that the existence of God cannot be non-inferentially justified to any degree, then it follows that the a posteriori probability that God exists is also infinitesimal.

Turning next to theodicies, and their relevance to the probability that God exists, in the online *Stanford Encyclopedia of Philosophy* article 'The Problem of Evil', posted in 2015, I discussed at length five of the most common types of theodicies. Then, more recently, in *The Problem of Evil* (2019), I offered detailed objections to several theodicy themes, including (1) claims that no non-human animals are conscious (10), (2) appeals to the doctrine of karma and reincarnation (11–15), (3) John Hick's 'soul-making' theodicy (15–16), (4) contentions that both natural disasters and suffering by non-human animals are caused by supernatural beings exercising free will (16), and (5) claims that undeserved suffering resulting from natural evils are justified by the need for laws of nature (18–23)

In short, my view is that if one can show, *first*, that the probability of any theodicy ever proposed is virtually zero, and then *secondly*, that no argument raises the probability that God exists above its a priori probability – which the Families of Properties Equiprobability Principle entails is infinitesimally close to zero (Tooley and Plantinga 2008, 92; Tooley 2019, 52) – then there is no need to complicate any argument from evil in a massive fashion by introducing, as Miller would have one do, probabilities concerning theodicies and pro-theistic arguments.

The upshot is that as regards, for example, the Lisbon earthquake, I hold that the following claims are justified:

- (1) The logical probability that God exists, *given only the following propositions*, is less than one-half:
 - (a) Not preventing the Lisbon earthquake has a known wrongmaking property, and no known counterbalancing rightmaking properties.
 - (b) No argument for God's existence significantly raises the probability of God's existence above its very low a priori probability.
 - (c) Belief in the existence of God is not non-inferentially justified.

I then implicitly assumed – mistakenly as we shall see – that aside from propositions concerning known evils other than the Lisbon earthquake that have no known counterbalancing rightmaking properties, (a), (b), and (c) cover everything that is relevant to the probability that God exists, and thus I concluded:

(2) The logical probability that God exists, given *all of the relevant evidence*, other than propositions about states of affairs other than the Lisbon earthquake whose known wrongmaking properties outweigh their known rightmaking properties, is less than one-half.

Finally, I generalized this conclusion by developing probabilistic arguments for the case of N evils, where the known wrongmaking properties of allowing each of those evils outweigh the known rightmaking properties of doing so. The quantitative results then depended upon the choice between a state-description equiprobability principle and a structure-description equiprobability principle, with the probability of God's existence being higher given the second of those principles, where it is of the order of 1/(N+1). Thus my more general conclusion was this:

- (3) The logical probability that God exists, given only the following propositions, and given a structure-description equiprobability principle, is of the order of 1/(N + 1), and it is even lower given a state-description equiprobability principle:
 - (a) There are N events in the world, the allowing of any one of which possesses a known wrongmaking property and no known rightmaking properties that are counterbalancing.
 - (b) No argument for God's existence significantly raises the probability of God's existence above its very low a priori probability.
 - (c) Belief in the existence of God is not non-inferentially justified.

I then implicitly assumed, once again, that aside from propositions concerning evils other than the N evils in question that also have no counterbalancing rightmaking properties, (a), (b), and (c) cover everything that is relevant to the probability that God exists, and accordingly I concluded:

(4) The logical probability that God exists, given all of the relevant evidence, and given a structure-description equiprobability principle, is of the order of 1/(N + 1), and it is even lower given a state-description equiprobability principle.

Miller's third objection: the unsoundness of a structure-description approach to logical probability

In his third objection, Miller does not challenge the *mathematical correctness* of the calculations that I set out either in the case of a single evil or in that of multiple evils. What Miller does is instead offer an argument to show that an approach to logical probability based on a *structure*-description equiprobability principle is unsound, and his objection focuses upon the following scenario:

Humans exist in a world populated only with prima facie good states of affairs. They manage to individuate 1,000 independent such states of affairs. Then n = 1,000. There are just 6 unknown morally relevant properties, and so there are 64 Q-predicates. Thus, the total number of structure descriptions is:

(1,000+63 - 1)!	_ (1, 063) (1, 001)
(1, 000)! (63 - 1)!	- (63)(1)

Suppose humans are in possession of the following knowledge: the unknown RMPs and WMPs are heavily balanced in favour of RMPs, and RMPs are both weightier and more common than WMPs. RMPs and WMPs are balanced such that only one of the 64 Q-predicates is sufficient to render these prima facie good states of affairs evil. Call the 63 Q-predicates preserving goodness preserver Q-predicates, and call the other predicate the evil Q-predicate. The details of these RMPs and WMPs remain unknown, of course. This case is obviously favourable to theism. The world contains nothing but prima facie good states of affairs, and humans even have the knowledge that the unknown RMPs and WMPs of their world are balanced in favour of good. Few things in philosophy are as clear as that people in this world should not be able to generate an inductive argument from evil against the existence of God. (Miller 2021, 225–226)

Miller then sets out a calculation showing that the proportion of the total structuredescriptions that contain only preserver Q-predicates is about 1 in 16. This implies that in the world described, the probability that God exists is very low, contrary to the claim that it is extremely clear that people in the world in question 'should not be able to generate an inductive argument from evil against the existence of God'.

The unsoundness of Miller's argument against a structure-description approach to logical probability

Miller's scenario is an unusual one, in that it presupposes that one has quite detailed knowledge about the number of *unknown* rightmaking and wrongmaking properties and their relative weights. Still, it is logically possible that one might, through communication with an omniscient being, for example, have such knowledge.

What, then, if anything, is wrong with Miller's argument? The answer to this question requires, perhaps surprisingly, but as we shall now see, consideration of the metaphysics, and the resultant epistemology of, *laws of nature*.

The place to begin is with the fact that the world Miller describes is 'populated only with prima facie good states of affairs', of which there are 1,000 (Miller 2021, 225). Given all the types of evils one can imagine, and of the unlimited magnitude that it is logically possible for familiar wrongmaking properties to have, surely it is a remarkable fact that all 1,000 of the independent states of affairs in the imagined world are prima facie good. Is it not plausible that there should be some explanation of this otherwise very improbable fact?

What form might such an explanation take? One possibility would be the existence of an omnipotent and omniscient being who was morally perfect, or at least a close approximation thereto. Alternatively, there could be a law of nature, somewhat akin to the Hindu and Buddhist doctrine of karma, which ensures that the good-making properties of every state of affairs outweigh its bad-making properties, if any.

Must there then not be a legitimate inductive inference from the fact that the goodmaking properties of each of the 1,000 independent states of affairs outweigh its badmaking properties to the likely existence of a law of nature that this is so for all states of affairs? But if there is such an inference, the resulting law is incompatible with Miller's quantitative conclusion, so must not Miller's calculation be unsound?

It is at this point that the metaphysics and the resulting epistemology of laws of nature become relevant. The great philosophical divide concerning laws of nature is between, on the one hand, reductionist views according to which non-probabilistic laws of nature are either simply cosmic regularities, or else cosmic regularities that satisfy some further constraint, such as the 'best theory' constraint proposed by David Lewis (1973, 72–77), and, on the other hand, the non-reductionist view defended by Fred Dretske (1977), David Armstrong (1983), and Tooley (1977), according to which laws of nature involve second-order relations between first-order properties and relations.

But how is this metaphysical divide relevant to Miller's third objection? The answer lies in the dramatically contrasting epistemological implications of the two different approaches to laws of nature. As regards the reductionist approach, according to which laws of nature are basically cosmic regularities, possibly satisfying some further condition, Rudolf Carnap proved in the appendix of his *Logical Foundations of Probability* (1950 and 1962, 570–571) that given a structure-description approach to logical probability, one cannot confirm the existence of any non-probabilistic laws of nature that have an unlimited number of instances.

Carnap's argument is quite complex, but here is a simple way of arriving at that result. First of all, the assumption that all structure-descriptions are a priori equally probable entails every Laplacean-style rule of succession, as Carnap demonstrated (1950 and 1962, 565–571). The simplest such rule is a restricted form of Laplace's first rule of succession, which, properly stated, says that if n events of type C have all been followed by events having property P, where P belongs to a family of properties containing only two members, then the probability that the next event of type C will be followed by an event with property P is equal to $\frac{n+1}{n+2}$. It then follows that the probability that the next m events of type C will all have property P is equal to $\frac{n+1}{n+2} \times \frac{n+2}{n+3} \times \frac{n+3}{n+4} \times \ldots \times \frac{n+m-1}{n+m} \times \frac{n+m}{n+m+1}$. The denominator of each fraction then gets cancelled along with the numerator of the next fraction, giving one that the probability in question is $\frac{n+1}{n+m+1}$, which, once m is greater than (n+1), will be less than one-half, and which will also approach zero as m increases without limit.

In contrast, given a non-reductionist view of laws of nature, according to which laws are *atomic* states of affairs involving second-order relations between first-order properties, rather than an infinite conjunction of atomic states of affairs, it can be shown – though the arguments in question are far too lengthy to be given here – both that confirmation of laws of nature is possible, and that, in particular, the probability, in a world containing 1,000 prima facie good states of affairs that *even one* of them would have the single unknown bad-making property in question is extremely low. As a consequence, there is no incompatibility with the intuition, concerning that world, that 'people in this world should not be able to generate an inductive argument from evil against the existence of God' (Miller 2021, 225–226).

The upshot is that Miller's third objection does not have any force against a structuredescription equiprobability approach if one adopts the non-reductionist view that laws of nature are atomic states of affairs involving second-order relations between first-order properties.

What Miller's argument does show

The failure of Miller's argument notwithstanding, there is something very valuable that emerges from it, namely, that equiprobability-based arguments from evil cannot be based simply on the known evils in the world: the known *goods* that exist must also be considered, as is shown clearly by the following scenario, which, unlike Miller's, does not presuppose that humans have any knowledge at all about unknown rightmaking and wrongmaking properties, let alone that those properties are 'balanced in favour of good' (Miller 2021, 226).

Consider a world with 1,000,000 known, intrinsically evil states of affairs E_1 , E_2 , ... $E_{1,000,000}$, along with a million known, intrinsically good states of affairs G_1 , G_2 , ... $G_{1,000,000}$, such that for every i from i = 1 to i = 1,000,000, E_i is logically necessary for G_i , and each combination of G_i and E_i is better than the absence of both. Suppose, also, that there is one more, and only one more, serious evil, $E_{1,000,001}$, where there is no known good $G_{1,000,001}$ for which $E_{1,000,001}$ is logically necessary, and that outweighs $E_{1,000,001}$. What is the probability, if there is an omnipotent and omniscient being, that that being is perfectly good?

Evils $E_1, E_2, \ldots E_{1,000,000}$ do not themselves provide evidence for the conclusion that if there is an omnipotent and omniscient being, then that being is evil, since each is logically necessary for a known good that outweighs it. Consequently, the only negative evidence is that provided by evil $E_{1,000,001}$. Then, however, if my argument in the case of a single evil were sound, E1,000,001 on its own would suffice to make the probability that God exists less than one-half. But that conclusion, surely, is not at all plausible. For setting $E_{1,000,001}$ aside, and considering only the million good states of affairs $G_1, G_2, \ldots, G_{1,000,000}$ and the million bad states of affairs $E_1, E_2, \ldots E_{1,000,000}$, and the logical relations between the corresponding states of affairs, if there were an omnipotent and omniscient deity, what moral dispositions would it be reasonable to assign to that deity? Would they not include a disposition M to allow the existence of a seriously bad state of affairs only when there will be some good state of affairs that outweighs it, and for which the bad state of affairs is logically necessary? But if it is highly likely, given that evidence, that any omnipotent and omniscient being who exists has disposition M, surely it is eminently reasonable to believe that the bad state of affairs E1,000,001 would not exist unless there were some counterbalancing good $G_{1,000,001}$, for which $E_{1,000,001}$ was logically necessary, and thus that, since, by hypothesis, we humans know of no such good, it must therefore lie outside our ken. Consequently, the probability that God exists, rather than being less than onehalf, is presumably very high indeed. Thus my argument for the initial conclusion that, given a single evil, the probability that God exists is less than one-half, must be not only unsound but enormously so.

This alternative scenario therefore shows that my original *three-part* argument from evil cannot be a complete, evidential argument from evil against the existence of God, since it does not enable one to arrive, via an inductively sound inference, at a sound conclusion about the probability that God exists given *all* the relevant evidence.

An equiprobability-principles-based evidential argument from evil must involve four parts

Can my argument be expanded to deal with this problem? The answer is that it can be, and in a way paralleling that used to deal with theodicies and arguments for the existence

of God. Thus, just as one can examine all known theodicies and pro-theistic arguments, and argue that none of them is satisfactory, so one can construct a list of the circumstances that make the move from the existence of a single evil in the world to the conclusion that it is unlikely that God exists unsound, and then see whether any such circumstances obtain.

Consider, then, the case described above. What makes the relevant inference unsound? The answer is that the existence of the 1,000,000 known, intrinsically evil states of affairs $E_1, E_2, \ldots E_{1,000,000}$, along with 1,000,000 known, intrinsically good states of affairs $G_1, G_2, \ldots G_{1,000,000}$, such that for every i from i = 1 to i = 1,000,000, E_i is logically necessary for G_i , and the combination of G_i and E_i is better than the absence of both, supports a *strong abductive* inference to the conclusion that any omnipotent and omniscient being that exists must be very strongly disposed not to allow the existence of an intrinsically bad state of affairs unless the latter is logically necessary for a good state of affairs $E_{1,000,001}$ is very probably accompanied by some good state of affairs that outweighs it, and for which it is logically necessary, and thus that, since we humans do not know of any such good state of affairs, it must be one of which we have no knowledge.

The reasoning in this case could also be viewed, however, as based on *a rule of succession* stating that if in all *n* cases where a state of affairs of type C is known to have existed, it was accompanied by a state of affairs of type D, then in the next case where a state of affairs of type C is known to exist, there is a probability p – which depends upon n – that that state of affairs will be accompanied by a state of affairs of type D. In the case being considered, however, one has 1,000,000 instances where a bad state of affairs was accompanied by a good state of affairs that outweighed it, and for which the bad state of affairs was logically necessary. The rule of succession then allows one to conclude that it is very likely indeed that there is a good state of affairs G_{1,000,001} that outweighs the bad state of affairs E_{1,000,001}, and for which the latter is logically necessary.

The conclusion, accordingly, is that inferences involved in my type of evidential argument from evil can turn out to be inductively unsound in at least two ways. One is that the known good states of affairs in the world, together with any known bad states of affairs that are logically necessary for those good states of affairs, may fall under *a rule of succession* according to which it is likely that any known bad state of affairs is logically necessary for some good state of affairs, either known or unknown, that outweighs the bad state of affairs in question.

The other way that such inferences may be inductively unsound is if the known good states of affairs in the world, and any known bad states of affairs that are logically necessary for those good states of affairs but outweighed by the latter, may provide the basis for *an abductive inference* to the conclusion that any omnipotent and omniscient being that exists will be morally perfectly good, or at least very nearly so.

Are there types of inferences other than the two just described that would make the inferences in question unsound? Perhaps, but if so, they would merely need to be added to the list of possibilities that must be considered before any move to a conclusion concerning the probability that God exists given *all* the relevant information is justified.

The actual world, and part 4 of an equiprobability-principles-based argument from evil

How are things in the actual world? Some evils in our world, such as undeserved, but mild insults, or failures to express gratitude, are relatively trivial and are also such that it is far from clear that intervening to prevent such occurrences would make the world a better

place, given that it would thereby deprive people of important knowledge about the moral character of other people, unless humans were supplied with some non-sensory way of acquiring such knowledge, and the goodness or badness of such a combination of changes is surely at best very murky. Let us use the expression 'serious evils' to cover, then, cases where intervention to prevent those evils *would clearly*, other things being equal, make the world a better place.

Consider, then, the *serious* evils one finds in the world – including, first of all, *natural* evils such as pandemics causing grave illnesses and many deaths, hurricanes, volcanic eruptions, starvation due to famines, the painful deaths of animals due to predators, and so on, and, second, *serious moral* evils, including acts of torture, murders, rapes, brutal beatings, slavery, etc. In cases of such serious evils, how often is there some known good state of affairs that outweighs the evil, and for which the evil was logically necessary? Unless certain religious theodicies can be shown to be justified, the number would seem vanishingly small, if there are any at all.

Consequently, the two types of inductive inferences that were justified in the imaginary case described above – namely, an abductive inference to an omnipotent and omniscient person who was perfectly good, or at least very nearly so, and an inference via a rule of succession to the conclusion that a serious known evil that is not logically necessary for any *known* good is likely to be accompanied by an *unknown* good that outweighs the evil, and for which the latter is logically necessary – are not available in the actual world.

Conclusion

Miller advanced three objections to the type of evidential argument from evil that I advanced. As regards Miller's first objection, it was shown that the occurrence of a given type of event *on its own* cannot affect the probability that it would be wrong for God to allow such an event. Then, as regards his second objection, Miller, first of all, ignored the fact that *any fully stated evidential* argument from evil, in addition to proving that the existence of God is improbable given certain facts about the evils or about the mixtures of goods and evils found in the world, must also offer refutations both of arguments for the existence of God and of theodicies. In addition, Miller also failed to consider the criticisms that I have offered both of theodicies and of arguments for God's existence. If, as I have claimed, all theodicies and all pro-theistic arguments are open to decisive refutations, then there is, *to this point*, no sound objection to setting out evidential arguments from evil as three-part arguments.

The answer to Miller's final objection, on the other hand, is considerably more complex. Miller's goal was to show that a structure-description equiprobability approach is unsound, and his argument is sound if laws of nature are cosmic regularities, possibly satisfying some additional condition. This metaphysical view of laws of nature is exposed, however, to several strong objections, including that it makes it impossible to justify the view that there are laws of nature. But if one adopts the non-reductionist view that laws of nature are second-order relations between first-order properties and relations, Miller's argument ceases to be sound.

Miller's argument, however, remains important, since it shows that I was mistaken in thinking that an argument from evil, rather than considering both goods and evils and any relations between these, could be based simply upon the evils found in the world. The conclusion is thus that one must also consider whether there are relations between the goods and serious evils found in a world that could serve to undermine completely, or at least reduce the force of, evidential arguments from evil. I have just argued, however, that there are *no relations* between goods and serious evils *in the actual world* that do this. The conclusion, accordingly, is that by adding a fourth part to my three-part

equiprobability-principle-based evidential argument from evil one has an evidential argument that is no longer open to Miller's final objection.

Acknowledgements. I am very grateful to two anonymous referees for *Religious Studies*. Earlier versions of this article were significantly improved by their philosophically astute comments.

References

Armstrong DM (1983) What is a Law of Nature? Cambridge: Cambridge University Press.

Carnap R (1950 and 1962) Logical Foundations of Probability. Chicago: University of Chicago Press.

- Draper P (1989) 'Pain and Pleasure: An Evidential Problem for Theists'. *Noûs*, 23, 331–350. Reprinted in Daniel Howard-Snyder (ed.) *The Evidential Argument from Evil*. Bloomington, IN: Indiana University Press, 1996, pp. 12–29.
- Draper P (2008) The argument from evil. In Copan P and Meister C (eds), Philosophy of Religion: Classic and Contemporary Issues. Malden, MA: Blackwell, pp. 142–155.
- Draper P (2009) The problem of evil. In Flint T and Rea M (eds), *The Oxford Handbook of Philosophical Theology*. Oxford: Oxford University Press, pp. 332–351.
- Draper P (2013) Humean arguments from evil. In McBrayer J and Howard-Snyder D (eds), *The Blackwell Companion* to the Problem of Evil. Malden, MA: Wiley Blackwell, pp. 67–75.
- Draper P (2014a) Confirmation theory and the core of CORNEA. In Dougherty T and McBrayer J (eds), *Skeptical Theism: New Essays*. Oxford: Oxford University Press, pp. 132–141.
- Draper P (2014b) Same as the old skeptical theism. In Dougherty T and McBrayer J (eds), *Skeptical Theism: New Essays*. Oxford: Oxford University Press, pp. 164–177.
- Dretske FI (1977) Laws of nature. Philosophy of Science 44, 248-268.
- Hume D (1779) Dialogues Concerning Natural Religion, in J. C. A. Gaskin (ed.) (1993) Dialogues Concerning Natural Religion. Oxford: Oxford University Press.
- Lewis D (1973) Counterfactuals. Cambridge, MA: Harvard University Press.
- Miller C (2021) What's wrong with Tooley's argument from evil? Religious Studies 57, 209-230.
- Morriston W (2014) Skeptical Demonism: a failed response to a Humean challenge. In Dougherty T and McBrayer J (eds). Oxford: Oxford University Press, pp. 221–235.

Nolen WA (1974) Healing: A Doctor in Search of a Miracle. New York, NY: Random House.

- Plantinga A (2004) Supralapsarianism, or 'O Felix Culpa'. In van Inwagen P (ed.), *Christian Faith and the Problem of Evil.* Grand Rapids, MI: Eerdmans, pp. 1–25.
- Rose L (1971) Faith Healing. Harmondsworth: Penguin Books.
- Tooley M (1977) The nature of laws. Canadian Journal of Philosophy 7, 667-698.
- Tooley M (2012) Inductive logic and the probability that God exists: farewell to skeptical theism. In Chandler J and Harrison VS (eds), *Probability in the Philosophy of Religion*. Oxford: Oxford University Press, pp. 144–164.
- Tooley M (2015) The problem of evil. In Zalta EN (ed.), *The Stanford Encyclopedia of Philosophy*, Winter 2021 Edition. Available at https://plato.stanford.edu/archives/win2021/entries/evil/.
- Tooley M (2019) The Problem of Evil. Cambridge: Cambridge University Press.
- Tooley M and Plantinga A (2008) Knowledge of God. Oxford: Blackwell Publishing.
- Walls JL and Dougherty T (eds) (2018) Two Dozen (or so) Arguments for God: The Plantinga Project. Oxford: Oxford University Press.
- White AD (1896) A History of the Warfare of Science with Theology within Christendom. New York: Appleton.

Cite this article: Tooley M (2022). Calum Miller's attempted refutation of Michael Tooley's evidential argument from evil. *Religious Studies* 1–18. https://doi.org/10.1017/S0034412522000452