Intentionality, belief, and the logical problem of evil

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Abstract: **This article provides a new defence against the logical problem of evil, based on the naturalistic functional/teleological theory of mind (NFT). I argue that if the NFT is self-consistent then it is consistent with theism. Further, the NFT entails that it is not possible for created minds to exist in the absence of evil. It follows that if the NFT is self-consistent then the existence of God is consistent with the existence of evil.**

The logical problem of evil is the appearance of inconsistency between the existence of God and the existence of any evil at all. A *defence* against the logical problem of evil is an argument that purports to show that this appearance is misleading and in fact there is no such inconsistency. Such defences, like all philosophical arguments, generally rely on controversial premises. For instance, Plantinga's Free-Will Defence relies on a Molinist account of the metaphysics of freedom (Plantinga (1974), ch. 9). The use of these sorts of controversial premises limits the dialectical effectiveness of such defences, so that no one defence can eliminate the logical problem in all contexts. In this article, I provide a new defence against the logical problem of evil, relying on a different package of controversial assumptions, and capable of going places Plantinga's Free-Will Defence can't. My aim will be to show that certain views in the philosophy of mind, which are popular among naturalists but might also reasonably be endorsed by theists, have the consequence that it is not possible for created minds to exist in a world without evil. Since the existence of created minds is a very great good, it seems that if this theory of mind is correct then God would be justified in creating a world containing at least some evil.

Defences against the logical problem of evil

It seems to many people that there is an inconsistency between the propositions *God exists* and *evil exists* (see Mackie (1955), 200–201; Plantinga (1974),

165). This *appearance* of inconsistency is what I call 'the logical problem of evil' (cf. Sobel (2004), 436). An attempt to substantiate this appearance, that is, to spell out a chain of argument by which the existence of evil implies the non-existence of God, I call a 'logical argument from evil'.

A defence against the logical problem is an attempt to prove that no such contradiction exists, so that no logical argument from evil can succeed.[1] As Plantinga (1974, 192) emphasizes, a defence need not be an explanation of God's actual reasons for allowing evil in the world, since it aims merely to show the *consistency* of the existence of God with the existence of evil.

In order to judge the effectiveness of such a defence, a bit more needs to be said about what is meant by 'God', 'evil', and 'consistency'. I begin with 'consistency'.

A set of propositions is consistent when its members do not jointly entail a contradiction. A contradiction is a proposition that can be seen to be false merely by its logical structure, such as $p \land \neg p$. This is simple enough. The difficulty comes in when we try to say what we mean by 'entail'.

Entailment[2] is sometimes understood in a purely formal way, in terms of the derivations permitted by the rules of some natural deduction system (e.g. Shapiro & Kissel (2018), §3). This, however, will not work since *God exists* and *evil exists* do not even appear to entail a contradiction formally. A looser notion of entailment must be in view.

An alternative to the formal notion of entailment is the modal notion, which treats a set of propositions A as entailing a proposition p iff it is impossible for all members of A to be true when p is false (e.g. Barker-Plummer, Barwise, & Etchemendy (2011), 42). This approach has many variants depending on what species of modality one has in mind. If one uses a possible worlds framework in which the worlds are maximal consistent sets of sentences of some formal language then this approach will be equivalent to the previous one. If, on the other hand, one employs the notion of metaphysical modality,[3] we run into a new problem: many philosophers have held that the proposition *God exists* is not metaphysically contingent.[4] This implies that if God exists then the proposition *God does not exist* entails a contradiction (on this notion of entailment) and conversely if God does not exist then the proposition *God exists* entails a contradiction. Thus, under this notion of entailment, if the existence of God is not contingent then one cannot prove that *God exists* is consistent with *evil exists* unless one can prove that God exists!

Insofar as the debate about the logical problem of evil is a debate about whether *God exists* and *evil exists* jointly entail a contradiction, that debate must be presupposing some notion of entailment that falls somewhere in between the formal notion and the metaphysical modal notion: it must be the case that a set of propositions may entail a necessary falsehood (such as an incorrect answer to the question whether God exists) without thereby being inconsistent, and yet it must also be the case that some sets of propositions that do not formally entail a contradiction are nevertheless inconsistent.

Mackie's talk of 'quasi-logical rules' needed to derive the contradiction (Mackie (1955), 200–201) suggests such an intermediate notion of entailment. Call a set A^* of propositions an *a priori supplement* of a set A just in case A^* is the union of A with some finite set of *a priori* necessary truths. We will then say that a set A is inconsistent iff some *a priori* supplement of A formally entails a contradiction. In this sense of 'inconsistent' we can easily see how there can be a substantive debate over whether *God exists* and *evil exists* are jointly inconsistent, and we can also see how the arguments of Mackie and Plantinga are contributions to that debate: Mackie and Plantinga disagree over whether Mackie's 'quasi-logical rules' are in fact *a priori* necessary truths.

Next, the notion of God. As Diller (2016) has argued, the word 'God' is so flexible in its use that it is almost inconceivable that some *one* argument would suffice to show that there is no God in any possible sense of the word. The logical problem of evil should be understood as an apparent reason for what Diller calls a 'local' atheism, a rejection of a certain family of conceptions of God. However, this is a quite broad family of conceptions. The classical formulation of the problem, which Hume (1779, 63) attributes to Epicurus, purports to rely on only two claims about the concept of God: that God is omnipotent, and that God is wholly or perfectly good. It is easy to see why these two claims might appear to contradict the existence of evil in the world: a perfectly good being would want to prevent evil from occurring, and an omnipotent being would be able to prevent evil from occurring, yet obviously there is much evil that has not been prevented.

The family of conceptions of God employed here is very broad, but it is not completely unbounded. Obviously this does not encompass amoral conceptions of the divine, or conceptions that reject divine omnipotence.[5] Furthermore, the logical problem of evil is a problem only for those theists who intend to be making a contentful claim by saying that God is perfectly good. Extreme forms of voluntarism or divine command metaethics that hold that whatever God does or approves is good simply because God does or approves it (e.g. Harrison (2017)) are unaffected,[6] as are extreme forms of mysterianism that would deny that the meaning of 'good' as applied to God bears any relation to our ordinary concept of goodness. The supposition that is supposed to lead to contradiction is that God is all-powerful and perfectly good and that the use here of the words 'powerful' and 'good' bears some significant relation to the usual semantic content of those words.

This brings us to the notion of evil. 'Evil' is here used in an extremely broad sense. It is to be defined in relation to the divine goodness: an evil is any state of affairs that a perfectly good being (in the sense of 'perfectly good' operative in the concept of God) would *ceteris paribus* wish not to obtain. Since we assume that the notion of goodness applied to God bears some significant relation to our ordinary notion, it follows that the class of evils will have significant overlap with the class of states of affairs we intuitively consider to be bad, though depending on one's particular conception of divine goodness and views about moral

epistemology these may not coincide perfectly. It seems safe to say, however, that a being who did not *ceteris paribus* wish for the absence of pain and suffering would not be perfectly good in any recognizable sense.

The logical problem of evil is the appearance of inconsistency between the existence of God and the existence of *any evil whatsoever*. We can now see that it does appear this way: if God is really perfectly good then God would (*ceteris paribus*) not want me to stub my toe, but if God is really omnipotent then it appears that God should get whatever God wants. As a result, it appears that if God (on the relevant conception) exists then I should never stub my toe and, conversely, if I do stub my toe then God does not exist.

A defence against the logical problem of evil is an argument intended to show that this appearance is misleading and the existence of evil is not in fact inconsistent with the existence of God. Insofar as the logical problem of evil is the problem of the consistency of God's existence with the existence of *any evil at all*, a defence against this problem need only show that the existence of *some* evil is compatible with the existence of God.

What can a defence accomplish?

Recent literature on the problem of evil within analytic philosophy has in large part moved on from the logical problem of evil, to discuss other problems, such as the evidential argument from evil (Howard-Snyder (1996)), the problem of the magnitude and apparently unjust distribution of evil (van Inwagen (1988)), and the problem of horrendous evils (Adams (1999)). These are indeed deep and difficult problems that a theistic philosopher must face even after she has defeated the logical problem. However, reports of the logical problem's death (e.g. Alston (1996), 97; Draper (1996), 176–177; Dougherty (2011), 560) are premature.

Plantinga describes the strategy of his defence as follows: 'one way to show that a proposition *p* is consistent with a proposition *q* is to produce a third proposition *r* whose conjunction with *p* is consistent and entails *q* . . . What the Free Will Defender must do, therefore, is find such a proposition' (Plantinga (1974), 165). The proposition Plantinga arrives at is: 'God is omnipotent and it was not within his power to create a world containing moral good but no moral evil' (*ibid.*, 184).[7]

As Plantinga clearly recognizes, simply stating this proposition would do very little to eliminate the appearance of inconsistency, since this proposition itself appears inconsistent: it states that God is omnipotent (all-powerful) and then expresses a limitation on God's power. Plantinga therefore provides a sophisticated argument for the consistency of this claim. The details are quite complex, but the following (over-)simplified summary will suffice for present purposes.

According to Plantinga, only free beings can bring about moral goods. However, it is impossible that the actions of a free being should be under the control of someone else, even if that someone is God. Furthermore, omnipotence does not

require the ability to do the impossible. Hence, God's omnipotence notwithstanding, God is unable to control the actions of free beings (though it is up to God whether any free beings other than God exist). According to Plantinga, although God cannot control the actions of free beings, God knows what any free being would do if that being were placed in any possible circumstance. Since God does not control these facts, it is possible that they all 'come out wrong' with the result that, if God creates any free beings at all, then those beings will sometimes commit moral wrongs. If this is correct, then the claim that God, though omnipotent, is unable to bring about moral good without moral evil is consistent after all.

There is a further claim Plantinga needs before his defence is complete, though he devotes considerably less attention to it. This is the claim that it is consistent with the divine goodness to create in such a circumstance.[8] Thus the proposition that really figures in Plantinga's defence is:

> God is omnipotent and perfectly good and God decided to create a world containing moral good although God was unable to do so without the occurrence of some moral evil.[9]

This proposition clearly entails that both God and evil exist. The only question is whether it is consistent.

Plantinga's argument – like most (all?) arguments for philosophically interesting conclusions – relies on a substantial package of controversial premises. Recall that Plantinga is aiming not merely to undermine a particular logical argument from evil, but to eliminate the logical problem of evil by *showing* that *God exists* and *evil exists* are consistent. Plantinga has not shown this unless he has shown that the proposition he has introduced is consistent, and he can't show this without showing that his account of free will and its value is consistent.

If the fact that Plantinga relies on disputed premises means that he hasn't shown anything, then probably no philosopher has ever shown anything. However, in light of its dependence on these disputed premises, Plantinga's argument should be seen as something more like a proof of *relative* consistency: in other words, it shows that *if* a certain package of philosophical views is consistent, then the existence of God is consistent with the existence of evil. This can be seen as solving the logical problem of evil, at least for a certain audience: if you are confident that Plantinga's story is consistent then, after sufficient reflection on that story, you will no longer have a logical problem of evil, i.e. the existence of God and the existence of evil will no longer appear inconsistent to you.

Plantinga often writes as if he is trying to accomplish more than this, but is this limitation really so significant? After all, most theistic analytic philosophers are libertarians about free will,[10] and perhaps this was already the case, at least to some extent, before Plantinga wrote.[11] Insofar as the logical problem of evil is a problem *for theists*, if it turns out that other premises theists already reasonably endorse on independent grounds dissolve that problem then the problem is dissolved.

However, the class *most theistic analytic philosophers* does not include nearly all the people for whom the logical problem of evil has force. First, there are some theists who doubt or deny the consistency of Plantinga's story.[12] Second, theists are not the only audience for the logical problem of evil. Atheists may take the logical problem to be among their reasons for rejecting theism, and agnostics may take it to be among their reasons for doubting theism. If, however, these thinkers reasonably lack confidence in the consistency of Plantinga's proposition, then the logical problem of evil remains in force for them.

Whether a given defence amounts to a successful solution to the logical problem of evil for a particular thinker – that is, whether it removes the appearance of inconsistency for her – depends on her other philosophical commitments. My aim in this article is to provide a defence addressed to audiences who doubt or deny the consistency of Plantinga's proposition, and particularly to philosophers of a naturalistic bent who may take the logical problem of evil to be among their reasons for denying the existence of God.

A new defence against the logical problem of evil

The defence I offer here has the same structure as Plantinga's: I identify a proposition that entails both *God exists* and *evil exists*, and then argue that this proposition is consistent. The proposition in question is:

> (M) God decided to create minds although it is impossible that created minds exist in the absence of evil.

My argument, like Plantinga's, relies on a controversial package of philosophical views. However, unlike Plantinga, I appeal to a package of views widely endorsed by non-theistic philosophers: the naturalistic functional/teleological theory of mind. (Henceforth, 'NFT'.) This theory holds that a state of an organism has representational content if and only if that state has the *function* or *purpose* of indicating a certain state of the world to the organism, and it aims to give a fully naturalistic account of the 'function' or 'purpose' involved.

I assume, for the sake of argument, that this account of the mind is self-consistent. In this section, I argue that this assumption is sufficient to show that (M) is consistent, and therefore to solve the logical problem of evil.

Theism and original intentionality

One way of approaching questions about the nature of the mind, popularized in a classic article by Dretske (1994), is to ask: what would it take to *build* one? Some enthusiasts of artificial intelligence have thought this problem was very easily solved and that very simple computers, even pocket calculators, exhibited thought in the same sense as humans. However, as Searle (1984, 28–41) has emphasized, there is a serious difficulty with this claim. While the numerals on the screen of a calculator, and the internal states that produce them, have

meaning, they do not have any meaning *for the calculator* any more than the words in a book have meaning for the page on which they are printed. The meaningfulness of these symbols derives from the function assigned to them by the makers and users of calculators. Hence the calculator does not possess *original* intentionality: the intentionality (aboutness, meaningfulness) of its states is *derived* from prior instances of intentionality, namely, the original intentionality exhibited by human thought. The problem, then, for would-be creators of computer or robot minds is how to endow them with *original* intentionality, or how to make their internal states mean something *to them* and not just to their creators.

If God exists, then God likewise faces this problem of original intentionality. God could create a system whose states were correlated with certain environmental factors, and make those states trigger behaviour appropriate to the state of the environment. If God intends these internal states to indicate the presence of those environmental factors, then there is a sense in which those states will be of or about those factors. So far, however, this is only derived intentionality. The states do not yet have meaning *for the system*.

The theist may be tempted to solve this problem by taking intentionality as primitive. After all, the theist is *ipso facto* not a naturalist, and so does not need a naturalistic reduction of intentionality.[13] A (substance or property) dualist who took original intentionality as primitive would surely be in a position to say that God can simply endow creatures with intentional properties.

While this position is open to the theist, there are a number of reasons why some theists may wish to reject it. First, some philosophers who are theists (and hence are not physicalists *simpliciter*) are nevertheless physicalists about human persons (e.g. van Inwagen (1990), 5–6), and no physicalist can take intentionality as primitive. Second, many philosophers find intentionality more mysterious than other aspects of the mental, such as phenomenal character. Even Berkeley, despite believing *only* in immaterial minds, found the intentionality of ideas suspicious and sought a reductive explanation in terms of other mental phenomena (Berkeley (1989), §§660, 843; Bolton (1987); Pearce (2017b)).

It might, however be alleged that any reductive account of intentionality will be inconsistent with theism. The theist holds that God is omniscient,[14] and God's knowledge surely must be *about* the world, hence God has intentional mental states, and the intentionality of these states must be irreducible.

In response, note first that on the classical metaphysics of theism God's knowledge must be understood to be radically unlike ours. God's aseity and impassibility have traditionally been taken to imply that God's knowledge cannot depend on external things, and hence must really in some sense be self-knowledge. Further, God's simplicity has often been taken to imply that God's knowing that a contingent state of affairs obtains is nothing different from God's making it obtain.[15] Some philosophers working in this tradition have even suggested that God's knowledge of a thing is not distinct from the being of that thing (Ross (1969), 214–215; Kant (1998), B145). The problem of intentionality, however, is a

problem about how a reference relation between the state of a system and some external state of affairs comes about. If the relation between God's knowledge and the thing known is *identity*, or some other very intimate metaphysical relation,[16] then this problem does not arise. Our problem is a problem about how the states of our minds/brains get to be about objects that are entirely metaphysically distinct from them. Although puzzles about the classical God's omniscience abound, none of those puzzles is the same as the puzzle of creaturely intentionality.

If, on the other hand, one adopts a more 'personalist' theology,[17] one might well attribute to God some sort of mental complexity that might provide a reduction base for the intentionality of God's knowledge.[18]

Furthermore, regardless of one's philosophical theology, God does not have a creator, hence there is no question, in the case of God, of distinguishing original from derived intentionality: God could not have derived intentionality. Additionally, if the theist holds that God is *necessarily* omniscient (and most theists do), then divine knowledge will not exhibit one of the most puzzling features of creaturely intentionality, namely, the possibility of misrepresentation. All of this makes the case of God very different from ours, in ways that matter to the present discussion. Divine omniscience does not provide a compelling reason to endorse primitivism about creaturely intentionality.

Insofar as theists are already committed to one purely non-physical mind (God), they may have good reason to be more open to recognizing non-physical aspects of created minds, and such aspects might be taken to include primitive intentionality. Nevertheless, this commitment does not, on its own, generate any *inconsistency* between theism and reductive theories of intentionality.

The other traditional attributes of God do not seem to have any special relevance for the theory of intentionality. It might perhaps be alleged that God's omnipotence requires that God be able to create primitive intentionality. However, this is akin to saying that God's omnipotence requires that God be able to create elemental water (without any hydrogen). Most theists have not thought that God is able to violate these kinds of metaphysical necessities. Nor does God's essential perfect goodness appear to have any bearing on the question: we are talking here about the *nature* of creaturely intentionality, not whether it would be good for God to create beings possessing it. I therefore conclude that theism generates no special problems for reductive theories of intentionality in general, or the NFT in particular. However, as I will now argue, if the NFT is correct then it is impossible that created minds exist in the complete absence of evil.

Evil and intentionality

According to one popular line of thought, what is required for a state to exhibit original intentionality is for that state to have the function or purpose of indicating its referent *to the system*. This purpose or function, according to such a view, must not be *assigned* by some other mind, but must be somehow internal to the functioning of the system. Theories of this sort – whether producer-centric

theories as in Dretske (1994) or consumer-centric theories as in Millikan (1989) or Neander (1995) – generally hold that the alternative to the function of a state being assigned by a creator is for it to develop by some selection process, such as evolution or learning. This naturalistic functional/teleological theory (NFT) consists in two claims:

1. A state S of a finite being B is non-derivatively about an object x iff S has the function of indicating x for B.
2. A state S of a finite being B has a function for B only if B's exemplification of S can be given a causal-historical explanation in terms of adaptive advantages that accrue to B when S successfully performs that function.

Not every reductive theory of intentionality is committed to these claims.[19] Recall that my assumption is only that this theory is *consistent*. That is, I assume that it does not logically conflict with any *a priori* necessary truth. Further, the NFT, as I understand it, takes these claims to tell us the true nature of (finite) intentionality, and therefore to be *a posteriori* necessities, like the claim that water contains hydrogen.

According to the NFT, a state possesses original intentionality only if it can be given a causal-historical explanation in terms of a process of selection or adaptation, such as evolution or learning.[20] However, it is impossible for such a process to take place in the absence of evil.[21]

To see why, it will be helpful to look in slightly more detail at one version of the NFT, that held by Millikan (1989). According to Millikan, a necessary condition for a state's serving as a representation is that 'unless the representation accords *so* (by a certain rule), with a represented, the consumer's normal use of, or response to, the representation will not be able to fulfill all of the consumer's proper functions in so responding' (*ibid.*, 286). In other words, a failure of correlation between the representation and the represented will be a malfunction of the system. Such a malfunction will be an evil. Granted, many such evils are trivial: to use one of Millikan's own examples, beavers are naturally skittish, and frequently raise false alarms, signalling other beavers to dart into their hiding places even though there is no predator. This system has been selected for because having a high rate of false positives is a lesser evil, for the beavers, than even a modest rate of false negatives. Nevertheless, the presence of these false positives is an evil. Plausibly, beavers experience fear in these circumstances, which is a kind of suffering. Even if they do not, they certainly waste time and energy that could be used more pleasantly.

Malfunctions of representational systems are evils. However, unless such evils had previously occurred, the representational system would not exist. The selection process (whether evolution, learning, or something else) must select for the correlation between the representation and its represented *because* this correlation is beneficial to (contributes to the proper functioning of) the organism in question.

Further, this correlation must be selected *from among alternatives*. Thus there must be instances, whether in the individual or in the species, where correlation is lacking. But, *ex hypothesi*, this lack of correlation leads to bad results, i.e. evils. Therefore, the selection process requires the presence of evil.

Note that this argument does not depend on the assumption that the created minds are embodied, that they exist in a world with laws like ours, or that they are the product of biological evolution as it actually exists on earth. Consider any imaginable being you like, whether biological or non-biological, physical or non-physical, provided only that this being has certain states that can be distinguished from one another. (If it helps, think of Berkeleian minds whose states consist only of non-representational qualia.) How could a state of such a being be said to have a function? A function could of course be assigned to it by some mind, but this won't solve our problem. Either the function would be assigned by the mind that has the state or by some other mind. In order to assign a function to a state, one has to have the ability to think *about* that state and that function, so the first option generates a bootstrapping problem. The second option, however, yields only derived intentionality. According to the NFT, the only way out of this problem is via a process of selection or adaptation. That is, there must be some causal-historical process whereby the being comes to exemplify a certain state because this is in certain circumstances advantageous. By the argument above, this sort of adaptation cannot take place unless there are disadvantageous states (evils) to be avoided. These disadvantageous states must sometimes actually occur. Thus even a Berkeleian mind cannot learn to use one of its phenomenal states to represent others in the absence of evil.

The NFT purports to be an *a posteriori* necessity, following from the essence or nature of creaturely intentionality. If this is correct, however, then it is *impossible* for creaturely intentionality to exist in a world without evil. As I argued in the previous subsection, there is no special reason why theists must reject this view: if it is consistent with itself, then it is consistent with theism. Thus, on the assumption that the NFT is consistent, it is consistent to maintain both that God exists and that it is impossible that created minds should exist in the absence of evil. Only one further claim is needed to arrive at (M): the claim that the existence of created minds is a sufficiently great good that it is consistent with perfect goodness to bring about the existence of created minds even if this implies the existence of at least some evil.[22] This is an extremely plausible claim, first because it is plausible that minds, merely as such, are intrinsically valuable, and second because the existence of minds is a necessary precondition for an enormous variety of other goods, such as pleasure, virtue, love, and aesthetic appreciation.[23] Further, insofar as (M) is merely a defence against the logical problem of evil, and not a theodicy or a solution to the evidential problem, we do not need to show that this is a sufficiently great good to justify the permission of all of the evil that actually exists. It suffices that it is a sufficiently great good to justify the minimum amount of evil that (assuming the NFT) is necessary for the existence of created minds. The fact

that, as a child, I had to burn my hand on the stove a couple of times to learn not to touch it provides no reason to doubt that my existence is on balance good.

The existence of created minds is a sufficiently great good to justify the permission of at least some evil, but the NFT entails that the existence of created minds requires at least some evil. Hence we arrive at our conclusion: if the NFT is consistent, then (M) is consistent, and if (M) is consistent then the propositions *God exists* and *evil exists* are consistent and the logical problem of evil is solved. No one who takes the NFT to be consistent should regard the logical problem of evil as a reason against the existence of God.

An objection

It may be objected that the selection process does not require *mal*function, but merely suboptimal function, and suboptimal function is not an evil. It is not, for instance, an evil that a particular rabbit has fewer offspring than it might have had.[24]

I reply that suboptimal function is indeed an evil, in the very broad sense defined above. Leibniz asserts that 'a lesser good is a kind of evil' (Leibniz (1710), §8) and his claim is correct in this context: a perfectly good being would want what is best for its creatures and therefore would, *ceteris paribus*, wish to prevent suboptimal function. But an evil is just any state of affairs that a perfectly good being would *ceteris paribus* wish to prevent.

Still, one might reasonably complain that this line of response significantly diminishes the interest of my argument, since it is easy enough to show that the existence of suboptimally functioning creatures is compatible with God's goodness. There are obvious reasons why, in a world even remotely resembling ours, it is impossible that every organism should simultaneously enjoy optimal function (even if there is an intrinsic maximum): a population of rabbits with optimal reproductive function would quickly lead to ecological collapse.

This complaint is not fully convincing. Theists generally hold that among God's creative options are some worlds radically *un*like ours, so observations about the ecological impact of rabbit breeding do not explain why God did not create a world in which everything functions optimally. On the other hand, if the NFT is a correct analysis of the nature of creaturely intentionality, then it is metaphysically necessary that no created minds exist in the absence of suboptimal function. This is a stronger conclusion than that yielded by ecological considerations.

Evil and belief

Even if we accept the claim that intentionality requires only instances of suboptimality and that such instances of suboptimality may not be evils, it can still be shown that the existence of created minds requires the existence of evil, since genuine minds must exhibit not merely intentionality but *belief*,[25] and the existence of belief in created minds requires a stronger sort of evil.

A constitutive norm of belief is that a believer must strive *both* to believe what is true *and* to avoid believing what is false (Wedgwood (2002)). What a system avoids, that system regards as bad (and not merely as less good – if, indeed, a distinction is to be drawn between what is less good and what is bad). Thus regarding false belief as bad is constitutive of engaging in the practice of believing. On the NFT, this practice must be selected for (via evolution, learning, or a similar process) and, as already argued, this selection process will need to include instances of both correct and incorrect representation, in which correct representations lead to better results (for the system). In other words, genuine belief will be differentiated from more primitive forms of representation in that beliefs are regulated by complex cognitive behaviour which aims to achieve true representations and avoid false ones (Shah & Velleman (2005)), whereas simpler forms of representation are not so regulated. Such complex cognitive behaviour cannot arise unless the system is somehow conditioned to regard misrepresentation as *bad* and this conditioning can only occur via instances of misrepresentation with suboptimal consequences.

What follows from this is that in order for there to be created minds (believers) there must be at least some tokens of an event-type (occurrent misrepresentation) which those minds regard as bad. If misrepresentations are in fact bad, then there is evil in the world. If misrepresentations are not in fact bad but incorrectly taken to be so, then there will be an illusion of evil in the world, and this illusion will itself be an evil (Mackie (1955), 201–202). The existence of created minds therefore requires the existence of evil.

Conclusion

We thus arrive at a curious conclusion: a certain way of thinking about the nature of mind – which is widely held by naturalists but might also reasonably be endorsed by theists – has the consequence that *the existence of (non-divine) minds is impossible in the absence of evil*. This conclusion provides the theist with a new line of response to the logical problem of evil: it is plausible that the existence of created minds is a sufficiently great good to justify the permission of at least some evil, and if the NFT is true then the permission of some evil is in fact necessary for the existence of created minds. In this way, the logical problem can be undermined without appeal to considerations about free will.

In light of how the logical problem has been defined, this conclusion is a very narrow one. Anyone who holds that the NFT is consistent cannot simultaneously hold that the existence of God is inconsistent with the existence of any evil at all. Of course, however, the 'real' problem of evil – the most serious form of the problem – is not a problem about occasional toe-stubbings or toothaches or unimportant instances of misrepresentation by finite minds. We humans live in a world filled with evil and suffering, much of which appears to achieve no counterbalancing good, and some of which is so horrendous that the very notion of searching

for a counterbalancing good may seem morally offensive. Does the present argument make any progress on the real issue here?

To a modest extent, I think it does. First, the logical problem of evil serves as a kind of threshold issue in discussions of God and evil: if theism is inconsistent with the existence of any evil at all, then there is no need of weighing evidence, or of identifying particular sorts of evil that cause especially intractable problems for theism. As we've seen, because of its controversial assumptions, Plantinga's Free-Will Defence does not decisively show that theism passes this threshold. I have shown that a different set of controversial assumptions, held by a very different group of philosophers, achieves the same result as Plantinga's, and hence that a much wider range of thinkers should regard theism as having passed this threshold, so that the more complex recent discussions of the problem of evil in analytic philosophy really are necessary.

Second, and perhaps more importantly, this line of thought may serve to alter our perspective regarding the mundane, ordinary sorts of evils that seem to be unavoidable parts of any human life.[26] The NFT implies that at least some such evils are necessary preconditions of my own existence. Thus the theist faces the question: why did God create *me*, given that my very existence was inextricably bound up with the existence of evil? This is a question that has a very different flavour – not only for philosophy but also for practical religious devotion – from the standard question of why God allows evil in the world.[27]

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Notes

1. Some philosophers employ a weaker epistemic notion of 'defence' on which it is sufficient to show that *for all anyone knows* God and evil may coexist (Howard-Snyder & O'Leary-Hawthorne (1998); van Inwagen (2006)). Here I will stick to the stronger sense in which the term was originally used by Plantinga.

2. Or its synonyms: deduction, logical consequence, logical implication, etc.

3. For instance Howard-Snyder & O'Leary-Hawthorne (1998); Sobel (2004, §2.5); Almeida (2017); and Beebee (2018) all treat the notion of consistency in Plantinga's defence as involving metaphysical possibility, and none of them notes the problems this causes if theism is not contingent (and this despite the fact that the central argument of Almeida (2017) depends on the assumption that theism is not contingent). Some of these philosophers may perhaps understand the argument as claiming only that *theists may reasonably believe* that God and evil are metaphysically compossible, but they do not make this explicit, and Plantinga claims to be accomplishing more than this.

4. Plantinga (1974, ch. 10) famously defends this claim.

5. Some philosophers have suggested that the best way to save traditional theism from certain paradoxes is to weaken the notion of omnipotence (e.g. Geach (1973); Sobel (2004), ch. 9; Hill (2014)). Additionally, some philosophers and theologians – particularly those influenced by process thought and/or feminist thought – have argued that omnipotence is not desirable as a divine attribute in the first place (e.g. Hartshorne (1984), 10–26; Davaney (1990); Frankenberry (2018), §3.1; Viney (2018), §6). The logical problem of evil, as formulated by Mackie and others, does not target such views.

6. For criticism of Harrison's view see Linford (2018).

7. Plantinga here says that the Free-Will Defender claims that this proposition is *possible*. However, as discussed above, if Plantinga is correct that the existence of God is not contingent, then this proposition is possible only if God exists. In fact, the Free-Will Defender needs to defend only the weaker claim that the proposition is *consistent*, in the sense defined above. This is a weaker claim because even if it is necessarily true that God exists, this necessity may not be *a priori* for us humans, but might be arrived at by, for instance, an inference to the best explanation. See Aquinas (1920), Iq2a1; Adams (1983); Forgie (1995); Pearce (2017a), 247–248, 260–61; Byerly (2019)).

8. For scepticism about this claim see Ekstrom (2016).

9. Cf. Almeida (2012), §2.4.

10. Bourget and Chalmers (2014) found the correlation between theism and libertarianism to be the 8th strongest correlation among the 30 views surveyed, with a correlation coefficient of 0.385.

11. In fact, however, there is reason to suspect that Plantinga's Free Will Defence is part of the reason why so many theistic analytic philosophers are libertarians. (For discussion, see Speak & Timpe (2016), 3–7; Vargas (2016); Byerly (2017).) While there may be nothing illegitimate in theistic philosophers endorsing libertarianism because it in some way helps with the problem of evil, one cannot employ Plantinga's Free Will Defence as Plantinga originally presented it unless one has a prior and independent belief in the consistency (though not necessarily the truth) of Plantinga's account of free will.

12. This will include, for instance, any theist who attaches significant epistemic probability to the claim that an adequate notion of divine sovereignty requires the rejection of libertarianism about human free will. Some philosophers have argued that a compatibilist version of the free will defence may also be possible (e.g. Bishop (1993); Pruss (2003); Turner (2013); Almeida (2017); Byerly (2017)). Since I am arguing that different defences are needed for different audiences my view is: if a compatibilist free will defence can also be made to work (for some audience), so much the better.

13. Here and throughout this article, I call any account which does not take intentionality as metaphysically primitive 'reductive'. Even so-called 'non-reductive physicalist' accounts are reductive in this very broad sense.

14. Omniscience is not one of the explicit assumptions used to generate the logical problem of evil. However, in the first place, few theists will be happy with the idea of evading the problem by denying omniscience and, in the second place, I have argued in other work that omnipotence entails omniscience (Pearce & Pruss (2012), 412; Pearce (2018)).

15. 'Aseity' is the classical God's property of being 'from Godself', i.e., not dependent on anything distinct from God. Impassibility is the classical God's property of being incapable of being acted upon. These attributes were traditionally thought to prevent God from receiving knowledge from outside Godself. The doctrine of divine simplicity is the denial that there is any kind of metaphysically real complexity within God, which was thought to mean that God's actions and attributes were not really distinct from God or from one another. On the consistency of aseity, impassibility, and simplicity with divine knowledge of contingent things, see ibn Sīnā (1973), chs 30–32; Aquinas (1920), Iq14a5–6; Brower (2009).

16. In Pearce (2017a), I propose a model of God on which God's creative act *constitutes* the causal history of the universe, in something like the way a lump of clay constitutes a statue. If this model is combined with the Thomistic claim that God's act of knowing is identical with God's act of creating, then the relationship between God's knowledge and the thing known will be constitution, which does seem a rather more plausible candidate than identity here. In any event, the problem of establishing the reference relation will not arise.

17. By a 'personalist' theology I mean a view that holds (contrary to Aquinas and other classical philosophical theologians) that God is a person in the same sense of the word 'person' that applies to us humans. See e.g. Swinburne (1994), ch. 6.

18. For instance, Vandergriff (2018) defends the application of a functionalist theory of mind to God's mental states.

19. In particular, as a referee emphasized, it is possible to endorse (1) without (2). Such a view would not have the consequences I discuss in the text.

20. The NFT is therefore an externalist theory of mental representation and, like other externalist theories, is committed to the claim that Davidson's swampman lacks intentionality (see Davidson (1987)). As an anonymous referee emphasized, this is quite important to my argument: if intrinsic duplicates always have the same intentional states, then God could have created an intrinsic duplicate of the present state of the universe lacking the actual world's history of pain and suffering and that world would contain creaturely intentionality. However, according to the NFT, such a world would (because of its different causal history) *not* contain creaturely (original) intentionality.

21. Zamulinski (2010) argues, in a somewhat similar fashion, that 'relationship-capable' free beings could arise only by a process of unguided evolution, and that this provides God with a reason for permitting evil. I am, however, aiming to avoid issues about free will altogether.

22. An anonymous referee suggests that, since the NFT prevents God from *directly* creating minds, it also prevents God from *ensuring* that minds will come about. Thus I need to hold that some sufficiently high probability of the existence of created minds is a sufficiently great good to justify the existence of at least some evil. This objection runs into thorny questions about divine providence, the possibility of God's controlling the outcomes of indeterministic processes, and whether the selection required by NFT must necessarily be indeterministic. These issues are much too large to address here. Suffice it to say that (M)

uses 'create' broadly enough to include the initiation of indeterministic processes among possible modes of creation.

23. Some, but not all, of these are the same goods that, according to Free-Will Defenders, require the existence of free will. However, the claim that these goods require the existence of intentional mental states is far less controversial than the claim that they require (libertarian) free will.

24. I thank Alexander Pruss for this objection. A rather similar objection was also posed independently by Heath White.

25. Even if some representational systems too primitive to have beliefs count as minds, there are significant values that can be attained only by systems capable of belief, and this is sufficient for my argument.

26. I do not intend to apply this reasoning to what Adams (1999) calls 'horrendous evils'.

27. Some of the ideas in this article were previously presented on the (late, lamented) Prosblogion philosophy of religion blog (archived at <https://web.archive.org/web/20171113062208/http://prosblogion.ektopos.com/2017/10/14/intentionality-and-theodicy/>), where I benefited from discussions with commenters. I also thank Alexander Pruss, Philip Woodward, and Scott A. Hill for helpful discussion of previous drafts.