

Some Thoughts on the Logical Aspects of the Problem of Evil

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Abstract

My purpose in this chapter is to take seriously the idea that problem of evil is an incompatibility between the proposition that the world was created and is ruled by an omnipotent, omniscient and unlimitedly good being and one that says that there is evil and suffering in our world. Besides being in accordance with much of the literature on the problem of evil, this idea takes the problem at face value, that is to say, it sees it as a logical and incompatibility problem. More important than that, it allows for a comprehensive and elegant account of the key concepts involved in the debate: despite contrary appearances, the concept of problem of evil itself, the concept of argument from evil, the concepts of logical and evidential problems of evil and the concepts of theodicy and defense can be seen and defined from the standpoint of the same general idea about the problem of evil. That is basically what I want to show here.

1. Introduction

The problem of evil is one the most debated issues in analytic philosophy of religion. Alvin Plantinga (1974, p. 164), for instance, has famously described it as “the most formidable objection to theist belief.” He continues:

A multitude of philosophers have held that the existence of evil is at least an embarrassment for those who accept belief in God. And most contemporary philosophers who hold that evil constitutes a difficulty for theistic belief claim to detect logical inconsistency in beliefs a theist typically accepts. (Plantinga, 1974, p. 164)

Besides presenting the problem in relation to the rationality of theist belief, Plantinga also characterizes it in terms of logical inconsistency. In fact, one of the most traditional descriptions of the problem of evil—John Mackie’s—explicitly uses notions of inconsistency and contradiction:

In its simplest form the problem is this: God is omnipotent; God is wholly good; yet evil exists. There seems to be some contradiction between these three propositions, so that if any two of them were true the third would be false. But at the same time all three are essential parts of most theological positions; the theologian, it seems, at once must adhere and cannot consistently adhere to all three. (Mackie, 1955, p. 200)

This is similar to some descriptions of the so-called evidential problem of evil (more on that below):

[...] rather than being formulated as a deductive argument for the very strong claim that it is logically impossible for both God and evil to exist, (or for God and certain types, or instances, or a certain amount of evil to exist), the argument from evil can instead be formulated as an evidential (or inductive/probabilistic) argument for the more modest claim that there are evils that actually exist in the world that make it unlikely—or perhaps very unlikely—that God exists. (Tooley, 2012, p. 3)

I could fairly rephrase Michael Tooley as follows: besides being characterized as an inconsistency problem, the problem of evil can also be characterized as an evidential incompatibility problem, in the sense that the evils that exist in the world seem to make it unlikely that God exists.

The following characterization would then probably find some sympathy among analytic philosophers of religion: the problem of evil is the supposed incompatibility that exists between the proposition that

(G) The world was created and is ruled by an omnipotent, omniscient and unlimitedly good being whom we call God,

and one that says that

(S) There is evil and suffering in our world.

If we take the word “incompatibility” to mean inconsistency, we get the logical problem of evil; if we take it to mean evidential incompatibility—in the sense of the existence of evil and suffering standing as evidence against the existence of God—we get the evidential or inductive problem of evil.

Despite its simplicity and intuitiveness, it is not obvious that this characterization captures all that has been done under the umbrella of *problem of evil*. There is a considerable variety of concepts involved in the debate, as well as disagreement over their exact meaning and tenability. The very concept of problem of evil, for instance, has been seen with suspicion:

Evil, it is often said, poses a problem for theism, the view that there is an omnipotent, omniscient, and perfectly good being, ‘God’ for short. This problem is usually called ‘the problem of evil’. But this is a bad name for what philosophers study under that rubric. They study what is better thought of as an argument, or a host of arguments, rather than a problem. (Howard-Snyder, 1996, p. xi)

Indeed, while the notion of argument from evil seems straightforward—we could define it simply as an atheistic argument premised on at least one proposition about the existence of evil and suffering—the notion of problem of evil might seem a little vague. In response to that, one could say that everything dealing with the issue that there is an incompatibility between (G) and (S) belongs to what we call problem of evil. This would include everything related to arguments from evil—conception, attempts of refutation, response to alleged refutations, etc.—but also theist’s efforts to build satisfactory theodicies, which might not address specific arguments from evil. Howard-Snyder acknowledges this, as he continues:

Of course, an argument from evil against theism can be both an argument and a problem. Some people realize this for the first time when they assert an argument from evil in print and someone publishes a

reply in which numerous defects and oversights are laid bare for the public eye. An if turns out that there is a God and He doesn't take kindly to such arguments, then an argument from evil might be a big problem, for one who sincerely propounds it. (Howard-Snyder, 1996, p. xi)

The notion of evidential problem of evil (and evidential argument from evil as well) is also problematic. First, there is great diversity of approaches falling under this label. For instance, while on one hand there are completely qualitative approaches such as William Rowe's (1979), on the other there comparative (Draper, 1989) and quantitative (Rowe, 1996) approaches. The variety of terms used to refer to this family of approaches does not help either; besides "evidential problem of evil", terms such as "inductive problem of evil", "probabilistic problem of evil", "empirical problem of evil" and "*a posteriori* problem of evil" have been used. Thirdly, unlike the logical problem of evil and the notion of logical inconsistency, there is no consensual theory, be it qualitative, comparative or quantitative, of what it means to say that a set of propositions Γ makes it likely that proposition A is true.

Be it as it may, the fact that there a distinction, however fussy it may be, between the concepts of problem of evil and argument from evil on one hand, and a logical approach and an evidential approach on the other, gives rise to at least four conceptual categories: logical problem of evil and logical argument from evil on one side, and evidential problem of evil and evidential argument from evil on the other. And there is more. Depending on the kind of suffering which one decides to emphasize, different problems of evil and arguments from evil, both logical and evidential, will emerge. For example, it is common to distinguish between moral evil and natural evil:

Moral evil is evil what we human beings originate: cruel, unjust, vicious, and perverse thoughts and deeds. Natural evil is the evil that originates independently of human actions: in disease bacilli, earth quakes, storms, droughts, tornadoes, etc. (Hick, 1985, p. 12)

From that, eight categories will emerge: natural logical problem of evil, moral logical problem of evil, natural logical argument from evil, moral logical argument from evil, and so on and so forth. It seems to me that this variety of categories should be taken into account by any attempt of comprehensively characterizing the problem of evil.

Another thing that must definitely be taken into account is the distinction between defense and theodicy. Plantinga has famously used the term "defense" to distinguish his endeavor (which he called the Free Will Defense) from the one associated with a theodicy:

Augustine tries to tell us what God's reason is for permitting evil [...] Such an attempt to specify God's reason for permitting evil is what I earlier called a theodicy [...] A theodicist, then, attempts to tell us why God permits evil. Quite distinct from a Free Will Theodicy is what I shall call a Free Will Defense. Here the aim is not to say what God's reason is, but at most what God's reason might possibly be. (Plantinga, 1977, pp. 27-28)

Since then, the distinction has been widespreadly mentioned and used in professional articles and books on God and evil. Nonetheless, contrary to what Plantinga says, the concepts of defense and theodicy are not that distinct from each other. Their task is basically the same: to give the reasons why God allows evil and suffering. As he himself admits (Plantinga, 1977, p. 28), finding such reasons is tantamount to solving the logical problem of evil (which is the context inside of which he presents the distinction).

Of equal importance is the connection that many people see between defense and the logical problem of evil on one side, and theodicy and the evidential problem of evil on the other side:

Just as we have classified the two major versions of the problem of evil into the logical and evidential formulations, we may also classify the two main responses to the problem as defense and theodicy [...] Defense has come to be the theistic strategy most closely associated with discussions of the logical formulation of the problem of evil, whereas theodicy has come to be associated with the evidential formulation. (Peterson, 1998, p. 33)

But why is this so? Does not a theodicy also solve the logical problem of evil? And is it really true that a defense cannot solve the evidential problem of evil? Needless to say, in order to answer these questions, one must have a minimally precise characterization of the concepts involved, in special the concept of evidential problem of evil.

My purpose in this chapter is to take seriously the idea that the problem of evil is an incompatibility between G and S. This, I believe, is worthy doing. First, as I have said, it (the idea that the problem of evil is an incompatibility between G and S) is in accordance with much of the literature on the problem of evil. Second, it takes the problem at face value, that is to say, it sees it as a logical and incompatibility problem¹. Thirdly and more important, it might allow for a comprehensive and more elegant account of the key concepts involved: despite contrary appearances, these concepts—the concept of problem of evil itself, the concept of argument from evil, the concepts of logical and evidential problems of evil and the concepts of theodicy and defense—can be seen and defined from the standpoint of the same general idea about the problem of evil.

Here is what I will do. First, I will refine this characterization and give a more precise definition of the concept of problem of evil. Then I will slightly modify one of its parameters to arrive at the notions of logical problem of evil and evidential problem of evil. This will be done in the next section. In section 3 I will deal with the concepts of theodicy and defense. I then move, in section 4, to the concept of argument from evil. Finally, in the last section, I lay down some concluding remarks. I will follow here what might be termed a semi-formal approach: despite not using a fully developed logical theory, I shall use the standard notation and a couple of results from the field of formal logic.

2. Logical and Evidential Problems of Evil

I say that the *problem of evil* is the claim of incompatibility between

(G) The world was created and is ruled by an omnipotent, omniscient and unlimitedly good being whom we call God,

and some proposition about the existence of evil and suffering in our world, say

(S) There is evil and suffering in our world.

In symbols, it is the claim that

¹ The two senses of the word “incompatibility” I am taking here—inconsistency and evidential incompatibility—can be seen as conceptually related, in the sense that inconsistency is the extreme case of evidential incompatibility. Propositions α and β are inconsistent when the support given by α against β is so strong that it proves β to be false.

(E) $\{G,S\} \models \perp$

, where \models is such that if Γ is a set of propositions and α is a proposition, then $\Gamma \models \alpha$ means that α can be inferred from or is a consequence of Γ ; \perp is the contradiction symbol.

As I said, if we take the word “incompatibility” to mean inconsistency, we get the logical problem of evil; if we take it to mean evidential incompatibility—in the sense of the existence of evil and suffering standing as evidence against the existence of God—we get the evidential problem of evil. Let \vdash be the inferential relation of classical logic and \models an inductive or evidential inferential relation. The distinction then can be put as follows: while the *logical problem of evil* amounts to the claim that

(E_l) $\{G,S\} \vdash \perp$

, the *evidential problem of evil* amounts to the claim that

(E_e) $\{G,S\} \models \perp$.

Due to the diversity of existing approaches to inductive reasoning, I take \models as generally as possible. It might mean for example the inferential aspect of conditional probability (so that in the case where the probability of β given α —in symbols: $P(\beta/\alpha)$ —is high, or at least not too low, we write $\alpha \models \beta$) but also an intuitive and pre-theoretical notion of evidential support dissociated from any formal theory of inference. From a minimal viewpoint, \models must allow us to read $\Gamma \models \alpha$ as “ Γ stands as evidence for α ”, “ Γ confirms α ” or “ Γ supports the reasonableness or plausibility of α ”

Despite of this, I shall suppose in the course of the chapter that \models satisfies the following principles (which I take here as intuitive and reasonable principles of inductive reasoning, taken as generally as possible):

(\models ₁) *Supraclassicality*: if $\Gamma \vdash \alpha$ then $\Gamma \models \alpha$.

(\models ₂) *Inductive contradiction*: if $\Gamma \cup \{\alpha\} \models \perp$ then $\Gamma \models \neg \alpha$.

(\models ₃) *Transitivity*: if $\Gamma \models \alpha$ and $\{\alpha\} \models \beta$ then $\Gamma \models \beta$.

In addition to them, I shall use the following deductive principle:

(\vdash ₄) *Reduction ad absurdum*: If $\Gamma \cup \{\alpha\} \vdash \beta$ and $\Gamma \cup \{\alpha\} \vdash \neg \beta$ then $\Gamma \vdash \neg \alpha$.

Notice that (\models ₁), (\models ₂) and (\models ₃) all hold if we replace \models by \vdash , in the case of which I use the markers (\vdash ₁), (\vdash ₂) and (\vdash ₃), respectively.

Getting back to the problem of evil, I have mentioned how the variety of kinds of evil and suffering can give rise to several different problems of evil. As one would expect, this variety is not restricted to the notions of moral and natural evil:

There are, I think, four different things a theodicy might aim at doing, each more difficult than its predecessor. First, a theodicy might seek to explain why O [God] might permit any evil at all. Second, a theodicy might endeavor to explain why there are instances of the various kinds of evil we find in our world – animal pain, human suffering, wickedness, etc. Third, a theodicy might endeavor to explain why there is the amount of evil (of these evils) that we find in our world. And, finally, a theodicy might endeavor to explain certain particular evils that obtain. (Rowe, 1988, p. 131)

As far as my characterization of the problem of evil is concerned, while the notions of natural and moral evil can be expressed in terms of proposition as follows:

(S₂) There are instances of natural evil.

(S₃) There are instances of moral evil

, the different kinds of evil which Rowe talks about might be expressed as follows:

(S₄) There are instances of animal pain.

(S₅) There are instances of human suffering.

(S₆) There is the amount of evil and suffering we find in our world.

(S₇) There is this, and this, and this . . . instance of evil and suffering in our world.

It is not difficult to see how this diversity of problems of evil would be coped with in the simple symbolism I have introduced. To each S-proposition there will be different logical and evidential problems of evil. Regarding S₂, S₃ and S₆, for example, we would have as follows:

(E_l-natural evil) {G,S₂} ⊢ ⊥

(E_e-natural evil) {G,S₂} ⊨ ⊥

(E_l-moral evil) {G,S₃} ⊢ ⊥

(E_e-moral evil) {G,S₃} ⊨ ⊥

(E_l-amount of evil) {G,S₆} ⊢ ⊥

(E_e-amount of evil) {G,S₆} ⊨ ⊥

3. Theodicy and Defense

The use of the word “claim” in my definition is important. Saying that the problem of evil is the *claim* of incompatibility between G and a S-proposition gives room to at least two distinct, and quite obvious indeed, attitudes towards it: one may try to show that the claim is in fact true, by providing arguments showing that there is really such an incompatibility, or that it is false. Let me take a closer look at what this second movement would look like.

Take an arbitrary evidential problem of evil, say the claim that

(E_x) {G,S_x} ⊨ ⊥

From it (thought ⊨₂) we get

(E'_x) S_x ⊨ ¬G

If (E'_x) is false so is (E_x). One way to show that (E'_x) is false is to exhibit a proposition R such that

(T) {G, R} ⊨ S_x

, {G, R} is a consistent set and R ⊨ S_x². Why is this so? Suppose that (E'_x) is true. From (T) and (E'_x), we can use the transitivity of ⊨ (⊨₃) and conclude {G, R} ⊨ ¬G. But this is absurd, for even if R somehow supports ¬G, this support must be defeated by G. Therefore, our supposition (E'_x) is false and so is (E_x).

R however seems to do more than merely showing (E_x) to be false. By showing that G and R might serve as evidence for S_x, it seems that (T) shows that the existence of evil and

² R ⊨ S_x is there to guarantee that G is indeed a relevant component of (T).

suffering is exactly what one would expect given the truth of G. This, incidentally, is one of the main criteria a theodicy should satisfy (Van Inwagen, 1991, p. 139). Traditionally, the chief task of a theodicy must be to “explain how the universe, assumed to be created and ultimately ruled by an unlimitedly good and unlimitedly powerful Being, is as it is, including all the pain, suffering, wickedness, and folly that we find around us and within us.” (Hick, 1981, p. 38). Therefore, if R along with G makes S_x plausible, it seems reasonable to say that R explains the existence of evil and suffering in the world given God’s existence.

This connection between explanation and inference is not new. There is a long tradition in the philosophy of explanation which takes inference as a key aspect of explanation³. In the context of the problem of evil, sometimes this is put in terms of the calculus of probability⁴:

A theodicy, let us say, is the conjunction of theism with some “auxiliary hypothesis” h that purports to explain how S could be true, given theism. Let us think for a moment in terms of the probability calculus. It is clear that if a theodicy is at all interesting, the probability of S on the conjunction of theism and h (that is, on the theodicy) will have to be high—or at least not too low. (Van Inwagen, 1991, p. 139)

Here, while our G would correspond to what Van Inwagen calls theism, his auxiliary hypothesis h corresponds to R . We can then say that R is at the very least a serious candidate to represent the reasons that would justify and explain why God permits S_x .

Taking the idea a little further and generalizing about which kind of problem of evil is at stake, I will say that a *theodicy* addressing a specific problem of evil

$$(E_x) \{G, S_x\} \models \perp$$

is a pair $\langle G, R \rangle$ which solves (E_x) ; otherwise said, $\langle G, R \rangle$ is such that

$$(T) \{G, R\} \models S_x$$

, $\{G, R\}$ is a consistent set and $R \not\models S_x$.

Although an important one, this is not of course the only condition a pair $\langle G, R \rangle$ should satisfy in order to be considered a theodicy. For instance, when one proposes a theodicy for explaining S_x , she wishes to find not only an explanation for why S_x is the case, but also an explanation able to *morally* justify why God allows or would allow S_x ⁵. Therefore, there should be some guarantee that R provides such a kind of explanation⁶.

One familiar with the literature on the problem of evil should have noticed that the reconstruction I have given of how a theodicy solves the problem of evil is very similar to Plantinga’s characterization of what a defense should do:

The Free Will Defence is an effort to show that (1) God is omnipotent, omniscient, and wholly good (which I shall take to entail that God exists) is not inconsistent with (2) There is evil in the world. That is, the Free Will Defender aims to show that there is a possible world in which (1) and (2) and both true.

³ See (Salmon, 1989) and (Ruben, 1990), for instance.

⁴ Recall that the inferential aspect of conditional probability is supposed to be encompassed in our inductive relation \models .

⁵ That these reasons should give a moral justification is clear. The purpose of a theodicy is to conciliate the existence of evil with the existence of an omnipotent, omniscient and perfectly good being. If the reasons given do not have a moral character, then one feature, namely perfect goodness, would be left out. It is not, as one might think, an asymmetry regarding the treatment given to the three features; instead, it is an exigence of the problem of evil itself.

⁶ For more on the conditions a theodicy must satisfy see (Silvestre, 2017).

No 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 . r , of course, need not be true or known to be true; it need not be so much as plausible. (Plantinga, 1974, p. 165)

In fact, he himself admits that a defense and a theodicy do almost exactly the same thing (Plantinga, 1977, p. 28); the difference is that while a theodicy puts R as God's actual reason, in a defense R needs only be possible (here (1) is the same as G and (22) is a S-sentence):

The Free Will Theodist and Free Will Defender are both trying to show that (1) is consistent with (22), and of course if so, then set A is consistent. The Free Will Theodist tries to do this by finding some proposition r which in conjunction with (1) entails (22); he claims, furthermore, that this proposition is true, not just consistent with (1). He tries to tell us what God's reason for permitting evil really is. The Free Will Defender, on the other hand, though he also tries to find a proposition r that is consistent with (1) and in conjunction with it entails (22), does not claim to know or even believe that T is true. And here, of course, he is perfectly within his rights. His aim is to show that (1) is consistent with (22); all he need do then is find an r that is consistent with (1) and such that (1) and (r) entail (22); whether r is true is quite beside the point. (Plantinga, 1977, p. 28)

But why is this so? If theodicy and defense are, from a logical point of view, indistinguishable from each other (that is to say, if they both solve in the same manner the problem of evil), why to have two different terms? And what difference does the claim (or even the fact) that R is true make?

Put in terms of \vdash , the answer is none. Regarding the logical problem of evil, there is no difference at all if R is claimed to be true (or even is true) or is a merely possible proposition. Let us consider an arbitrary logical problem of evil:

(E₁) $\{G, S_x\} \vdash \perp$

If we have R such that

(T₁) $\{G, R\} \vdash S_x$

, $\{G, R\}$ is a consistent set and $R \not\vdash S_x$, then (E₁) is false. The reasoning is the same as above. From (E₁) and \vdash_2 we get

(E'₁) $S_x \vdash \neg G$.

Trivially, if (E'₁) is false so is (E₁). Now Suppose that (E'₁) is true. From (T₁), (E'₁) and \vdash_3 and get $\{G, R\} \vdash \neg G$, which is false. Therefore, (E'₁) is false and so is (E₁).

What matters for this are the logical relations that R holds with G and S_x . It is completely irrelevant whether R is true or only possibly true. Therefore, from the perspective of the logical problem of evil and its solution, the concepts of theodicy and defense are logically indistinguishable from each other⁷.

The situation is a bit different when we deal with the evidential problem of evil. We can see this by taking a look at the whole quotation by Van Inwagen I have shown above:

⁷ Notice that my claim is circumscribed to the problem of evil as a problem, that is to say, as something that must (or might) be solved. It is only in that sense that I am claiming that the concepts of theodicy and defense are logically indistinguishable from each other. From a more general perspective, it is obvious that they are different. R and possibly R are obviously not equivalent. Therefore, showing that R is God's possible reasons for allowing evil does not imply that R is God's actual reasons. However, and that is my point, this does not make a slight difference to the fact that the logical relations that R holds with G and S_x prove that E₁ is false.

[...] whether a theodicy is interesting depends not only on the probability of S on the conjunction of theism and h, but also on the probability of h on theism. Note that the higher $P(h / \text{theism})$, the more closely $P(S / \text{theism})$ will approximate $P(S / \text{theism} \ \& \ h)$. On the other hand, if $P(h / \text{theism})$ is low, $P(S / \text{theism})$ could be low even if $P(S / \text{theism} \ \& \ h)$ were high. (Consider, for example, the case in which h is S itself: even if $P(S / \text{theism})$ is low, $P(S / \text{theism} \ \& \ S)$ will be 1 – as high as a probability gets.) The task of the theodicy, therefore, may be represented as follows: find an hypothesis h such that $P(S / \text{theism} \ \& \ h)$ is high, or at least not too low, and $P(h / \text{theism})$ is high. (Van Inwagen, 1991, p. 139)

The idea here is that the stronger the evidential support given by G to R is, the closer the amount of evidential support given by G to S gets to the amount of evidential support given by G and R to S. Therefore the need of $P(h / \text{theism})$ be high. From a purely qualitative point of view, this means that if G stands as evidence for R, and G, along with R, stands as evidence for S_x , then G itself stands as evidence for S_x . In symbols: if $G \models R$ and $G \cup \{R\} \models S_x$ then $G \models S_x$ ⁸. Therefore there should be the following additional condition:

(P) $G \models R$.

As pointed out by Van Inwagen, the absence of (P) could give rise to *ad hoc* uses of \models as an explanatory instrument, as in the case mentioned where R (Van Inwagen's h) is S_x ⁹.

Now we can make some sense of Plantinga's distinction. As far as the evidential problem of evil is concerned, it really makes a difference that R is true, for if this is so, then $G \vdash R$ is also true, and by (\models_1) (P) is satisfied. Consequently, we could also make some sense of the connection which has often been made between defense and the logical problem of evil on one hand, and theodicy and the evidential problem of evil on the other.

However, and despite of this, the distinction as it stands is still untenable. First because it does not apply equally to both logical and evidential problems of evil, as Plantinga announces. Second because it is at least controversial to say that all theodicyists put R as being God's actual reason for allowing evil and suffering in the world. Third, as an evaluation criterion for the satisfactoriness of theodicies, how to know that R is indeed true? Most, if not all the reasons so far given by theodicyists in principle cannot be known to be true. Finally, if from a logical point of view the two notions are indistinguishable from each other, why to have it? Why not simply to drop this theoretically useless criterion that R should be true and have instead only one concept to refer to the theodicyist's attempt to solve a logical problem of evil?

That is my proposal: to take the notion of theodicy as defined above and see it as the theist response to the problem of evil, be it logical or evidential¹⁰. According to this, Plantinga's free-will defense (1974, 1977) would be a theodicy aimed at answering the logical problem of evil. As far as the notion of *defense* is concerned, I propose to take it at face value and define it as an attempt to refute a specific argument from evil, be it logical or evidential.

⁸ Incidentally, this is the cut property, which in general holds in deductive logics and is seen as a desirable property of commonsense and non-monotonic reasoning. See (Makinson, 1994, p. 39).

⁹ In Van Inwagen's view, (P) is a necessary condition for the explanatory soundness of \models . Others who seem to require the same thing are William Hasker (1988, p. 5) and Tooley (2002, p. 22). While this is not completely false, the satisfaction of (P) is by no means the only—nor is it the best—way to prevent this type of *ad hoc* use. By invoking the restriction imposed on (T) that $R \not\models S_x$, we obtain the same result in a much simpler way without requiring the satisfaction of a condition as strong as (P).

¹⁰ As far as R's ontological and epistemological status are concerned, one can see them as distinguishing parameters for theodicies. See (Silvestre 2017).

According to this definition, while, for instance, Nelson Pike’s “Hume on Evil” article (Pike, 1963) would be a defense against Hume’s logical argument, Stephen Wikstra’s (1984) well-known CORNEA critique would be a defense against Rowe’s 1979 evidential argument (Rowe, 1979).

4. Argument from Evil

Here is what I have done so far. I have defined the problem of evil as a claim of incompatibility between G and some S sentence; taking the word “incompatibility” to mean inconsistency gives us the logical problem of evil; taking it to mean evidential incompatibility gives us the evidential problem of evil. Then I pointed out that two movements might be taken to answer the challenge of incompatibility. While the first one tries to make the incompatibility as explicit as possible by building atheistic arguments premised on at least one proposition about the existence of evil and suffering—these are the so-called arguments from evil—the second tries to show that the incompatibility is merely apparent and that there are in fact reasons that would morally justify God in allowing the evil and suffering we find in our world. The goal of a theodicy, which is the theist’s movement, is to exhibit these reasons. I defined a defense as an attempt to reply to a specific argument from evil.

As far as the notion of argument from evil is concerned, a simple but very fundamental point comes out from what I have said so far: there is a distinction between the notions of problem of evil and argument from evil, for one can successfully answer a problem of evil, that is to say, a specific claim of incompatibility between G and S_x , without taking into account a specific argument which tries to show that there is really such an incompatibility. Another thing which comes out is this: since there is a distinction between the logical and the evidential problems of evil, there must also be a distinction between logical arguments from evil and evidential arguments from evil.

In order to cope with these distinctions, I will say that, from a general viewpoint, an *argument from evil* is an atheistic argument premised on at least one known proposition about the existence of evil and suffering and logically connected to some (E_x) , in the sense that showing (E_x) to be false amounts to refuting the argument. A *logical argument from evil* then is an argument from evil which is refuted by refuting (E_l) or some of its variations. In its turn, an *evidential argument from evil* is an argument from evil which is refuted by refuting (E_e) or some of its variations, but is not refuted by refuting the corresponding (E_l) variation. This qualification is needed to prevent that every logical argument be also an evidential argument: by (\neq_l) , (E_e) follows from (E_l) .

Let me try to show now how some existing arguments from evil fit in my definition. For the logical problem of evil the task is a straightforward one. As shown by Pike (1963) and Plantinga (1974), in order to prove

$$(E_l) \{G, S_x\} \vdash \perp$$

one has to show that $G \rightarrow \neg S_x$ is an analytical truth, or equivalently, to provide an argument for

$$(A) \Gamma \vdash G \rightarrow \neg S_x$$

such that each premise of Γ is either analytically true or a non-controversially known definitional postulate. Such an argument would justify the use of $G \rightarrow \neg S_x$ in the trivially deductively valid argument below:

$$(A') \{G \rightarrow \neg S_x, S_x\} \vdash \neg G.$$

Although (A) and (A') together would make up what I am calling here a logical argument from evil, the crucial part is of course (A) (possibly accompanied by auxiliary arguments trying to show that the members of Γ are indeed either analytically true or non-controversially known definitional postulates).

It is not difficult to see that such an argument fits in my definition of logical argument from evil. If one successfully shows (E_1) to be false, she has also shown (A) to be false: if (E_1) is false, then there cannot be Γ such that each premise of Γ is either analytically true or a non-controversially known definitional postulate and $\Gamma \vdash G \rightarrow \neg S_x$.

Things are not that easy with evidential arguments from evil. As I said in the beginning, there is a considerable variety of arguments which are accepted as evidential (probabilistic or inductive) arguments from evil. Howard-Snyder states this in a quite dramatic way:

It is customary to distinguish two families of arguments from evil, calling one 'logical,' 'deductive,' or 'piori' and calling the other 'evidential,' 'inductive,' 'empirical,' 'probabilistic' or '*a posteriori*'. But these too are poor names for that to which they refer. [...] evidential arguments involve quite a bit of logic, both deductive and inductive, [...] And every undeniably logical argument is superlative evidence against theism, if it is a good argument. Moreover, every undeniably logical argument has a premise that can only be known *a posteriori*, by empirical means, namely, a premise about evil, e.g., that it exists. And every undeniably evidential argument has a premise that can only be known *a priori*, e.g., a premise about what counts as good evidence or what we rightly expect from God in the way of preventing evil. And many 'inductive' arguments from evil are, on the face of it, deductively structured. (Howard-Snyder, 1996, p. xii)

Despite of this, there has been attempts to give a taxonomy for all these kinds of evidential arguments. Tooley (2002), for example, distinguishes between three kinds of evidential arguments from evil: direct inductive arguments, indirect inductive arguments and probabilistic or Bayesian arguments. While direct inductive arguments are those which try to show that theism is unlikely to be true given evil and suffering, indirect inductive arguments try to establish some alternative hypothesis logically incompatible with theism and more probable than theism given the existence of evil. In hits turn, probabilistic or Bayesian formulations start out from probabilistic premises and then attempt to show that it follows deductively, via axioms of probability theory, that it is unlikely that God exists. Examples of these evidential arguments are (Rowe 1979), (Draper 1989) and (Rowe 1996), respectively.

As far as my definition is concerned, I will only show here that one of those formulations—Rowe's 1979 formulation—fits in it. In order to do the same for the other kinds of evidential arguments, I would need to lay down and argumentatively support some presuppositions on the relations between my qualitative inferential relation \models and comparative and numerical probability, which would require a space that I do not have here. I shall therefore postpone such an undertaken to a future work.

Here is Rowe's argument (1979):

- (P) An omnipotent, omniscient and unlimitedly good being (God) would prevent the occurrence of any intense suffering it could, unless it could not do so without thereby losing some greater good or permitting some evil equally bad or worse.
- (S'') There exist instances of intense suffering for which we have found no greater goods which would be lost or evils equally bad or worse which would be permitted if God were to prevent those instances of suffering.
- (S') [Therefore] There exist instances of suffering which God could have prevented without thereby losing a greater good or permitting an evil equally bad or worse.
- (¬G) [Therefore] There does not exist an omnipotent, omniscient and unlimitedly good being that created and rules the world.

The argument is in fact composed by two arguments, a deductive one

$$\{P, S'\} \vdash \neg G$$

and an inductive one, meant to support the second premise of the deductive argument:

$$S'' \vDash S'$$

Although the main argument is deductive, one of its premises (S') is inductively supported by S'', which is the known proposition about evil. That is why the whole argument is seen as inductive.

In order to see how this argument is logically related to the claim that $\{G, S''\} \vDash \perp$, notice that by (\vDash_1) we have $\{G, S'\} \vDash \perp$, for $\{G, S'\} \vdash \perp$. But since $S'' \vDash S'$, by (\vDash_3) we have that

$$\{G, S''\} \vDash \perp$$

If we prove that $\{G, S''\} \not\vDash \perp$ then by (\vDash_3) either $\{G, S'\} \not\vDash \perp$ or $S \not\vDash S'$. If $\{G, S'\} \not\vDash \perp$ then the first argument is invalid, which we know is not true. Therefore if $\{G, S''\} \not\vDash \perp$ then $S'' \not\vDash S'$.

Finally, it has to be said that in the same way I did with the problem of evil, here too for each S-sentence there will be different kinds of logical and evidential arguments from evil.

5. Conclusion

In this chapter I have taken seriously the idea that the problem of evil is an incompatibility claim between

- (G) The world was created and is ruled by an omnipotent, omniscient and unlimitedly good being whom we call God,

and some proposition about the existence of evil and suffering in our world, say

- (S) There is evil and suffering in our world.

I have then defined some key concepts of the contemporary debate on God and evil, namely the concept of problem of evil itself, the concept of argument from evil, the concepts of logical and evidential problems of evil and the concepts of theodicy and defense. I have followed what I term a semi-formal approach; despite not using a fully developed logical theory, I used the standard notation and a couple of results from the field of formal logic.

I believe that the modest results I have achieved point to the fruitfulness of my approach. The definition of problem of evil I gave provides the base from which we can arrive at a comprehensive and logically articulated understanding of some key concepts involved in the debate. In special, the definitions of theodicy and defense are from a logical point of view much more coherent than the definitions found in the literature. As a drawback, there is an obvious limitation of my semi-formal approach concerning its qualitative nature. As I have said in the previous section, in order to consider other evidential arguments from evil, such a qualitative approach has to be enlarged in such a way as to be able represent quantitative and comparative formulations. As I said, this shall be done in a future work.

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