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PLANTINGA ON THE PROBLEM OF EVIL

No-one has contributed more than Alvin Plantinga to the development of an analytical tradition in the philosophy of religion, and his studies of the problem of evil are among his most important contributions to the field. I believe that he has presented an adequate solution to at least one major form of the problem. And at a foundational level he has done a lot to clarify what one might be demanding or attempting in a "solution" to the problem, and to show that theists need not accept certain burdens of proof – although I think theists have reason to attempt a more extensive response to the problem of evil than Plantinga seems to see a use for. This is indeed my principal disagreement with him on this subject, as will appear in section III, below.

Plantinga has argued that the phenomena of evil (A) are *logically consistent* with the existence of God and (B) do not show God's existence to be *improbable*. The first of these contentions will be discussed in sections I and II of the present essay, and the second in section III.

I. The Abstract Logical Problem of Evil

Many philosophers have argued that

(1) God is omnipotent, omniscient, and wholly good

is inconsistent (in a "broadly logical" sense, as Plantinga would say) with

(2) There is evil in the world.

For an omnipotent being would be able to prevent evil, an omniscient being would know if he had the ability and the occasion to prevent evil, and a

J. E. Tomberlin and P. van Inwagen (eds.), 'Alvin Plantinga', 225–255.

wholly good being would prevent evil if he knew that he could. Or so it is argued.

The problem of evil as presented in this argument is a *logical* problem because it is about the *consistency* of (1) and (2). It is also an *abstract* problem in that it is not concerned with any particular kind or sort of evil. It does not depend on Auschwitz or the notorious Lisbon earthquake, nor on *how much* evil there is in the world. For (2) is true provided only there is *some evil or other* in the world.

I think it is fair to say that Plantinga has solved this problem. That is, he has argued convincingly for the consistency of (1) and (2). His argument attacks the assumption that a wholly good being would (necessarily) prevent evil if he knew that he could. For a wholly good being might not prevent some evil if he had a morally sufficient reason for not preventing it. And Plantinga argues that it is possible (in the broadly logical sense) for even an omnipotent and omniscient being to have a morally sufficient reason for not preventing all evils.

Plantinga does not purport to tell us what God's reason for permitting evil *is*, nor to prove that God actually has a morally sufficient reason for permitting evil. To do that would be to present what Plantinga calls a *theodicy*. He contents himself instead with what he calls a *defense*, which tells us "at most what God's reason *might possibly be*" ([8], p. 27f.). For he is trying to prove only that (1) and (2) are *consistent*, and in order to serve this purpose a proposition ascribing to God a good reason for permitting evil need not be true; "it need not be so much as plausible" ([9], p. 165). It is enough if such a proposition can be shown to be possible in itself and consistent with (1) and (2).

The defense that Plantinga chooses is a Free Will Defense. Its central contentions are, first, that it would be worth permitting some evil in order to create a universe containing creatures that freely do right on some occasions when they could have done wrong; and second, that it is *possible* that God could not have created such a universe without creating a universe containing some evil in the form of morally wrong actions. It is important to the argument that Plantinga construes 'free' in an *incompatibilist* sense – that is, a sense in which freedom is incompatible with determinism. "If a person is free with respect to a given action, then . . . no antecedent conditions and/or causal laws determine that he will perform the action, or that he won't" ([8], p. 29). Given this understanding of freedom, "God can create free creatures, but He can't *cause* or *determine* them to do only what is right. For if He does so, then . . . they do not do what is right *freely*" ([8], p. 30). Free creatures *could* refrain from all wrongdoing; but whether they do is up to them. God cannot have creatures who freely choose the right when they could have chosen wrong, unless He leaves it up to them whether they do wrong. And if He leaves it up to them, they may do wrong. That is why, despite His omnipotence, God could be unable to create a world containing moral good but no moral evil.

Plantinga discusses two objections to the Free Will Defense as a solution to the abstract logical problem of evil. One is the *compatibilist* objection. As Plantinga observes, "some philosophers say that *causal determinism* and *freedom* . . . are not really incompatible" ([8], p. 31). Their claim involves an analysis of the notion of freedom according to which I perform an action freely if I do it because I choose to, even if my choosing to perform it was causally determined. At least one compatibilist, Antony Flew, has argued that if freedom really is compatible with causal determinism, then the Free Will Defense collapses because God could have had free creatures even if He caused them never to do anything wrong ([2], qucted in [7], p. 133).

Plantinga regards compatibilism as "utterly implausible" ([8], p. 32). But he does not leave the Free Will Defense entirely dependent on the correctness of his judgment on this point. His innermost defense against the compatibilist objection is simply to *stipulate* that 'free,' 'freedom,' and 'freely' are being used in an *in*compatibilist sense in the Free Will Defense.

The free will defender can simply make Flew a present of the word 'freedom' and state his case using other locutions. He might now hold, for example, . . . that God made men such that some of their actions are *unfettered* (both free in Flew's sense and also causally undetermined) . . . By substituting 'unfettered' for 'free' throughout his account, the free will defender can elude Flew's objection altogether ([7], p. 135).

Since this can be done at any time, it need not be done; and Plantinga continues to use 'free' in the incompatibilist sense, having left instructions for compatibilists on how to replace 'free' with 'unfettered.' "So whether Flew is right or wrong about the ordinary sense of 'freedom' is of no consequence; his objection is in an important sense merely verbal and thus altogether fails to damage the free will defense" ([7], p. 135).

Plantinga cannot be denied the right to use 'free' in a stipulated, incompatibilist sense; but there is another issue to be explored before the compatibilist objection to the Free Will Defense can be laid to rest. The Free Will Defense depends crucially on the ethical assumption that free will, at least when used virtuously, is a great good and worth sacrificing for. Few will reject this assumption if it is agreed that 'free' is being used in its ordinary sense. But suppose the ordinary sense of 'free' were a compatibilist sense; what reason would we have to maintain, as Plantinga acknowledges the free will defender must, "that a world in which men perform both good and evil unfettered actions is superior to one in which they perform only good, but fettered, actions" ([7], p. 135)? If all the values of freedom in the ordinary sense can be realized in causally determined actions, why should God permit any evil in order to get actions that are causally undetermined?

In order to answer this question, I think, the Free Will Defender must turn to an idea that rightly holds a central position in many theodicies – the idea that one of God's main purposes in creating the world was to have creatures who would be related to Him as His children and friends. The bearing of determinism on this purpose is not the same as its bearing on the significance of relationships among human beings. Even if determinism were known to be true it would not follow that your kindness to me or your injuring me are simply results of *my* manipulation. Therefore it might still be reasonable for me to thank you or blame you. That is one of the principal grounds for the compatibilist contention that the truth of determinism would not destroy our moral responsibility to each other. But God being the Creator of all other causal agents and the Author of all causal laws, everything that happens will be something that He has done, directly or indirectly, if determinism is true. The truth of determinism would undermine our moral responsibility *to God*, and He could not have a fully personal relationship with us. As John Hick has put it, "Just as the patient's trust in, and devotion to, the hypnotist [if caused by post-hypnotic suggestion] would lack for the latter the value of a freely given trust and devotion, so [if determinism were true] our human worship and obedience to God would lack for Him the value of a freely offered worship and obedience. We should, in relation to God, be mere puppets" ([4], p. 310). This argument persuades me that there is firm ground for the Free Will Defender's contention that God could have a good reason for not *causing* His creatures to act always as He wished, and hence for preferring determinism to be false, even at the cost of permitting some morally wrong action. (From this point on I will assume, as Plantinga does, that 'free,' 'freely,' and 'freedom' are used in an incompatibilist sense.)

J. L. Mackie has asked, "If God has made men such that in their free choices they sometimes prefer what is good and sometimes prefer what is evil, why could he not have made men such that they always freely chose the good?" ([5], quoted in [9], p. 167 f.). This question could perhaps be understood in a compatibilist sense, but Plantinga construes it in an incompatibilist sense and elicits from it a second objection to the Free Will Defense, which receives his most careful attention. He grants that "there are possible worlds [possible in the broadly logical sense] containing moral good but no moral evil" – that is, possible worlds in which creatures freely do right but never do wrong, although they are sometimes free to do wrong. He sees "no contradiction or inconsistency in" the idea of "significantly free creatures who always do what is right." But if God is omnipotent, "there are no non-logical limits to his power" – from which it seems to follow that "he could have created just any possible world he chose, including those containing moral good but no moral evil" – which is contrary to a central contention of the Free Will Defense.

Plantinga's response to this objection is to deny the proposition that an omnipotent God could have created just any possible world He pleased. He styles this proposition "Leibniz's Lapse" ([9], p. 184), since the sage of Hanover is famed for his sponsorship of it. In order to understand Plantinga's position here it is important to distinguish between two senses in which God (or any other agent) may be said to "bring about" or "actualize" a state of affairs ([9], pp. 171–173).

In a narrow or *strong* sense one brings about or actualizes ("strongly actualizes") a state of affairs if and only if one *causes* it. I think the crucial point here is that if one acts in such a way as to cause or strongly actualize a state of affairs *s*, then one's action renders it completely determined causally that *s* will occur. If this condition is not satisfied, one may still bring about or actualize *s*, but only in a broad or *weak* sense. One may "weakly actualize" *s* by employing the free, causally undetermined action of another free agent.

An example may help us to understand this distinction. Suppose I want a grand piano moved from the first to the second floor of my house. I could try to accomplish this end in either of two ways. (i) If I were strong enough, I might lift it myself. In doing so I would *strongly actualize* the transfer, even if I used instruments, such as belts and pulleys, so long as I did not call on the aid of another (incompatibilistically free) person.[1] (ii) Physical incapacity or laziness may lead me to look around for some other people who are collectively strong enough to lift the piano to the second floor, and who I believe will do it if I promise to pay them a certain amount of money. If these people are free in the relevant sense, I can at most *weakly actualize* the transfer of the piano by employing them as my agents. My ability to weakly actualize it depends on their choosing to do as I ask them to do, as well as on my physical ability to speak to them and my sagacity in dealing with them.

Now suppose God wanted to create a *morally flawless world*, which we may define as a possible world in which no one ever does wrong although there are creatures who freely (in the incompatibilist sense) do right on occasions when they are also free to do wrong. It is clear that it would be logically impossible for God to *strongly actualize* such a world. For in order to do so, by the definition of 'strongly actualize,' He would have to act in such a way that it would be completely determined causally that His creatures would do right and never do wrong. But then they would not do right *freely*, as the definition of a morally flawless world requries.

Since it would be logically impossible for God (or any creator) to strongly actualize a morally flawless world, the claim that He is omnipotent – that His power has no *non-logical* limits – does not imply that He is able to do it.[2] The following argument might be given, however, for the view that an omnipotent and omniscient God must be able to *weakly actualize* a morally flawless world. Just as I can look around for a group of people that are strong enough and would lift my piano if offered certain inducements, so God could search His infinite understanding for possible free creatures[3] who would freely do right, and never do wrong, if placed in certain circumstances. Then by creating those creatures, and placing them in those circumstances, God could weakly actualize a morally flawless world.

This argument is best understood as involving a conception of God's providential control of the world that was first clearly articulated at the end of the sixteenth century by the Jesuit theologian Luis de Molina. Molina held that God, in His omniscience, knows with complete certainty what every possible free creature would freely do in every situation in which that creature could possibly have occasion to act freely. The knowledge thus ascribed to God was called "middle knowledge" (*scientia media*) by Molina, because it was seen as falling between His knowledge of the merely possible and His knowledge of the actual, and between His knowledge of necessary truths and His knowledge of truths that He causes to be true ([6], cited in [1]).

The objects of middle knowledge are counterfactual conditional propositions of a sort which we may call *counterfactuals of freedom*.[4] A typical counterfactual of freedom could be given the form,

(3) If p were in c, p would (not just probably but definitely) freely (in the incompatibilist sense) do a,

where p is a possible free agent, c is a possible situation, and a is a possible free action or omission. Counterfactuals of freedom are logically contingent;

for if (3) were logically necessary, then *p* would be logically necessitated to do *a* by his being in *c*, and would not be *free* in doing *a* in *c*. And God does not cause counterfactuals of freedom to be true; for if He caused (3) to be true, then that plus *p*'s being in *c* would determine *p* to do *a*, and again *p* would not do *a freely* in *c*.

The suggestion before us is that God could use His middle knowledge to weakly actualize a morally flawless world, by creating only creatures about whom He knew that they *would* freely act sinlessly in certain circumstances in which He could create them. Plantinga assumes that God does have middle knowledge, but argues that it is logically possible that even so, He could not weakly actualize a morally flawless world, on the ground that it is logically possible that there are no possible free creatures who would in fact freely act sinlessly in any circumstances in which God could create them. Given Molinist assumptions about middle knowledge, it seems to me that Planginga's argument is sound.

In order to appreciate the strength of his argument, consider that in any morally flawless world *w* there must be at least one situation *c* in which a free creature *p* freely refrains from performing some sinful action *s*. This means that God cannot weakly actualize *w* if the counterfactual of freedom,

(4) If *p* were in *c, p* would freely do *s*,

is true. For in order for *w* to be actual, *p* must both be in *c* and refrain from *s* in *c* – which will never happen if (4) is true. And God could not weakly actualize *w* by *causing* (4) to be false, for then *p* would not *freely* refrain from *s* in *c* as *p* does in *w*. Let us say that *w* is *unrealizable* if (4) is true – and more generally, that a possible world is unrealizable if it contains a free action that would not in fact be performed in the situation in which it occurs in that world.

On Molinist assumptions it is clear that it is logically possible that *w* is unrealizable. For counterfactuals of freedom are contingent; so both the truth and the falsity of (4) are logically possible. And given that it is logically possible that *w*, which was any morally flawless world, is unrealizable, I cannot see what would keep it from being logically possible that *all* morally flawless worlds are unrealizable. It follows that it is logically possible that God was unable to weakly actualize such a world, for there is no way in which He could weakly actualize a morally flawless world if all of them are unrealizable.

So Plantinga's version of the Free Will Defense seems to be successful if Molinist assumptions about middle knowledge and counterfactuals of freedom are granted. Those assumptions are controversial, however. In particular, it has been doubted whether counterfactuals of freedom can be true, and hence whether middle knowledge is possible. Counterfactuals of freedom, as I have pointed out, are supposed to be contingent truths that are not caused to be true by God. Who or what does cause them to be true? For instance, who would have caused (4) to be true? Not *p*, for *p* may never exist. God is supposed to rely on His knowledge of counterfactuals of freedom in deciding whether to create the free creatures they are about; and therefore the truth of counterfactuals of freedom should be prior, in the order of explanation, to the existence of those creatures, and should not be caused by their choices. Perhaps it could be maintained that some counterfactuals of freedom just *happen* to be true, without anyone or anything having caused them to be true. That seems to be a consistent position; but it would be very unpalatable, not only to determinists, but also to those indeterminists who believe that facts that are not completely determined causally must be due to the activity of beings endowed with spontaneity.

Even more serious than the problem of explaining what could *cause* counterfactuals of freedom to be true is the problem of explaining what it would *be* for them to be true. In many contexts it is plausible to suppose that the truth of a counterfactual conditional consists in a logically or causally necessary connection between the antecedent and the consequent. But a counterfactual of freedom cannot be true in that way, for then the actions described in the consequent would not be free, but determined by the circumstances described in the antecedent. If there is not a necessary connection between the antecedent and the consequent, there may still be a probabilistic connection, but then what will be true is that the free creatures in question would *probably* do what the consequent says in the circumstances of the antecedent – not that they definitely would, as required by Molinist assumptions about counterfactuals of freedom. For reasons of this sort (which I have developed more fully in [1]) I believe that counterfactuals of freedom cannot be true.

This does not undermine Plantinga's solution of the abstract logical problem of evil, however. As he sees ([9], pp. 182–184). God could have been unable to weakly actualize a morally flawless world even if counterfactuals of freedom cannot be true. If the most that can be true is that a certain possible free creature *would probably* act in a certain way in a certain situation, then it is logically possible that God tried His best to create a morally flawless world, but failed. Perhaps it was true that if God created Adam and Eve in the garden of Eden they would probably (or almost certainly) never sin; and perhaps God acted on that truth, but unfortunately Adam and Eve did what it was true that they would probably (or almost certainly) not do – and sinned.[5] On this view even an omnipotent, omniscient God could not try to create a morally flawless world without taking some risk of getting a world with sin in it. And since 'world' is used here in such an inclusive sense that once sin has occurred it's too late for God to create a world containing none of it, there is no possibility of a "second chance" to create a morally flawless world if sin results from the first attempt. Thus an omnipotent, omniscient God could have been unable to create a morally flawless world, in the sense that His best attempt to do so might fail. And therefore such a deity could have been justified in permitting some moral evil in His attempt to create a world containing moral good.

II. The Concrete Logical Problem of Evil

A solution of the abstract logical problem of evil is (as Plantinga recognizes) only a beginning of a theistic solution to the whole problem of evil. Even in the broadly logical realm of problems of consistency we still face the more concrete question whether God's existence is logically consistent, not merely with some evil or other, but with those kinds and quantities of evil that actually occur. Plantinga deals explicitly with two parts of this concrete logical problem. He discusses the consistency of God's existence with one actual *kind* of evil, namely "natural evil," and with the actual *quantity* of another kind of evil, "moral evil." (Moral evil, says Plantinga, [8], p. 30, "is evil that results from free human activity; natural evil is any other kind of evil.") Of course we could also raise a question about the *quantity* of *natural* evil, and still more concrete issues about more specific kinds of moral and natural evils – for instance, about the consistency of God's existence with the occurrence of torture, cancer, schizophrenia, and the pains of rabbits. We need not move immediately to issues that are *that* concrete, however, for Plantinga's response to the problem of the quantity of moral evil suggests a way in which a *general* solution of the concrete logical problem of evil might be attempted. Accordingly, we will discuss that response, and then, as a secondary issue, Plantinga's response to the problem of natural evil.

Plantinga's argument for the logical consistency of God's existence with the actual quantity of moral evil is an application of the line of argument he worked out to solve the abstract logical problem of evil, on the assumption that counterfactuals of freedom can be true. Assuming that the actual world contains more moral good than moral evil, Plantinga suggests, plausibly, that

God could be justly criticized for permitting *that much* moral evil only if He could have actualized a world containing less moral evil than the actual world but as much moral good, or "a better mixture of moral good and evil" ([9], p. 1905.). Plantinga grants that many such worlds are logically possible; but he argues, in effect, that it is logically possible that *all* such possible worlds are *unrealizable*, and hence logically possible that an omnipotent, omniscient God was unable to actualize any of them ([9], p. 191; [8], pp. 55–57). The argument need not be repeated here because it is essentially the same as was given in section I, above, for the claim that it is logically possible that God was unable to actualize a morally flawless world. The crucial thesis of the argument is that it is logically possible that for every possible world containing a better mixture of moral good and evil than the actual world, there is a true counterfactual of freedom stating that a certain free action which occurs in that world would not in fact be performed in the circumstances in which it occurs in that world.

This argument can readily be extended into an attempt at a general solution of the concrete logical problem of evil. This extension requires an additional ethical or evaluative assumption – namely, that actual *moral* good so exceeds *all* actual evil that God could not be justly criticized for permitting any or all of the kinds and quantities of evil that actually occur unless He could have actualized a world that contains none, or less, of the evil in question but does not contain *too much* less *moral* good than the actual world. Let us grant that many such worlds are possible; we may call them *morally preferable worlds*. But if counterfactuals of freedom can be true, their contingency seems to render it logically possible that all morally preferable worlds are unrealizable, so that God could not have actualized any of them. Hence it may be concluded that it is logically possible that God had a morally sufficient reason for permitting all the evils that actually occur.

This attempted solution of the concrete logical problem of evil faces two principal objections, one metaphysical and the other ethical. The metaphysical objection is that the solution, as stated, depends on the assumption that counterfactuals of freedom can be true, and it would be no trivial task to free it from that dependence. But the assumption seems to me, and to a number of other philosophers, to be false. The rejection of counterfactuals of freedom does not undermine Plantinga's solution to the abstract logical problem of evil, as I pointed out in section I, above. But that is because, if counterfactuals of freedom cannot be true, it is clearly possible (in the broadly logical sense) for *some* moral evil to occur even if God does everything that is *likeliest* to result in the best (or a good enough) sort of world containing free creatures.

It is not so clear, however, that it is logically possible for all the actual kinds and quantities of evil to occur under that condition. Consider the actions and omissions that are required of God if all actual evils are to occur. Is it logically possible that *those* actions and inactions are part of a train of divine action that was *likeliest* to result in the best (or a good enough) sort of world containing free creatures? The answer to this question is not obvious. Very difficult and interesting issues arise here about the logical possibility of probabilities of free actions. I will not discuss them here, for as far as the problem of evil is concerned I think that effort devoted to probabilities is more wisely invested in study of the probabilistic problem of evil, to which we will come shortly.

The other objection, the ethical objection, is not directed against Plantinga's solution of the problem of the quantity of moral evil. Surely a wholly good God might permit a certain *amount* of moral evil in order to obtain a sufficiently greater amount of moral good. The objection is directed, rather, at the ethical assumption of the extension of the solution to the rest of the concrete logical problem of evil. For some may think that there are certain actual evils (certain sufferings, perhaps) that God would not have been justified in permitting (much less in causing) even if that were the only way in which He could obtain anything like as much moral good as the actual world contains. This end does not justify those means, the objectors would claim. I merely note this possible objection here, without attempting to pronounce on its merits, though I do not think it can be dismissed out of hand. A full treatment of it would be tangential to our discussion of Plantinga's thought.

The argument that Plantinga actually offers for the logical compatibility of *natural* evil and divine existence has a feature that is not part of the line of argument that we have been considering. Plantinga suggests that apparently natural evils might be "broadly moral," being caused by the sins of non-human free creatures (fallen angels, perhaps). Broadly moral evil is defined as "evil resulting from the free actions of personal beings, whether human or not" ([9], p. 193). It is logically possible, Plantinga claims, that

(5) All natural evil is due to the free activity of non-human persons; there is a balance of good over evil with respect to the actions of these non-human persons; and there is no world God could have created which contains a more favorable balance of good over evil with respect to the free activity of the non-human persons it contains ([9], p. 192).

Why could God have been unable to create a world as rich in non-human righteousness but not containing any natural evil? Presumably because it is logically possible that all such worlds are *unrealizable*. But then the possibility of non-human free creatures plays no clear role in the argument. The crucial question, for the argument as stated, is not what could have caused the natural evil, but whether it is logically possible that, as a matter of contingent fact, there would be a less favorable balance of righteousness over sin if there were no natural evil. And on Plantinga's assumptions about counterfactuals of freedom it seems to be logically possible that there would be a less favorable balance of *human* righteousness over *human* sin if there were no natural evil, regardless of how the natural evils are caused. Even if many natural evils have no clear causal or rational connection with any good deed, why could it not be a brute, irrational fact that human creatures would freely act less well if those evils did not occur? So far as I can see, if counterfactuals of freedom can be true at all, they can be brute, irrational facts. Why could it not just *happen* to be that every possible world without moral evils that is as rich as the actual world in *human* moral good is unrealizable? No doubt it is also logically possible for apparently natural evils to be caused by sins of non-human free creatures; but the introduction of this possibility seems thus far to be an unnecessary complication in Plantinga's argument.

Perhaps, although Plantinga does not suggest this, the hypothesis of fallen angels might help in dealing with the ethical objection to the general solution sketched above to the concrete logical problem of evil. For it might be that God could be justified in *permitting* fallen angels to cause sufferings that He would not be justified in *causing*, in order to bring about some moral good. Perhaps; but it is far from obvious that God would have any better reason for allowing the sins of fallen angels to result in some of the natural evils we observe, than for causing those evils Himself. Indeed one of the problems facing anyone who would use the fallen angels hypothesis in solving the problem of evil is precisely the difficulty of making it plausible that God could (even in the broadly logical sense of 'could') have had a good reason for letting the sins of fallen angels mess up the rest of the world. If sins of fallen angels cause cancer, for example, an omnipotent God could presumably have permitted the angels to sin without sustaining the causal connections by virtue of which their sins result in cancer. For reasons of this sort it may be doubted whether the possible introduction of fallen angels into the causal chains leading to natural evils does much to solve ethical problems about God's responsibility for those evils.

III. The Probabilistic Problem of Evil

Some critics of theism admit that the phenomena of evil that occur in the actual world are logically compatible with the existence of God, but claim that evils constitute *evidence against* theism – evidence which shows the existence of an omnipotent, omniscient, wholly good God to be *improbable*. This probabilistic version has come increasingly to seem the most important form of the problem of evil, as Plantinga and others have shown how difficult it would be to establish a logical incompatibility between divine existence and the facts of evil. Plantinga has recently published a long article on "The Probabilistic Argument from Evil" [10], in which his principal endeavor is to show that "none of the main interpretations of probability provide the atheologian with resources for a decent objection to theism based on the premiss that P(G/E) is low" ([10], p. 47f.). (Here an "atheologian" is one who argues against theism, G is the proposition that "God exists and is omniscient, omnipotent and wholly good," and E is a proposition asserting the existence of exactly those evils that actually exist ([10], p. 1f.). P(G/E) is the probability that G is true, given that E is true.)

It is important that the question Plantinga addresses is not whether the evils that occur are evidence against theism, but whether they show theism to be improbable. The defendant's wife's testimony that he was at home at the time of the crime, for example, is evidence against the hypothesis that he is guilty, but may not show that hypothesis to be improbable if there is enough other evidence of his guilt. Similarly, evils may be evidence against theism and still not show that the probability of theism is low, if theism is sufficiently probable on other grounds.

This point is rendered more precise in the calculus of probabilities by a principle known as "Bayes' Theorem," which Plantinga ([10], p. 12) states in the form,

$$(6) \qquad P(A/B\&C) = \frac{P(A/C) \times P(B/A\&C)}{P(B/C)}$$

Here A and B are the hypothesis and the evidence, respectively, that are presently under consideration; and C is "background information" consisting of other relevant propositions believed to be true. It is assumed that $P(B/C) \neq 0$. Both the meaning and the plausibility of (6) may be clearer if we rewrite it to exhibit $P(A/B\&C)$, the probability of A given B and C, as a product of two factors:

$$(7) \qquad P(A/B\&C) = P(A/C) \times \frac{P(B/A\&C)}{P(B/C)}$$

Here we see that Bayes' Theorem incorporates two intuitively plausible assumptions. (i) B weighs as evidence for or against A to the extent that B would be more or less likely to be true, given A, than it would otherwise be – as expressed by the factor $P(B/A\&C)/P(B/C)$. This is obviously connected with the fact that a piece of evidence supports hypothese that would explain it. (ii) The probability of A, after the evidence B is taken into account, depends not only on B's evidential weight for or against A, but also on how probable A would be apart from B – as expressed by the factor $P(A/C)$, which is commonly known as the "prior probability" of A.

Where theism and evil are the hypothesis and the evidence, respectively, and C is the relevant background information, Buyes' Theorem tells us that

$$(8) \qquad P(\mathrm{G/E}\&C) = P(\mathrm{G}/C) \times \frac{P(\mathrm{E/G}\&C)}{P(\mathrm{E}/C)}$$

Here $P(\mathrm{G}/C)$, $P(\mathrm{E}/C)$, and even $P(\mathrm{E/G}\&C)$ are all, in a sense, "prior probabilities." That is, E is not evidence for any value we might assign to them, but we must assign values to them in order to determine whether E shows G to be improbable. Plantinga's strategy depends heavily on the difficulty of establishing the correctness of any assignment of values to these prior probabilities.

He argues that each of the three "main interpretations of probability" faces problems in this area. According to the *personalist* interpretation each person S has a *credence function*, which assigns, to each proposition about whose truth or likelihood S has any opinion, a real number between 0 (for total disbelief) and 1 (for complete subjective certitude). $P_S(A/B)$ will have a value between 0 and 1 indicating how likely A would seem to S if B were S's total evidence in the matter. The main thing that Plantinga wants to say about personalism is that personalistically understood, the "atheological claim" that P(G/E) < ½ "carries an implicit subscript and simply measures" the intellectual tendencies of "some person or other – perhaps the atheologian. But then it constitutes a piece of atheological autobiogtaphy rather than an objection to theism" ([10], p. 48). The "personalist atheologian" can claim that P(G/E) < ½ is *rational*, in the sense that it "can be embedded in a coherent system of beliefs." But P(G/E) > ½ is also rational in this sense; and as this is the only sense of rationality admitted by personalism,

"personalism doesn't offer much to the atheologian intent on convicting the theist of holding untenable beliefs." But "this may plausibly be seen not so much as a point in favor of theism as a point against personalism" ([10], p. 17f.).

According to the *logical* interpretation of probability, $P(A/B)$ has a certain purely objective value for any propositions A and B. This value expresses a strictly logical relation between A and B (inconsistency if $P(A/B) = 0$, entailment of A by B if $P(A/B) = 1$, and a uniquely probabilistic relation if the value is between 0 and 1). Plantinga argues, in the first place, that there is no plausible way of assigning values to prior probabilities under the logical interpretation, and in the second place, that even if the purely logical prior probabilities relevant to P(G/E) do exist, "there isn't the slightest reason to think [they] have the values the atheologian says they have" ([10], p. 48; cf. p. 30).

Plantinga looks with more favor on a *frequency* interpretation of probability according to which a prior probability, in any given case, is determined by the frequency of truths in certain reference classes of propositions. Prior probabilities thus depend on the choice of these reference classes. Plantinga argues that this choice in turn depends, rationally, on what else the chooser believes. "Here, then, just as with personalism, prior probabilities are relative to noetic structures. Of course there is no reason to think theist and atheist need agree about prior probabilities;" indeed Plantinga thinks they each may reasonably choose reference classes in such a way that P(G/E) gets a high value from the theist and a low value from the atheist ([10], p. 48; cf. p. 44f.).

I do not wish to discuss here the details, interesting and often technical, of Plantinga's arguments about these interpretations of the probability calculus. I agree with the conclusion to which his examination of these interpretations leads. That is, I agree that in assigning values to prior probabilities relevant to P(G/E) we must, rationally, rely on our own beliefs and judgments about issues on which theists and atheists may disagree.

The next step in the argument is the one I want to examine most closely. Plantinga thinks it follows that the "atheological program" of using the probabilistic argument from evil to show "that the theist's views are somehow rationally objectionable, or irrational, or noetically below par . . . is totally misconceived." For the program depends on an insistence on general acceptance of probability assignments that are based on the atheologian's noetic stricture, and this "is no more than a bit of intellectual imperialism" ([10], p. 48).

Plantinga anticipates the objection that he "simply exploit[s] the difficulties inherent in the current analyses of probability to urge a sort of skepticism about probability claims," but that despite those difficulties, "often we *do* know that a proposition is improbable with respect to our total evidence" ([10], p. 49). He responds that he "wouldn't dream of denying that there are cases where a proposition A is quite clearly improbable with respect to another proposition B or quite clearly improbable with respect to our total evidence," but that the probabilistic argument from evil does not provide such a case. It is not "self-evident, or obvious . . . or accepted by all rational persons who think about it" "that $P(G/E)$ is low, . . . or that G . . . [is] improbable on any body of knowledge the atheologian could plausibly propose as the relevant body of total evidence" ([10], p. 49).

We should grant, I think, that none of these things is obvious or universally accepted. Is that enough to sustain Plantinga's argument? That depends on what he is trying to establish. What is the "atheological program" that he thinks is totally misconceived? Is it to present an argument of coercive force that will compel all reasonable people to agree that theism is irrational? The prospects for that program do indeed seem dim; and there are indications in Plantinga's arricle that that is the program he meant to attack.

On the other hand there are also indications that he meant to do more. In concluding that "*the* atheological probabilistic argument from evil is totally misconceived" ([10], p. 49, my italics), he seems to leave no rrom for *any* well conceived probabilistic argument for atheism based on the phenomena of evil. His essay leaves the impression that it is supposed to have shown that atheists should have no use at all, and theists no concern, for any such argument. This conclusion does *not* follow from the non-obviousness of the probability assignments that are involved in the atheological argument. For the atheological program (like the program of natural theology) need not be one of rational coercion. It might be a more modest project of rational persuasion, intended not to coerce but to attract the minds of theists and agnostics, or perhaps to shore up the unbelief of atheists. Theist and atheist can reason together about the existence of God without either trying to prove that the other has been foolish or irrational.

A great deal of reasoning in philosophy and other fields has this non-coercive character. Even if it is not obvious, and cannot be made obvious, that one position on some controversial issue is more probable than another, it may still be a legitimate project to give reasons for preferring one position to the other. Such reasoning does sometimes lead to changes of opinion; and we engage in it with a real hope of persuading others or of coming to a more adequately justified position ourselves. In doing so we rely on assessments of plausibility that we know are not obvious and not likely to be universally accepted; it is enough if they are accepted by us and/or have some appeal to our discussion-partner. I cannot see that Plantinga has shown that it must be illegitimate or useless for an atheist to offer a probabilistic argument from evil in a discussion of this sort.

Perhaps one or more of the personalist, logical, and frequency theories of probability can be rescued for the purpose of providing a framework for non-coercive rational persuasion. Without meaning to commit myself to the superiority of personalism I will explore a personalist strategy here. Even for a personalist atheologian, I think, a probabilistic argument from evil may have uses that are more than merely autobiographical. (i) The argument may articulate an atheist's *reasons* for not believing; it may not merely record his unbelief, but lead him to it or at least confirm him in it. (ii) The atheologian may hope to get some theist (not every possible theist but some particular theist) to admit that his credence function is incoherent.

Both of these uses of the argument can be understood in terms of a comparative form of Bayes' Theorem. Where $\overline{\mathrm{G}}$ is the negation of G, obvious mathematical operations on (8) yield

$$(9) \qquad \frac{P(\mathrm{G}/\mathrm{E}\&C)}{P(\overline{\mathrm{G}}/\mathrm{E}\&C)} = \frac{P(\mathrm{G}/C)}{P(\overline{\mathrm{G}}/C)} \times \frac{P(\mathrm{E}/\mathrm{G}\&C)}{P(\mathrm{E}/\overline{\mathrm{G}}\&C)}$$

How much more or less probable theism is than atheism, given E, depends on the ratio of the prior proabailities of theism and atheism, and on how much more or less likely E would be if God existed than if He did not.

(i) Suppose the values assigned to $P(\mathrm{G}/C)$ and $P(\overline{\mathrm{G}}/C)$ by the credence function of a particular atheist, *a*, are approximately equal. That is, suppose that apart from the phenomena of evil, *a* would find it difficult or impossible to decide between theism and atheism. *a* believes, however, that E would be much less likely if God existed than if He did not. The appropriate substitutions in (9), for *a*, might look something like this:

$$\frac{P(\mathrm{G}/\mathrm{E}\&C)}{P(\overline{\mathrm{G}}/\mathrm{E}\&C)} = \frac{.5}{.5} \times \frac{.00001}{.01} = \frac{1}{1000}$$

a might reasonably claim that he thinks atheism much more plausible than theism *because* he thinks E would be so much less likely if God existed than if He did not. This is not to say that *a* is more rational than theists; still, *a* is giving a reason and not just narrating his life.

(ii) Perhaps a will meet a theist, t, who agrees with a's assessment of $P(\mathrm{E}/\mathrm{G}\&C)/P(\mathrm{E}/\overline{\mathrm{G}}\&C)$. Apart from the problem of evil, t finds theism much more plausible than atheism, but not by so large a margin as he thinks $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ exceeds $P(\mathrm{E}/\mathrm{G}\&C)$. In t's noetic structure perhaps $P(\mathrm{G}/\mathrm{E}\&C) = .7$, $P(\overline{\mathrm{G}}/\mathrm{E}\&\mathrm{C}) = .3$, $P(\mathrm{G}/C) = .9$, $P(\overline{\mathrm{G}}/C) = .1$, $P(\mathrm{E}/\mathrm{G}\&C) = .00001$, and $P(\mathrm{E}/\overline{\mathrm{G}}\&C) = .01$. Substituting these values in (9) yields the arithmetical impossibility

$$\frac{.7}{.3} = \frac{.9}{.1} \times \frac{.00001}{.01} = \frac{.000009}{.001} = \frac{9}{1000}$$

t has an incoherent credence function, and has some reason to feel the probabilistic argument from evil pulling him toward atheism. Of course a conversion to atheism is not the only way in which t might correct his incoherence. He might try to change the relative values that $P(\mathrm{G}/C)/P(\overline{\mathrm{G}}/C)$ and $P(\mathrm{E}/\mathrm{G}\&C)/P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ have for him, Still, a might reasonably expect the probabilistic argument from evil to have some persuasive force with t.

I would not claim that *most* atheists are like a, or *most* theists like t. But it would also be unrealistic to think of all debate between theists and atheists as a tournament of intellectual champtions breaking harmless lances on each other's seamless armor. Most people's noetic structures are not monolithic. It is not at all unusual to have a credence function that is incoherent, or at least unsettled, in some respects. We cannot assume that typical theists and atheists have in their credence functions only those values most consonant with their theism or atheism. We often have conflicting, or apparently conflicting, noetic inclinations. We therefore can be tempted by arguments for beliefs that we do not accept, and troubled by doubts about beliefs that we do hold.

In this context theists who experience inner struggles of faith and doubt and unbelief, or who talk to people who experience such struggles, may well have a use for a sort of Defense against the probabilistic argument from evil – a Defense that would go beyond the largely methodological shield that Plantinga has erected. The idea of a Defense in this context would be similar in some ways to Plantinga's idea of a "defense" against the logical arguments from evil. It would propose a hypothesis about God's reasons for permitting the evils there are. This hypothesis would not have to be true or even probable in order for the Defense to be successful. For the Defense is not a Theodicy; that is, it does not purport to tell us what God's actual reasons are for permitting the evils, but only what His reasons *might* have been. But whereas in the purely logical context, as Plantinga insists, it is enough if the hypothesis of the Defense is logically possible, and consistent with G and E, here the hypothesis must also be ***credible*** – it must not be too improbable – if the Defense is to be successful. (And as I will argue in the Appendix, below, a greater success could be attained by a hypothesis that seemed probably true, given the theist's beliefs.)

Let us return to Bayes' Theorem:

$$(9) \qquad \frac{P(\mathrm{G}/\mathrm{E}\&C)}{P(\overline{\mathrm{G}}/\mathrm{E}\&C)} = \frac{P(\mathrm{G}/C)}{P(\overline{\mathrm{G}}/C)} \times \frac{P(\mathrm{E}/\mathrm{G}\&C)}{P(\mathrm{E}/\overline{\mathrm{G}}\&C)}$$

The purpose of a Defense in the probabilistic context is to induce us (or as many of us as possible) to assign to $P(\mathrm{E}/\mathrm{G}\&C)/P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ a value far enough from zero to keep it from overwhelming any other theistic inclinations we may have. Since few theists would count E as evidence for G, theists must generally be presumed to have other theistic inclinations. Personalistically understood, $P(\mathrm{G}/C)$ should therefore significantly exceed $P(\overline{\mathrm{G}}/C)$ for the theist, so that a Defense may be successful for her, leaving $P(\mathrm{G}/\mathrm{E}\&C)$ greater than $P(\overline{\mathrm{G}}/\mathrm{E}\&C)$, even if it leaves $P(\mathrm{E}/\mathrm{G}\&C)$ less than $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ for her. $P(\mathrm{E}/\mathrm{G}\&C)$ must just not be *too* much less than $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$. (It would of course be bizarre for anyone struggling with the argument to make up her mind by actually assigning numerical values to the probabilities; but (9) exhibits the way in which the various considerations are related.)

Intuitively, the principle underlying any Defense in this context is that the availability of a plausible hypothesis as to why E would be true, given that G is true, increases both the likelihood that E would be true, given the truth of G, and the probability that G is true, given that E is true. We are familiar with this sort of thinking in everyday life. You are waiting for a friend, who is quite late. You begin to wonder if he is going to come; why would he be so late if he still intended to come? Then you remember that he often gets lost in your neighborhood, but always finds his way eventually; perhaps that is happening again tonight. This consideration makes it seem fairly likely that he would be late if he were coming, and therefore restores some of your confidence that he is coming although he is late.

The indicated strategy for a Defense, then, is to find a hypothesis, D, that gives a more plausible reason than we have previously seen for a good God to permit E to be true. The discovery of such a hypothesis should reasonably lead us to set a higher value on $P(\mathrm{E}/\mathrm{G}\&C)$, and hence on $P(\mathrm{E}/\mathrm{G}\&C)/P(\mathrm{E}/\overline{\mathrm{G}}\&C)$, than we did before. It is required of D that the value of $P(\mathrm{E}/D\&\mathrm{G}\&C)$ be significantly higher than the value we would have set on

$P(\mathrm{E}/\mathrm{G}\&C)$ before we began to think about D. It is also required that the value of $P(D/\mathrm{G}\&C)$ not be too low. But it is not necessary that the overall probability of D exceed ½; that is, D need not be probably true. (For fuller discussion of the mathematics of this, see the Appendix to this essay.)

In developing the idea of a Defense against the probabilistic argument from evil I emphatically do *not* mean to suggest that a theist must have a successful Defense in order to be rational. Rationality does not require the theist to have any hypothesis at all as to why God permits the evils that happen. She can say that God must have a good reason for permitting them but she has no idea what it is. "Perhaps God has a good reason, but that reason is too complicated for us to understand," as Plantinga suggests ([8], p. 10). That would be entirely in keeping with theistic views of the immense superiority of God's understanding to ours. I think it is also characteristic of faith, in Judaism or Christianity or Islam, that one's trust in God should outrun one's understanding of His purposes.

There is nothing extraordinary about continuing to hold a belief while admitting that one has no idea how to explain some evidence against it, or how to solve some problem about it. I may reasonably continue to trust the laws of chemistry even though I have no idea *what* went wrong with my high school lab experiment, producing results apparently contrary to those laws. Similarly a mind/body dualist is not necessarily convicted of irrationality if he admits he has no idea *how* the mind and body interact; that will be a disadvantage of his theory, but perhaps he has respectable reasons for thinking that alternative theories, such as materialism and idealism, have worse defects.

In Bayesian terms there are at least two ways a theist could respond to the probabilistic argument from evil without claiming to have any idea what might have been God's reason for allowing E to be true. (i) She could say that because (if G is true) God's wisdom is unsearchable, we cannot predict with much confidence what God would do under any stated condition, unless we have a special revelation of His intentions. Some conjectures as to what an omniscient, omnipotent, wholly good God would do are clearly more plausible than others; but our cognitive distance from omniscience is so great that we are not in a position to say that anything as complicated and incomplete as the phenomena of good and evil known to us is *enormously* more or less likely to happen if such a deity exists than if He does not. Therefore we ought not to assign to $P(\mathrm{E}/\mathrm{G}\&C)/P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ a value crushingly close to zero.

(ii) Alternatively the theist could point to the doubtfulness of any assignment of values to the probabilities involved in the problem of evil. She might say that her trust in God – in His reality, power, and goodness – exceeds her confidence in any assignment of values to $P(\mathrm{E}/\mathrm{G}\&C)$ and $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$. Therefore, if she is a Bayesian, she would say that

$$\frac{P(\mathrm{G}/C)}{P(\overline{\mathrm{G}}/C)} > \frac{P(\mathrm{E}/\overline{\mathrm{G}}\&C)}{P(\mathrm{E}/\mathrm{G}\&C)}$$

expresses a prior condition that must be satisfied by any assignment of numerical probabilities in her noetic structure, and she would reject any assignment not conforming with it.

Of course both these responses presuppose a strong trust in God. They give reason for thinking that if one comes to the problem of evil with such a faith, one's faith need not be overwhelmed by one's inability to give a plausible explanation of why God would permit the evils there are. But in the absence of such an explanation, the evils remain evidence against theism, and must be outweighed by an independently grounded trust in God. An independent strengthening or confirmation of trust in God is therefore an alternative to a Defense as a basis for rejecting an atheistic argument from evil. This is why an experience of God that does not provide an explanation of God's permitting evils can still be seen as relieving the need for such an explanation – as in the Book of Job (esp. 42:1–6).[6] For such an experience can greatly increase one's trust in God – and reasonably so, in my opinion.

It is worth remarking that the theist does not *need* a Defense against the logical arguments from evil any more than against the probabilistic argument from evil. Our not knowing any reason that could, logically, have been morally sufficient for an omnipotent God to permit the evils that occur would no more prove that such a reason is logically impossible, than our not knowing any good reason that God may, plausibly, have had for permitting the evils would prove that He had no such reason in fact. The disproportion between an infinite intellect and our own gives grounds for some distrust of any argument or judgment about what good reasons God could, logically, have had, just as it gives grounds for some distrust of any conjecture about how much more or less likely something would be to happen if God existed than if He did not.

But even if a sufficiently confident theist would not *need* a Defense, it is clear that many theists would welcome a successful Defense against the probabilistic argument from evil, and it would be of great interest in religious discussion. It seems fitting to conclude this essay with some discussion of how well a Free Will Defense might play that part. Plantinga does not address himself to this question, but we may begin with his treatment of a disagreement theist and atheist might have over the probability of one possible hypothesis for a Free will Defense,

(5) All natural evil is due to the free activity of non-human persons; there is a balance of good over evil with respect to the actions of these non-human persons; and there is no world God could have created which contains a more favorable balance of good over evil with respect to the free activity of the non-human persons it contains ([10], p. 46).

This hypothesis has been criticized, as Plantinga notes, on the ground that "the existence of demons and/or other non-human persons" is "monumentally improbable" ([10], p. 46). In several earlier publications Plantinga responded by denying that we have any evidence against the causation of natural evils by non-human free creatures such as fallen angels. The idea may be "repugnant to 'modern' habits of thought, but this is scarcely evidence against it" ([7], p. 155; cf. [9], p. 195, [8], p. 62). In his paper on 'The Probabilistic Argument from Evil' Plantinga concentrates rather on arguing that we should not expect the *theist* to find (5) improbable even if the atheist does. "Surely it isn't particularly improbable with respect to a *theistic* noetic structure. The theist already believes that there are non-human persons (God, for example); and certainly has no reason to think God couldn't or wouldn't create more non-human persons who play a substantial historical role. . . . The atheist on the other hand, might think [(5)] quite improbable, antecedently" ([10], p. 46).

Plantinga seems to be correct in both these responses, but let us note in passing that we do have evidence against *some forms* of the hypothesis that all "natural" evils are caused by sins of non-human free creatures. In particular we have evidence against the theory that

(10) All "natural" evils are caused by demons interrupting the ordinary processes of nature.

For we have reason to believe that many calamities, pains, and diseases are predictable results of those processes. Of course, as Plantinga points out, evidence that certain evils have perfectly natural causes is not necessarily evidence that they were not *also* caused by fallen angels ([8], p. 62). For the natural causes of the evils may themselves have been caused by fallen angels. Still, the hypothesis that the ordinary processes of nature have been shaped partly by the malevolent or perverted influence of sinful angels, and not exclusively by God, has a dualistic flavor. Some have embraced it, but it may well be less attractive to many theists than (10) would have been if we did not have evidence against it.

Plantinga suggests that other considerations might lead theist and atheist to differ in their estimates of the probability of (5):

They may differ, for example, with respect to the proportions of good and evil in the universe at large; the Christian theist will no doubt concur with St. Paul: "For I reckon that the sufferings we now endure bear no comparison with the splendor, as yet unrevealed, which is in store for us" (*Romans* 8:18). They may also disagree as to the *extent* or *amount* of good the universe contains. From a Christian point of view, there is immortality and the expectation of a better world; and, towering above all, the unthinkable splendor of God's gift to mankind in the suffering and death and resurrection of His Son. It is therefore no wonder theist and non-theist differ about prior probabilities ([10], p. 46f.).

There is something not only right but important in what Plantinga is saying here. Christian beliefs about Christ and about life after death surely must affect Christian evaluations of the character of the world and how credible it is that a good God created it. In particular, these beliefs are relevant to the probability of the last clause of (5). The better the actual world is, presumably, the easier it is to believe that God could not have actualized (strongly or weakly) a world containing a better balance of good over evil.

It seems to me, however, that even the atheologian should grant that these considerations facilitate a Christian Defense against the probabilistic argument from evil. I doubt that they provide grounds for disagreement between Christians and atheists about the force of that argument, or about the priori probabilities of G and E.[7] In particular I do not think that these considerations should lead Christians and atheists to disagree about the success of a Free Will Defense based on (5) against the probabilistic argument from evil. Let us recall that the success of such a Defense depends on the value of $P((5)/G\&C)$ and $P(E/(5)\&G\&C)$. Plantinga has argued in effect that Christian and atheist should be expected to disagree about the overall probability of (5). But that is because the probability of (5), given the Christian's views, which include G, differs from the probability of (5), given the atheist's views, which include $\overline{G}$. And that difference does not obviously lead to any disagreement about the probability of (5), given G and *C*, or of E, given (5) and G and *C*.

Formally at any rate, something may depend here on *how* Christian views about Christ and life after death are taken to be relevant to $P((5)/G\&C)$. We might be tempted to suppose that those views will be included in the background beliefs *C* for the Christian but not for the atheist. Then $P((5)/G\&C)$

would be expected to have different values for the Christian and the atheist. There is a decisive objection to this treatment of the matter, however. For in our application of Bayes' Theorem, C also figures as the background belief in $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$; and in this context even the Christian should not include Christian views about Christ and life after death in C where $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ is concerned. $P(\mathrm{E}/\overline{\mathrm{G}}\&C)$ functions here as a measure of how likely certain evils would be to occur if G were false. Even the Christian, in setting a value on this likelihood, is not trying to say how likely these evils would be to occur if his theism were false but the splender of God's gift in Christ still towered over everything. For this reason C should not include anything that only a theist would believe.

A more promising apporach is to expand G to include whatever Christian beliefs are relevant to the problem of evil; let $\mathrm{G^c}$ be G thus enlarged. If we turn our attention to assessing the value of $P(\mathrm{G^c}/\mathrm{E}\&C)$, we will be recognizing that for Christians G does not meet the test of the problem of evil in isolation from other Christian beliefs (nor for Jews and Muslims in isolation from other Jewish or Muslim beliefs, respectively). $\mathrm{G^c}$ will include Christian beliefs about Christ and about life after death. There is no clear reason why Christian and atheist should disagree about the *bearing* of those beliefs on the probability of (5); there is no reason why they should disagree about the value of $P((5)/\mathrm{G^c}\&C)$, even though they disagree about the truth of many of the beliefs included in $\mathrm{G^c}$. So I am not convinced that the considerations mentioned by Plantinga should lead Christians and atheists to disagree about the success of a Free Will Defense based on (5), where success is understood as diminishing the value of evils as evidence against Christian theism.

There is not room here for a complete evaluation of a Defense based on (5), but let us consider one important issue about it. How plausible is it that an omnipotent God could not obtain morally better free creatures than actually exist? The last clause of (5) states that "there is no world God could have created which contains a more favorable balance of good over evil [than the actual world] with respect to the free activity of the non-human persons it contains" ([10], p. 46). I believe Plantinga regards this as part of a wider hypothesis in a complete Free Will Defense – the hypothesis that "there is no possible world God could have created that contains a better balance of broadly moral good with respect to broadly moral evil" than the actual world contains – where broadly moral good and evil are good and evil "resulting from the free actions of personal beings, whether human or not" ([8], pp., 63, 59). Plantinga envisages the Free Will Defense as suggesting the hypothesis that God permitted evils only when there was no way in which He could have had free creatures that would have behaved as well, on balance, without permitting such evils.

This hypothesis presupposes that determinism is false and there are creatures that are free in the incompatibilist sense. I agree with Plantinga in finding that plausible, although it is controversial. Plantinga also assumes something that I find implausible – namely, that counterfactuals of freedom can be true. The hypothesis he proposes is, in effect, that

(11) If God had permitted less evil than He has actually permitted, whatever free creatures He had would have acted less well than His actual free creatures actually do.

Even if counterfactuals of freedom, including (11), cannot be true, however, it might be true that

(12) It was antecedently *probable* that whatever free creatures God had would act better, on the whole, if He permitted as much evil as He has actually permitted than if He did not.[8]

And that might give God a good reason for permitting as much evil as He has permitted.

In ascribing a probability or degree of plausibility to either (11) or (12) we must assume that it can be *probable* that a certain sort of person would act in a certain way in certain circumstances, even though the action would not be causally or logically necessitated. But incompatibilists must assume this anyway, if they are to claim with any plausibility that we are free in most actions that are normally taken to be morally significant. For such actions are often highly *predictable* (otherwise we would not trust each other), and we certainly believe that they can be *influenced*, if not completely determined, by various causes. We may ask, therefore, how plausible (11) or (12) is – first with regard to the actions of non-human free creatures, and then with regard to human actions.

In the case of *non-human* free creatures the most obvious obstacle in our path is that we know so little about them. We are trying to judge how plausible it is that they would (or would probably) have acted less well on the whole if God had not permitted them to wreak as much havoc in the world as they do, than if He did permit it. How can we make such a judgment unless we have some idea how well they actually behave and what conditions affect the likelihood of their acting well or ill?

Those who believe that "natural" evils are caused by fallen angels have commonly believed that those angels have fallen irredeemably and are hopelessly damned. On the traditional hypothesis the moral quality of the fallen angels' lives is (predictably) about as bad as it could conceivably be, so that it would be implausible to suppose that they would (or would probably) act significantly worse if God prevented them from harming us. The blacker the devils are painted, the less credible it is that any value in their lives may justify permitting them to meddle in our world.

But perhaps it is the good angels whose righteousness would (or would probably) be less if God did not let the bad angels cause "natural" evils. Perhaps the evils that bad angels cause among us provide the good angels with occasions for heroism that would otherwise be lacking, or elicit from them a more perfect hatred of sin than they would otherwise have. Or maybe the fallen angels are *not* hopelessly corrupt; maybe they would be less likely to repent if they were prevented from working as much of their evil will on us as they do.

Still our conception of angels' lives is so meager that it is hard to tell in any detail a really plausible story of angelic good that probably would not be equaled if God prevented natural evils. By the same token it is hard to be sure that any given evil could not be important to some great good in the angelic realm. This may be the main contribution that the hypothesis of non-human free creatures can make to a Defense against the probabilistic argument from evil: if there are free creatures that we do not see, then evils that look as if they could have been eliminated without the loss of any good that we see may still have been important for goods that we do not see. But this is hardly more than an amplification of the general theme that God may have good reasons that we do not see for permitting the evils that we see. (This is not, of course, to deny that the hypothesis of fallen angels may be supported by other, stronger reasons in theology or religious experience, even if it contributes little to a Defense against arguments from evil.)

We are presumably in a better position to evaluate the plausibility of the hypothesis that

(13) It is true (or was antecedently probable) that *human* actions would be morally worse on the whole if God did not permit as much evil as He has actually permitted, than if He did.

There are obvious objections to (13). Even the indeterminist must agree that free human actions are often quite predictable, as was noted above. There seem to be many cases in which unfavorable circumstances – illness, oppressive poverty, the birth of a child to parents mentally or physically unable to cope with it – lead predictably to morally worse behavior, on the whole, than other, less demoralizing circumstances would be likely to produce. If God chiefly wanted to elicit righteous behavior, it seems He could probably have gotten more of it by miraculously replacing bad circumstances with better ones. Moreover it seems extremely probable that there are hereditary features of the constitution of each one of us that make it more likely that we will do wrong in certain ways. This is an important part of the Christian doctrine of original sin, which in this respect is one of the most realistic of religious doctrines. It is plausible to suppose that an omnipotent deity could tamper with these hereditary factors in such a way as to get human creatures whose free behavior would probably be morally better than ours is.

I am not disputing Plantinga's claim that (13) is logically possible. The question here is how *plausible* (13) is. Nor would I claim to have proved that (13) is false. Perhaps, in some way that we do not see, every unhappy experience increases the probability of a morally better life – if not here and now, then after death. But I think the objections do show that a hypothesis such as (13) is not of much use for a Defense against the probabilistic argument from evil. The fuction of a Defense is to *explain*, by sufficiently plausible hypotheses, *how* God could have a good reason for permitting the evils there are. It will be successful in raising the value of $P(E/G\&C)$ for us to the extent that it suggests fairly plausible reasons for permitting evils that we could previously see no good reason for permitting. (13) does not offer such explanations at the points where they are needed; for in the difficult cases we still lack explanations of *how* it could be likely that preventing this or that evil would lead to a poorer belance of moral good over moral evil. Those explanations, if we had them, would serve the function of a Defense. But (13) only promises them; it does not give them.

Perhaps the best Defenses against the probabilistic argument from evil will be partial Defenses. A plausible reason for permitting some evils might be given in one way; for other evils, in another. Having such explanations for a number of types of evil might increase the value of $P(E/G\&C)$ even if there remain some evils for which we have no explanation.

It may well be plausible that *some* evils are permitted because they make right action likelier. Perhaps, for example, God has attached unpleasant consequences to some wrong actions in order to make it less likely that we would repeat them. But we need not rely exclusively on this type of explanation.

(13) does not propose a complex enough program for explaining how God may have good reasons for permitting the evils that occur. It suggests that

a complete explanation is to be found in the overall balance of moral good and evil in the world, whereas other considerations might provide a more plausible reason for the permission of some evils. For example, many have suggested on the basis of their own experience that some suffering may be necessary for the fullest and best sort of relationship with God. And I think a realistic view of human history warrants the conclusion that if one comprehensive goal is guiding God's dealings with us, it is probably something richer and more complicated than the advancement of morality. This conclusion agrees with Christian beliefs about God's purposes, according to which He wants free creatures who live by faith in His love rather than by their own righteousness. But here I may be straying from the paths of Defense into those of Theodicy.[9]

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Appendix: The Mathematics of Defense

The following theorem enables us to see more precisely how $P(\mathrm{E}/D\&\mathrm{G}\&C)$ and $P(D/\mathrm{G}\&C)$ affect the value of $P(\mathrm{E}/\mathrm{G}\&\mathrm{C})$:

$$(14)\qquad \begin{aligned} P(\mathrm{E}/\mathrm{G}\&C) &= P(D\&\mathrm{E}/\mathrm{G}\&C) + P(\bar{D}\&\mathrm{E}/\mathrm{G}\&C) \\ &= [P(D/\mathrm{G}\&\mathrm{C}) \times P(\mathrm{E}/D\&\mathrm{G}\&C)] + \\ &\quad + [P(\bar{D}/\mathrm{G}\&C) \times P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)] \end{aligned}$$ [10]

For example, suppose $P(\mathrm{E}/D\&\mathrm{G}\&C) = .5$, $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C) = .1$, and $P(D/\mathrm{G}\&C) = .1$, In other words, with G and C as background, E is five times likelier if D is true than if D is false, and D is rather improbable but not utterly incredible. Since $P(D/\mathrm{G}\&C) = .1$, $P(\bar{D}/\mathrm{G}\&C) = .9$. Then, by substitution in (14),

$$P(\mathrm{E}/\mathrm{G}\&C) = (.1 \times .5) + (.9 \times .1) = .14$$

Since the value of $P(\mathrm{E}/\mathrm{G}\&\mathrm{C})$ for us before we thought about D is likely to have been approximately the same as the value (.1) that $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)$ has for us now, the discovery of D would increase $P(\mathrm{E}/\mathrm{G}\&C)$ for us by about 40% if this set of suppositions were true. And there would be a corresponding increase in the value of the ratio $P(\mathrm{E}/\mathrm{G}\&C)/P(\mathrm{E}/\bar{\mathrm{G}}\&C)$. Yet a theist who used a Defense with these probability assignments would not have to assign to D a higher overall probability than about 35.7%. For by Bayes' theorem,

$$(15)\quad \frac{P(D/\mathrm{E}\&\mathrm{G}\&C)}{P(\bar{D}/\mathrm{E}\&\mathrm{G}\&C)} = \frac{P(D/\mathrm{G}\&C)}{P(\bar{D}/\mathrm{G}\&C)} \times \frac{P(\mathrm{E}/D\&\mathrm{G}\&C)}{P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)} = \frac{.1}{.9} \times \frac{.5}{.1} = \frac{5}{9}$$

– from which it follows that $P(D/\mathrm{E}\&\mathrm{G}\&C) = 5/14$ (approximately .357); and $P(D/\mathrm{E}\&\mathrm{G}\&C)$ is the probability of D on all the theist's relevant beliefs.

We can see here, however, that a spectacularly successful Defense would tend to turn into a Theodicy. For by (15), if $P(D/\mathrm{E}\&\mathrm{G}\&C) \leqslant P(\bar{D}/\mathrm{E}\&\mathrm{G}\&C)$ [that is, if $P(D/\mathrm{E}\&\mathrm{G}\&C) \leqslant 50\%$], then $[P(D/\mathrm{G}\&C) \times P(\mathrm{E}/D\&\mathrm{G}\&C)] \leqslant [P(\bar{D}/\mathrm{G}\&C) \times P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)]$. And in that case, by (14), the present value of $P(\mathrm{E}/\mathrm{G}\&C)$ must be less than twice $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)$, provided that $0 < P(D/\mathrm{G}\&C) < 1$. (For then $P(\bar{D}/\mathrm{G}\&C)$ will also be a fraction smaller than 1, so that $[P(\bar{D}/\mathrm{G}\&C) \times P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)]$ will be a value, v, that is less than $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)$. And we have agreed that value, v', of $[P(\mathrm{D}/\mathrm{G}\&C) \times P(\mathrm{E}/D\&\mathrm{G}\&C)]$ under present assumptions is less than v, so that $v + v'$ is less than $2v$, and therefore less than twice $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)$. But by (14), $P(\mathrm{E}/\mathrm{G}\&C) = v + v'$.) If the value of $P(\mathrm{E}/\mathrm{G}\&C)$ prior to considering D was not less than $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)$, this line of reasoning suggests that as long as $P(D/\mathrm{E}\&\mathrm{G}\&C)$ [the probability of D, given all the theist's relevant beliefs] does not exceed 50%, the discovery of D will not double the value of $P(\mathrm{E}/\mathrm{G}\&C)$.

The assumption that the previous value of $P(\mathrm{E}/\mathrm{G}\&C)$ was not less than the present value of $P(\mathrm{E}/\bar{D}\&\mathrm{G}\&C)$ can be questioned. Perhaps the discovery of one plausible reason for God to permit E to be true, where previously we had seen none, will make it seem likelier that there are other plausible reasons we have not yet found. This is a way in which a Defense mgiht increase the value of $P(\mathrm{E}/\mathrm{G}\&C)$ by somewhat more than would be indicated by the sort of calculations we have been making. Another fact not reflected in those calculations is that we might have several equally plausible hypotheses to explain why God would permit E to be true. No one of those hypotheses would be more than 50% probable, given all the theist's relevant beliefs; and yet collectively they might much more than double the value of $P(\mathrm{E}/\mathrm{G}\&C)$

Notes

1 Here I am idealizing a bit. If there are other free agents in the neighborhood, I may have to rely on their not charging in to cut down my pulleys, or more generally on their not interfering to prevent my actions from having their intended effect. In the strictest sense perhaps only God can strongly actualize very much.

2 Here we cannot simply define omnipotence as power to cause any logically possible state of affairs, for we are seeing that there are some logically possible states of affairs

that even an omnipotent being could not cause. The following doubtless still needs amendments, but is a more adequate definition of omnipotence for our present purpose: $\ulcorner x$ is omnipotent$\urcorner =_{df} \ulcorner x$ can cause any logically possible state of affairs s unless s logically requires that a certain event or state of affairs occur but not be caused by $x.\urcorner$ I believe the theological concept of omnipotence is to be understood in terms of power to cause (or strongly actualize) states of affairs, rather than in terms of power to weakly actualize them.

3 Or for *essences* of possible free creatures, as Plantinga would say ([9], pp. 187ff.); but I shall neglect this refinement here.

4 I am indebted to David Vriend for this apt term.

5 I do not mean to commit myself one way or the other on the possibility of divine *fore*knowledge of free action of creatures. Foreknowledge is different from middle knowledge because foreknowledge is only of what *will* happen. Foreknowledge would therefore be less useful to God than middle knowledge in deciding what to do. We cannot consistently suppose that God decided not to create $P_1, P_2, \ldots P_n$ in c because He knew by *fore*knowledge that they would sin in c. For He can know their sin in c by foreknowledge only if they will in fact sin in c; and it is self-contradictory to say that they will in fact sin in c but God has prevented them from ever being in c. For this reason *fore*knowledge would not assure God of being able to avoid a situation in which Adam and Eve will sin.

6 A sermon by H. Dana Fearon III helped me to see the Book of Job in this light. For an interesting discussion of ways in which such experience may depend on, as well as affect, the way in which one faces evils, see [2].

7 I am not sure that Plantinga meant to suggest that they do provide such grounds.

8 This sort of alternative to counterfactuals of freedom is more thoroughly discussed in [1].

9 I am indebted to students in several classes for discussion of some of the material in this essay, and to Marilyn McCord Adams and Donald Kalish for reading and commenting on drafts of all or part of it.

10 Cf. Plantinga's axioms A_3 and A_4 ([10], p. 11; '×' has ousted '+' by a misprint in A_3 there).

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