A LOGICAL SOLUTION TO THE PROBLEM OF EVIL

by William S. Hatcher

In this article we will discuss the philosophical problem known as the "problem of evil." The classic form of this problem runs something as follows: If there is a God, then he cannot be both omnipotent and good. For, since there is evil in the world, God, if he be all-powerful, is responsible for this evil (since he could prevent it if he chose) and is thus himself evil.

The problem is a real one, for the choice which seems to be imposed by the above argument is hard indeed. If God really is not all-powerful, but is good, then what is the limit of his power? Precisely, evil and his inability to conquer it. Certainly, a good God must wish to overcome evil, and since he evidently has not, it follows that it is because he has not been able to do so. Thus, evil and its force would seem to be more powerful than such a God, and he ceases to be any sort of God at all. He is, at best, a sort of ally with us (or some of us) in the struggle against evil.

On the other hand, an all-powerful but evil God is equally unsavory to contemplate.

Logically speaking, there is one simple way out of the dilemma: Deny the existence of evil. If there is no evil, then God can logically be held to be both good and all-powerful. Among those thinkers who have squarely faced the problem (and there may not be too many), some, such as Leibniz, seem to have chosen this way out.

But if the above is logically satisfying, it is certainly not, at first glance in any case, emotionally and morally satisfying. Our moral repugnance (or at least the moral repugnance of a certain large proportion of the world's population) at such atrocities as death camps, genocide, homicide, war, persecution, etc. makes it difficult for us to believe that evil does not exist. If there is no evil, then there is certainly an abundance of suffering and injustice. And if suffering, or at

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least injustice, is not evil, then are we not simply playing with words and refusing to call a spade a spade?

In the spirit of modern philosophy, I seem to find that the problem of evil turns on a certain unfortunate way of using the term "evil." I hope to show clearly in what way this is so and how, on more careful analysis, one can preserve both the goodness and omnipotence of God without sacrificing the vocabulary necessary to an adequate description of the various horrors which history has furnished (and continues to furnish) us.

Before proceeding, let us note that this is not an article on the existence of God. The problem I pose is essentially a logical one—the question of reconciling the seemingly contradictory character of attributing both goodness and omnipotence to any God which exists. I will not bother to punctuate my article with conditional phrases of "if God exists, then . . . ," and the reader is invited to insert them or not according to his personal convictions. The point is that I am begging no question in refusing to discuss here the existence of God.

ANALYSIS

Let us now return to the argument which constitutes the problem of evil, stating all of its premises explicitly so that a precise, logical analysis may be obtained:[1]

$$(Ey)[Ev(y)] \tag{1}$$
"There is at least one thing which is evil."

$$(x)[Ev(x) \supset -Gd(x)] \tag{2}$$
"No matter what thing we choose, if it is evil, then it is not good"; more briefly said: "Nothing which is evil is good."

Notice that statement (2) is minimal in the assumptions it makes about the relationship between good and evil, because it does not identify goodness with nonevil. By the laws of logic, we can of course infer from (2) that if something is good then it is not evil, and this we certainly want to be true. But we cannot infer that if something is not evil then it is good. Hence, goodness can be thought of as a positive quality, something more than the mere absence of evil. The logical point here is that we do not have to decide whether to identify goodness with nonevil for the purposes of this discussion. If we obtain a contradiction involving the assumption (2), then we will a fortiori be able to obtain a contradiction from the stronger assumption:

$$(x)[Ev(x) = -Gd(x)] \tag{2'}$$
"Anything is evil if and only if it is not good."

We continue:

$$(x)(y)\{[Rsp(x,y) \wedge Ev(y)] \supset Ev(x)\} \tag{3}$$
"If one is responsible for something which is
evil, then one is evil"; more simply: "To be
responsible for evil is to be evil."

Note that "responsible" is a relative predicate "x is responsible for y" and not an absolute predicate such as "evil." The extension (set of satisfying values) of a relative predicate is a class of ordered pairs of objects, while the extension of an absolute predicate is a class of objects.

$$(x)[Pw(x) \supset (y)Rsp(x,y)] \tag{4}$$
"If something is all-powerful, then it is
responsible for everything that exists."

$$(x)[Cr(x) \supset Pw(x)] \tag{5}$$
"No matter what thing we choose, if it is God
(symbolized as Cr for 'creator'), then it is
all-powerful."

From premises (1)–(5), all assumptions on which the "problem of evil" is based, we can conclude, using only the laws of (modern) logic, that

$$(x)[Cr(x) \supset -Gd(x)] \tag{6}$$
"No matter what thing we choose, if that thing
is creator of the universe, then it is not good."

The formal deduction is exhibited below. The reader can skip the details of the formal deduction and accept the conclusion or give for himself an informal deduction if he chooses.

In the following deduction, the bracketed 1 indicates dependence on the hypothesis of line 1 for the lines of the deduction where the bracketed 1 is displayed. The notations *H*, $e\forall$, *MP*, *eE*, *eH*, and $i\forall$ stand for "hypothesis," "eliminate universal quantifier," "*modus ponens*," "eliminate existential quantifier," "eliminate hypothesis," and "introduce universal quantifier," respectively.

[1]   1. $Cr(x)$ *H*
         2. $Cr(x) \supset Pw(x)$ $e\forall$, premise (5)
[1]   3. $Pw(x)$ 1,2, *MP*
         4. $Pw(x) \supset (y)Rsp(x,y)$ $e\forall$, premise (4)
[1]   5. $(y)Rsp(x,y)$ 3,4, *MP*
         6. $(Ey)Ev(y)$, premise (1)
         7. $Ev(a)$ 6, *eE* (*a*, some new constant)

[1]   8. $Rsp(x,a)$ 5,$e\forall$
       9. $[Rsp(x,a) \land Ev(a)] \supset Ev(x)$ $e\forall$, premise (3)
[1]   10. $Ev(x)$ 7,8,9, tautology, MP
      11. $Ev(x) \supset -Gd(x)$ $e\forall$, premise (2)
[1]   12. $-Gd(x)$ 10,11, MP
      13. $Cr(x) \supset -Gd(x)$ 1,12, eH
      14. $(x)[Cr(x) \supset -Gd(x)]$ 13, $i\forall$.

Each of our premises has been used in obtaining the conclusion.

If we wish to add the explicit premise that God exists, then we will have

$$(E!x)Cr(x) \tag{7}$$
"There exists one and only one God."

We can then state, using the description operator,

$$-Gd[\imath xCr(x)] \tag{8}$$
"God is not good."[2]

Statement (8) is provable if (7) is added as a premise.

Whether or not we make the explicit hypothesis (7), the logical point is the same: The assumption of the existence of a God leads to the conclusion that he is not good.

If we take as premises (1)–(4), replacing (5) by

$$(x)[Cr(x) \supset Gd(x)] \tag{9}$$
"Whatever we choose, if it is God, then it is good,"

we can formally deduce the conclusion

$$(x)[Cr(x) \supset -Pw(x)]$$
"Whatever thing we choose, if it is God, then
it is not all-powerful."

We do not furnish the details of the deduction, letting the above serve as an example.

If, now, we suppose (1)–(4) and replace (5) by

$$(x)\{Cr(x) \supset [Gd(x) \land Pw(x)]\} \tag{5'}$$
"Whatever thing we choose, if it be God, then
it is good and all-powerful,"

then we can formally deduce the conclusion

$$(x)\{Cr(x) \supset [-Pw(x) \land Pw(x)]\} \tag{10}$$
"Whatever thing we choose, if it is God, then it is
both all-powerful and not all-powerful."

From this we have immediately

$$-(Ex)Cr(x) \qquad\qquad (11)$$
$$\text{``There is no God.''}$$

Thus, if we add to the set (1)–(4) and (5′) the further premise (7) that there is a God, we immediately obtain a contradiction. Thus, God, if he exists, cannot be both good and all-powerful on pain of formal contradiction. Notice again that we have never used the stronger assumption (2′).

Explicitly, the set of premises which leads to formal contradiction is the set (1)–(4), (5′), and (7). Let us examine these one by one to determine likely candidates for rejection in order to avoid contradiction.

As we have already stated, we are not interested in the rejection of (7) in this article. Of course, the fact that the above set of statements is contradictory has sometimes been used precisely as an argument for the rejection of the existence of God. But any reasonable solution to the problem which avoids the rejection of (7) will show that such an argument is inconclusive.

The refusal to reject (5′) has already been seen as the heart of the problem we are attacking. Our precise intention here is that we shall not take this way out.

Rejection of (2) seems weak, since this would appear to be the least prejudicial way of asserting the relationship between good and evil, as we have already noted.

Rejection of (4) is also unsatisfactory, since this is almost a definition of terms. To be all-powerful means precisely to control everything, thus to be responsible for everything. Man is not all-powerful precisely because there exist things (the universe, for example) for which he is not responsible.

One could argue for a rejection of (3), which says that to be responsible for evil is evil. There are those who have argued in the vein that this is not necessarily so. It has been said, for example, that God "uses evil" for good purposes. Some have even waxed eloquent, pointing out that the very proof of Godliness is that God is so powerful, clever, or what have you that he can use evil for good.

There does indeed seem to be a grain of truth in this type of argument. We often observe processes in life in which something we call evil works toward an end which we judge desirable and good. It can be pointed out that suffering often entails growth and development, serving as a stimulus to organisms to seek higher and more creative forms of adaptation.

What weighs most heavily against this argument is the equivocation

of terms it seems to involve. Can that which is evil really lead to good? If something leads to good, then on what basis do we call it evil in the first place? After all, we may simply be mistaken in calling a particular instance of suffering an evil. Our later realization that the experience resulted in good should occasion the reflection that we were wrong to predicate evil of the suffering to begin with, not that something which was intrinsically evil has magically changed to good!

In short, an evil, whatever else it may be, must be something that, by its very nature, does not tend toward good ends. The fact is that most life situations involve a mixture of factors, some of which we judge good and others evil. If we are consistent in our use of these terms, we must suppose that the good which results from a given situation results from the good involved and that the result would have been even better had the evil involved not been there at all. That a God could produce some good results where evil is involved does not imply that it was the evil which contributed to the good result. The good which results from a situation must result in spite of the evil involved and not because of it. Otherwise, our use of the terms "good" and "evil" is going to be equivocal.

To sum up, then, evil must by its very nature be something which does not lend itself to good use, and thus to be responsible for evil is to contribute willingly toward the frustration of a certain amount of good. To be responsible for evil is to contribute willingly to a lesser good. It is to be a willing accomplice to the undoing of (a certain amount of) good. And certainly a being who is a willing accomplice to the undoing of good is evil. Thus, rejection of (3) only shifts the philosophical argument to another level and accomplishes nothing.

The above argument for the rejection of (3), as cited above, does seem to have a certain force as an argument for the rejection of (1). We can argue that everything which we call "evil" tends, from some ultimate and olympian point of view which we do not possess, to work toward good, and thus that evil, in the precise sense we have discussed, that is, in the sense of tending toward the frustration of good, does not exist.

On the other hand, if good exists, then let us identify something which is good and we will certainly discover that some person (perhaps out of ignorance or selfishness) has deliberately attempted to frustrate it. Such acts exist and, since they tend to frustrate good, are evil (and they will hurt at least the authors of such acts). Hence it seems that, if good exists and human freedom is not illusory, then evil must also exist.

Thus, the above argument applied as an argument for the rejection of (1) seems to deny the possibility of good and evil altogether

and leaves us with amorality. Again, we have difficulty squaring our philosophical amorality with our value-charged experience of life.

SOLUTION

The solution to the problem lies, I feel convinced, in the observation that the term "evil," like the term "responsible," is a relative term. An absolute term (such as "all-powerful") has a class of objects as its extension (the class of all all-powerful things). It thus divides the ontological universe into two separate parts, those objects which satisfy the term and those which do not (those things which are all-powerful and those which are not). This follows from the logical truth

$$(x)[F(x) \lor -F(x)] ,$$

where F is any one variable predicate. However, a relative term (such as "responsible") has a class of ordered pairs of objects as its extension (the class of all pairs $\langle x, y \rangle$ such that x is responsible for y) and does not so divide the universe.

Of course, where F is any relation,

$$(x)(y)[F(x, y) \lor -F(x, y)]$$

is also a logical truth, but this says merely that, no matter what two objects we choose, either they stand in the relation F or they do not.

What we are about, then, is the following: We propose to replace the absolute term

$$Ev(x)$$
"x is evil"

with the relative term

$$Ev(x, y)$$
"x is more evil than y."

Let us work, rather, with the converse relation

$$Val(x, y)$$
"x is better than y,"

understanding that x is better than y if and only if y is more evil than x. We now replace the contradictory set of statements (1)–(4), (5'), and (7) with the following noncontradictory set:

$$(Ex)(Ey) \ [Val(x, y)] \tag{i}$$
"There exist x and y such that x is better than y
(or, equivalently, y is more evil than x)."

$$(x)(y)[Val \ (x, y) \supset -Val(y,x)] \tag{ii}$$
"For any two things x and y, if x is better than y,
then y is not better than x."

$$(x) - Val \ (x,x) \tag{iii}$$
"Nothing is better than itself."

$$(E!x)[Cr(x)] \tag{iv}$$
"God exists."

$$Pw[\iota x Cr(x)] \tag{v}$$
"God is all-powerful."

$$(y)[y \neq \iota x Cr(x)] \supset Val[\iota x Cr(x), y] \tag{vi}$$
"God is better than every other thing"; in other
words, God is the supremely valued thing, the
highest good.

$$(x)\{Pw(x) \supset (y)[Rsp(x, y)]\} \tag{vii}$$
The same as (4).

The set of statements (i)–(vii) is clearly consistent. To see this, take
as a model the negative integers where Val is the relation "greater
than," the unique object satisfying the predicate Cr is -1, Pw and Cr
are both equal to the set whose only element is -1, and Rsp is the
relation "greater than or equal to." (In fact, the statements clearly
have a model in a two-element domain.)
   In this set of statements, both the goodness

$$(in[vi])$$

and the omnipotence

$$(in[v])$$

of God are affirmed. Notice that we no longer have any analogue of
(3) in the new set of statements. Let us examine this in more detail.
   Premise (3) affirms that to be responsible for evil is evil. This is
when we regard "evil" as an absolute term. We could still obtain a
contradiction from the set (i)–(vii) by adding the following statement:

$$(x)(y)\{[Rsp(x, y)] \wedge (Ez)[Val(z, y)] \supset (Ew)[Val(w,x)]\} \tag{3'}$$
"If someone x is responsible for y and there is something z
which is better than y, then there is something w
which is better than x."

That contradiction follows from (i)–(vii) plus (3′) can be seen roughly in this way: By (v) and (vii), God is responsible for everything. By (i), there is a *y* which is more evil than some *x*. Since God is responsible for everything, he is responsible for this *y*. Thus, (3′) would require that there be something better than God. But (vi) contradicts this by asserting that God is the supreme good (i.e., is better than every other thing). Roughly, then, we would have a new "problem of evil" which would go somewhat as follows: God cannot be the supreme good since he is responsible for the fact that there is at least one thing which is more evil than another.

But here the argument for the acceptance of (3′), thus forcing the new "problem," is quite weak. For God is responsible not only for the *y* that is more evil than *x* but also for the *x* which is *better* than *y*! In short, God is responsible for the fact that some things are better than others. It does not follow in any easily arguable way that God should be held less than supremely good because of this state of affairs.

If we accept a still further hypothesis that humans have a limited but real freedom to choose, then it follows, together with the above, that moral choice is possible. Since some things are better than others, the consequences of moral choices are real. Moreover, by (v) and (vii), God is responsible for this situation.

Suffering (or increased suffering) is often the consequence of wrong moral choice, and one therefore could argue that God is not supremely good because it would have been better for God not to have created this situation. God, since he is all-powerful, could have arranged things otherwise. Let us note, however, that the main logically possible alternatives seem to involve either suppressing the relation *Val* (amorality again), or suppressing man's freedom, or not creating man in the first place. In fact, all of these logical possibilities amount more or less to the same thing, since it is only the relation *Val* which gives our freedom any meaning or purpose. The freedom to choose among a number of morally indifferent alternatives would be the same as having no freedom, since the result of the "choice" would not be of any consequence.

On the other hand, the idea that some things are better than others—that some choices lead to relatively good results whereas others lead to relatively bad results—is the very basis of our notion of progress, of growth (both individual and social), and of happiness.

It is obvious that any question can be argued, so the main point here should not be obscured: It is that the burden of proof has now been shifted to the shoulders of those who would argue that God was "wrong" to allow man the freedom of moral choice. True, we do not see the ultimate end of many of the sufferings we endure, and this

may sometimes lead us to curse the freedom which makes us have to suffer. But the alternative of being a dumb automaton (or of not existing at all) seems much more evil, so any argument that this alternative is necessarily a greater good is inconclusive at best. (Nothing, in fact, excludes that even automatons could suffer.) In short, a person can choose to deny the supreme goodness of God on this basis if he chooses, but he cannot feel secure in having done so on such a clear and logical foundation as if our first analysis had been allowed to stand.

I would like to make two observations in closing. The first is this: It is interesting and important that at least one major religion, the Baha'i Faith, has taken essentially the present solution to the problem of evil.[3] I say that this is important because philosophies are noted for their lack of influence on the public at large while religions are noted precisely for their general influence. That a major religion has avoided the confusion on this issue and assumed a logical stand is thus a good omen.

The second observation concerns the nature of our solution. Notice that, in one sense, our solution harks back to the one first considered in the fourth paragraph of this article, that is, denying the existence of evil. Of course, we have not rejected evil but rather "evil." We have not rejected the existence of the moral dimension but rather the term "evil" as an absolute term. My question is this: Could other thinkers, such as Leibniz, who were led to deny the existence of evil really have been attempting to formulate something like the present solution?

Our analysis has rested heavily on the logic of relations, and this was developed only late in the nineteenth and early in the twentieth century by De Morgan, Frege, Schröder, and Russell in Europe and by C. S. Peirce in America. Hence, the present way of escaping the dilemma was denied those who thought about the problem before modern times, simply because the necessary vocabulary was not yet common philosophical currency.

The question is particularly poignant in regard to Leibniz, for it is well known that it was he who first conceived of the possibility of a logical calculus and even made unsuccessful attempts to develop it. Could he have intuitively conceived of an analysis resembling the present one and yet have remained unable to express it adequately due only to the above-mentioned lack of vocabulary (the logic of relations)? For my part, I like to think so, for certainly this is more reasonable than to assume that the thought of this incomparable genius was vulnerable to the amusing but philosophically naive attack of Voltaire's *Candide*.

NOTES

1. In this article I will use the following signs for the sentential connectives: ⊃ for "if
... then ... "; ∧ for "and"; ∨ for "or"; − for "not"; ≡ for "if and only if." Read the
existential quantifier (*Ey*) as "there is at least one *y* such that" and the universal
quantifier (*x*) as "for all *x*" or "no matter what *x* we choose."

2. (*E!x*) is read as "there exists one and only one *x* such that," and "*ιxF(x)*" is read as
"the unique thing *x* 'such that *F*(*x*) is true."

3. See Abdu'l Baha, *Some Answered Questions,* 7th ed. (Wilmette, Ill.: Baha'i Publishing
Committee, 1954), pp. 250–51, 301–2.