1. Introduction.

It is the standard position on the existence of evil that a perfect being could not permit even one instance of evil that serves no purpose. Among those who have defended the standard position on evil is William Rowe.

An omniscient, wholly good being would prevent the occurrence of any intense evil it could, unless it could not do so without thereby losing some greater good or permitting some evil equally bad or worse.¹

According to Peter van Inwagen the standard position on the existence of evil is false. A perfect being would prevent the occurrence of any intense suffering it could only if there exists some minimum amount of evil that is necessary to the purposes of a perfect being. The minimum evil necessary for divine purposes is the least amount of evil such that any greater evil is unnecessary for divine purposes.² But van Inwagen urges that it is implausible to suppose that there is some amount of evil that is the minimum necessary.

It is not very plausible to suppose that there is a way in which evil could be distributed such that (i) that distribution of evil would serve God’s purposes as well as any distribution of evil could and (ii) God’s purposes would be less well served by any distribution involving less evil.³ It is plausible to suppose instead that for any amount of evil such that any greater evil is unnecessary for God’s purposes there is some lesser amount of evil such that any greater evil is unnecessary for God’s
purposes. Call that the *No Minimum Thesis*. There is therefore no least amount of evil such that any greater evil is unnecessary for divine purposes. According to van Inwagen the *No Minimum Thesis* together with some uncontroversial assumptions entails that the standard position on evil is false. And we arrive at the incredible conclusion that a perfect being might exist along with pointless and preventable evil.

I present next van Inwagen’s *No Minimum* argument against the standard position on evil. I show in (2.1) that the premises in the argument cannot all be true together and that therefore the argument offers no reason to believe that the standard position on evil is false. Contrary to the *No Minimum* argument the standard position on evil does not entail that there is a discrete transition between evil that is unnecessary for divine purposes and evil that is necessary for divine purposes. In (2.2) I provide a reformulation of the *No Minimum* argument that assumes a greatest lower bound on evil that is unnecessary for divine purposes. The reformulated argument requires the implausible assumption that there exists a discrete transition between an amount of evil that is necessary for divine purposes and amount that is unnecessary for divine purposes. In section (2.3) I offer the *Vague Minimum Thesis*. The thesis guarantees that there is no discrete transition between amounts of evil that are necessary and amounts of evil that are unnecessary for divine purposes. The *Vague Minimum Thesis* poses no threat to the standard position on evil. In (3) I consider some
alternative formulations of the *No Minimum Thesis*. I argue that the alternative formulations are consistent with the *Vague Minimum Thesis* and do not advance van Inwagen’s argument. In (3.1) and (3.2) I show that degree-theoretic and epistemicist interpretations of the *No Minimum* argument do not advance van Inwagen’s argument against the standard position on evil. In (4) I consider the higher-order vagueness of unnecessary evil and show that it too presents no problem for the standard position. In (5) I consider whether, for every amount of evil \( k \) that is unnecessary for divine purposes, an omniscient being would know that \( k \) is unnecessary for divine purposes. I argue that an omniscient being would know and conclude that the knowledge of omniscient beings poses no problem for the standard position on evil. I offer some closing comments in (6).

2. *Van Inwagen’s No Minimum Argument.*

Suppose there is a divine purpose to bringing about a world containing higher-level sentient beings. Perhaps the existence of higher-level sentient beings is necessary to some very important moral good—a moral good that outweighs all sentient suffering. It might be true that a series of miraculous interruptions in natural law could prevent every instance of sentient suffering. But suppose that preventing every instance of sentient suffering would produce a moral defect—the bad effects of a massive irregularity in natural law—that is at least as great as any pattern of suffering among sentient beings. It might then be true
that a perfect being could permit an amount of evil that is not the minimum evil necessary for divine purposes. Here is the *No Minimum* argument.

But what of the hundreds of millions (at least) of instances [of intense suffering similar to Rowe’s fawn] that have occurred during the long history of life? Well, I concede, God could have prevented any one of them, or any two of them, or any three of them . . . without thwarting any significant good or permitting any significant evil. But could He have prevented all of them? No—not without causing the world to be massively irregular. And of course there is no sharp cutoff point between a world that is massively irregular and a world that is not. . . There is, therefore, no minimum number of cases of intense suffering that God could allow without forfeiting the good of a world that is not massively irregular.⁴

But if there is no minimum amount of evil necessary for divine purposes, van Inwagen urges, we cannot conclude that God is unjust or cruel for permitting more than the least amount of evil necessary for those purposes.

But if there is no minimum of evil that would serve God’s purposes, then one cannot argue that God is unjust or cruel for not “getting by with less”—any more than one can argue that a law that fines motorists $25.00 for illegal parking is unjust or cruel owing to the fact that a fine of $24.99 would have an identical deterrent effect.⁵
According to the standard position on evil a perfect being cannot permit more than the minimum evil necessary for divine purposes. Every instance of evil that exceeds the minimum necessary is, of course, unnecessary or pointless. But according to the *No Minimum* argument it is true both that some evil is necessary for divine purposes and that no evil is the minimum necessary for divine purposes. A perfect being can actualize divine purposes only if he permits more than the minimum evil necessary. But van Inwagen urges that certainly a perfect being is permitted to actualize the great goods in his divine purposes. Therefore the standard position on evil is mistaken.

According to the *No Minimum* argument an omnipotent being might allow pointless and preventable evil and display no moral imperfection at all. And that is a good reason to suspect that the *No Minimum* argument has gone wrong. Suppose we reconsider the premises in the argument. Let $k$ be the total amount of evil in the actual world including every instance of intense suffering among sentient beings. The *No Minimum* argument assumes that the amount of evil in $k$ is such that any greater amount of evil is unnecessary for divine purposes. Indeed van Inwagen proposes the stronger assumption that the amount of evil in $k$ exceeds the amount necessary for divine purposes. He simply concedes that many actual instances of intense sentient suffering do not serve any divine purpose. The initial premise of the *No Minimum* argument states the following.
1. The actual amount of evil $k$ is such that any greater amount of evil is unnecessary for divine purposes.

But according to the No Minimum argument the amount of evil $k_n$ is not the least amount of evil necessary for divine purposes only if, for some positive increment in evil $i$, the amount of evil $k_{n-i}$ is not the least amount of evil necessary for divine purposes. In fact van Inwagen finds it a very plausible assumption that for any amount of evil that would have served God’s purposes, slightly less evil would have served His purposes just as well. However bad the actual world it seems unlikely that there is an infinite amount of actual evil. But let’s suppose that the amount of evil between 0 and $k$ is at least infinitely divisible. Let $i$ be some increment in evil between 0 and $k$. There is then a sequence $S$ in total amounts of evil that begins at the actual amount $k$ and ends at 0 and is such that $k > k-i > k-2i > k-3i > \ldots > 0$. The second premise in the argument expresses the No Minimum Thesis.

2. For any amount of evil $k_n$, ($k \geq k_n > 0$) if $k_n$ is such that any greater amount of evil is unnecessary for divine purposes then for some $i$ ($i > 0$) $k_{n-i}$ is such that any greater amount of evil is unnecessary for divine purposes. The No Minimum Thesis expresses the proposition that, for each amount of evil $k_n$ ($k \geq k_n > 0$) in the sequence $S$, if $k_n$ is such that any greater amount of evil is unnecessary for divine purposes then, for some positive increment in evil $i$, the same is true of the lesser amount of evil $k_{n-i}$.
But from premise (1) together with the *No Minimum Thesis* we can derive premise (3).

3. There is no amount of evil $k_n (k \geq k_n > 0)$ that is the *least* amount of evil such that any greater amount of evil is unnecessary for divine purposes. From (1) and (2).

Let’s show that (3) follows from premise (1) and the *No Minimum Thesis*.

Suppose premise (3) is false. It follows that there is some *least* amount of evil $k_n (k \geq k_n > 0)$ such any greater amount of evil is unnecessary for divine purposes. But it follows from the *No Minimum Thesis* and premise (1) that for every amount of evil $k_n (k \geq k_n > 0)$ there is a *lesser* amount of evil $k_{n-i}$ such that any greater amount is unnecessary for divine purposes. So our supposition is false. It follows that premise (3) is true.

The minimum evil necessary for divine purposes is just the least amount of evil such that any greater evil is unnecessary for divine purposes. But from premise (3) we know that there is no least amount of evil such that any greater is unnecessary for divine purposes. And so we arrive at premise (4).

4. There is no minimum amount of evil $k_n (k \geq k_n > 0)$ necessary for divine purposes. From premise (3).

Now according to the theodicy that van Inwagen offers—a story offered as a plausible elaboration on the data of Christian revelation—a certain amount of suffering and evil is necessary for divine purposes. It is
impossible, for instance, for God to prevent every instance of intense suffering among sentient beings without thereby causing a moral defect that is at least as bad. The No Minimum argument therefore assumes that at least some instances of evil are necessary for divine purposes.

5. There is some amount of evil $k_n \ (k > k_n > 0)$ that is necessary for divine purposes.
   
   Assumption

We know from premise (4) that there is no minimum amount of evil necessary for divine purposes. And we know from (5) that some amount of evil is necessary for divine purposes. Now certainly a perfect being would permit enough evil and suffering to realize divine purposes. So we arrive at premise (6).

6. A perfect being would permit an amount of evil $k_n \ (k > k_n > 0)$ that is sufficient to realize divine purposes. 
   
   Assumption.

An amount of evil $k_n \ (k > k_n > 0)$ is sufficient for divine purposes just in case there is no greater amount of evil necessary for divine purposes. But for every amount of evil $k_n \ (k > k_n > 0)$, $k_n$ is either less than the minimum necessary for divine purposes or $k_n$ more than the minimum necessary for divine purposes. Any amount of evil that is less than the minimum necessary for divine purposes is an amount that is insufficient to realize those purposes. The No Minimum argument therefore concludes that a perfect being would permit an amount of evil that is greater than
the minimum necessary for his purposes. From premises (4), (5) and (6) we arrive at premise (7).

7. A perfect being would permit some amount of evil \( k_n \) \( (k_n > k_n > 0) \) greater than the minimum amount of evil necessary for divine purposes. From (4), (5) and (6).

Of course, in defense of the standard position on evil it might be urged that a perfect being simply could not permit more than the minimum evil necessary for divine purposes. Premise (7) would then constitute an absurd consequence of the assumption that there are divine purposes for which there is no least amount of evil necessary. But suppose we set this objection aside. It follows directly from premise (7) that the standard position on evil is mistaken.

8. Therefore the standard position on evil is false. From (7)

The standard position on evil states that a perfect being would prevent the occurrence of any pointless evil it could. But according to (7) a perfect being would permit an amount of evil that is greater than the minimum necessary for divine purposes. But then a perfect being would not prevent the occurrence of all the pointless evil it could. The standard position on evil is therefore false.

2.1 Why the No Minimum Argument Fails

The No Minimum argument is designed to show that the standard position on evil is false. Premise (1) assumes that any amount of evil exceeding the actual amount is unnecessary for divine purposes.
1. The actual amount of evil $k$ is such that any greater amount of evil is unnecessary for divine purposes.

And premise (2) expresses the *No Minimum Thesis*.

2. For any amount of evil $k_n$, $(k \geq k_n > 0)$ if $k_n$ is such that any greater amount of evil is unnecessary for divine purposes then for some increment $i$ $(i > 0)$, $k_{n-i}$ is such that any greater amount of evil is unnecessary for divine purposes.

And since our theodicy assumes that some amount of evil is necessary for divine purposes, the *No Minimum* argument also includes premise (5).

5. There is some amount of evil $k_n$ $(k \geq k_n > 0)$ that is necessary for divine purposes.

But these premises cannot all be true together. Premises (1) and (2) entail that premise (5) is false. We know from premises (1) and (2) that every amount of evil in $S$ is such that any greater amount of evil is unnecessary for divine purposes. Suppose for *reductio ad absurdum* that (5) is true and $k_n$ is necessary for divine purposes. We know that there is some amount of evil $k$ in $S$, such that $k$ is unnecessary for divine purposes. But from repeated applications of premise (2)—the increments in premise (2) are always positive—it follows that $k_n$ is also unnecessary for divine purposes. That’s impossible. Therefore our supposition is false. It follows from premises (1) and (2) that no amount of evil—not so much as the scratching of a finger—is necessary for divine purposes. So contrary to (5) no amount of evil $k_n$ $(k \geq k_n > 0)$ in $S$ is such that $k_n$ is necessary for divine purposes.
We know that premises (1), (2) and (5) in the No Minimum argument cannot all be true. The No Minimum argument must contain at least one false premise. The argument is therefore unsound. I consider in (2.2) an illuminating reformulation of the No Minimum argument.

2.2 No Minimum Reformulated.

According to the No Minimum argument there is some amount of evil that is necessary for divine purposes. We can stipulate without loss of generality that some amount or other greater than 50 turps of evil is necessary for divine purposes. Let’s suppose further that for any amount of evil \( k_n \) greater than 50 turps there is some increment \( i = \frac{1}{2}( k_n - 50 ) \) such that \( k_n - i \) serves divine purposes just as well. We arrive at the conclusion that some amount or other greater than 50 turps of evil is necessary for divine purposes and each particular amount of evil greater than 50 turps exceeds the least amount necessary for divine purposes.

In the reformulated No Minimum argument premise (1) is true just in case the actual amount of evil \( k_n \) exceeds 50 turps.

1. The actual amount of evil \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes.

If we put \( k \) at 50 turps of evil then premise (2) states that for any amount of evil \( k_n \) greater than \( k \) there is some increment \( i (i > 0) \) such that \( k_n - i \) is unnecessary for divine purposes.

2. For any amount of evil \( k_n \), \( (k > k_n > 0) \) if \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes then for some \( i (i > 0) \)
$k_{n-1}$ is such that any greater amount of evil is unnecessary for divine purposes.

Since we have stipulated that $i = \frac{1}{2}(k_n - 50)$, it is evident that premise (2) is true. Premise (5) states that there is some amount of evil greater than $k$ that is necessary for divine purposes.

5. There is some amount of evil $k_n (k > k_n > 0)$ that is necessary for divine purposes.

But premise (5) is false under the current assumption that each particular amount of evil greater than $k$ is unnecessary for divine purposes. Since the scope of the existential quantifier in premise (5) is wide it asserts that there is some particular amount of evil greater than $k$ that is necessary for divine purposes. Indeed if van Inwagen is right, then quite a large amount of evil is necessary for divine purposes. The theodicy he offers is designed to show the essential contribution to God's plan of a good portion of actual evil.

What the theodicist must do, given the facts of history, is to say what contribution—what essential contribution—to God's plan of Atonement is made by the facts about the types, magnitude, duration, and distribution of evil that are made known to us by historians and journalists, not to mention our own experience.

Suppose we give the quantifier narrow scope and replace (5) with (5').
5’. It is necessary to divine purposes that there is some amount (or other) of

\[ k_n, \ (k > k_n > 0). \]

Premise (5’) states that it is necessary to divine purposes that there is some amount of evil or other greater than \( k \). Consider whether premises (1), (2) and (5’) are consistent.

Suppose the actual amount of evil \( k_n \) equals 60 turps. Since, by hypothesis, any amount of evil greater than \( k \) is unnecessary for divine purposes, it follows that \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes. According to premise (2), for any amount of evil \( k_n \), if \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes then for some \( i \ (i > 0) \) \( k_{n-i} \) is such that any greater amount of evil is unnecessary for divine purposes. Since we have defined \( i = \frac{1}{2}(k_n - 50) \), it follows that \( k_{n-i} = (k_n/2 + 25) \) or \( k_{n-i} = (60/2 + 25) = 55 \). It is evident that any amount of evil greater than 50 turps satisfies premise (2).

The reformulated No Minimum argument includes premise (1), (2) and (5’). But these premises entail that there is some least amount of evil such that any greater amount of evil is unnecessary for divine purposes. At precisely \( k (= 50 \text{ turps}) \) we arrive at an amount of evil that is less than the total amount of evil necessary for divine purposes and at any amount of evil greater than 50 turps we arrive at an amount of evil that is greater than the total amount necessary for divine purposes. Here is van Inwagen again.
But could He have prevented all [instances of evil similar to Rowe’s fawn]? No—not without causing the world to be massively irregular. And of course there is no sharp cutoff point between a world that is massively irregular and a world that is not. . .\textsuperscript{12}

But according to the reformulated \textit{No Minimum} argument there is a sharp cutoff point between a world that is massively irregular and a world that is not. At precisely 50 turps of evil the world is massively irregular and at any amount of evil—ever so small—greater than 50 turps the world is regular. So the reformulated \textit{No Minimum} argument entails that there is a precise border between an amount of evil that is less than the total necessary for divine purposes and an amount of evil that is greater than the total amount necessary for divine purposes. Van Inwagen notes elsewhere,

\begin{quote}
One might as well suppose that if God’s purposes require an impressively tall prophet to appear at a certain time and place, there is a minimum height that such a prophet could have.$^{13}$
\end{quote}

But given the reconstructed \textit{No Minimum} argument, there is a precise height, say 6', such that any prophet that is exactly 6' or less will fail to serve God’s purposes and any prophet that exceeds 6' by any amount—say a prophet that is $6.0000000000001'$—would serve God’s purposes perfectly well.

Suppose that a 6' prophet would not serve God’s purposes and that a world containing 50 turps of evil is massively irregular. It is
evident that the world would not suddenly become regular at 50.0000000000001 turps of evil and a prophet would not suddenly serve God’s purposes perfectly well at 6.0000000000001 feet.

The reformulated No Minimum argument contains premises that are simply implausible. The argument entails that there is a precise border between an amount of evil that is less than the total necessary for divine purposes and an amount of evil that is more than the total amount necessary for divine purposes. So the reformulated No Minimum argument fares no better than the initial No Minimum argument.

2.3 Vague Minimums: A Supervaluation Solution.

Suppose it’s agreed that the predicate ‘is necessary for divine purposes’ does not sharply divide its positive and negative extensions. There is an amount of evil $k_{n-j}$ that is necessary for divine purposes and an amount of evil $k_n$ that is unnecessary for divine purposes. But there are amounts of evil in the sequence $S$ that are neither necessary for divine purposes nor unnecessary for divine purposes. Now suppose that the actual amount of evil $k$ falls just outside the range of evil that is clearly unnecessary for divine purposes. Figure (1) displays the situation that we are considering.

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| 0 Necessary Evil                           |  $k$                                  | Unnecessary Evil

Fig. 1
```
The amounts of evil in the shaded area in figure (1) are those amounts that are not definitely necessary for divine purposes and not definitely unnecessary for divine purposes. So $k$ falls outside the range of evil that is definitely unnecessary for divine purposes. Supervaluation semantics urges that the truth-value of the proposition “the amount of evil in $k$ is necessary for divine purposes” can be determined only if we sharpen or precisify the vague predicate ‘is necessary for divine purposes’.

But of course there is no unique and non-arbitrary way to make the predicate ‘is necessary for divine purposes’ precise. Any semantic decision to sharpen the predicate will make some arbitrary distinction. Supervaluationism therefore makes it true that the amount of evil in $k$ is necessary for divine purposes if and only if that proposition is true on every admissible precisification of ‘is necessary for divine purposes’. And supervaluationism makes it false that the amount of evil in $k$ is necessary for divine purposes if and only if that proposition is false on every admissible precisification of that predicate. Otherwise the proposition is neither true nor false.

Supervaluation semantics places some important restrictions on admissible precisifications. Propositions that are clearly true (false) prior to precisification must remain true (false) after precisification. The proposition expressed in premise (5) of the *No Minimum* argument, for instance, is assumed to be clearly true and so it must remain true on every precisification. But it is no doubt false that the amount of evil in $k_n$
\((k \geq k_n > 0)\) is necessary for divine purposes only if the lesser amount of evil in \(k_{n-j}\) \((k_n > k_{n-j} > 0)\) is unnecessary for divine purposes. The proposition must therefore remain false on every precisification.

Reconsider the No Minimum Thesis. Supervaluation semantics makes the thesis true only if it is true on every admissible precisification of ‘is necessary for divine purposes’. But on every admissible precisification of that predicate there will be some least amount of evil \(k_n\), \((k \geq k_n > 0)\) such that any greater amount of evil is unnecessary for divine purposes. If \(k_n\) is the least amount of evil such that any greater evil is unnecessary for divine purposes, then of course \(k_{n-i}\) is not such that any greater amount of evil is unnecessary for divine purposes. We know there is one increment of evil greater than \(k_{n-i}\) (namely, \(k_n\)) that is necessary for divine purposes. Therefore no matter how we make the predicate precise there will be an exception to the generalization expressed in the No Minimum Thesis. It follows that the thesis is false.

But it does not follow that the transition from the amount of evil unnecessary for divine purposes to the amount necessary for divine purposes is discrete. We should replace the No Minimum Thesis in (2) with the thesis in (2a).

2a. There is no amount of evil \(k_{n_i}\) \((k \geq k_{n_i} > 0)\) in \(S\) such that for every increment \(i\) \((i > 0)\) and every admissible precisification, \(k_{n_i}\) is unnecessary for divine purposes and \(k_{n-i}\) is necessary for divine purposes.
It follows from (2a) that for every amount of evil $k_n (k \geq k_n > 0)$ there is some admissible way of sharpening the predicate ‘is necessary for divine purposes’ such that $k_n$ is unnecessary for divine purposes only if $k_{n-1}$ is unnecessary for divine purposes. The thesis in (2a) therefore asserts that there is no discrete transition from the evil unnecessary for divine purposes to the evil necessary for divine purposes. Call (2a) the Vague Minimum Thesis.

The Vague Minimum Thesis is true. But does it present a problem for the standard position on evil? Suppose that the actual amount of evil $k$ is accurately represented in figure (1) above. According to (2a) there is some admissible precisification on which the amount of evil in $k$ is unnecessary for divine purposes and the lesser amount of evil in $k_{-1}$ is also unnecessary for divine purposes. But it does not follow that the standard position on evil prohibits a perfect being from permitting the evil in $k$. This is because it is not true that the amount of evil in $k$ is unnecessary for divine purposes. Certainly on some admissible ways of sharpening the predicate ‘is necessary for divine purposes’ $k$ is unnecessary for divine purposes. But on other admissible ways of sharpening the predicate $k$ is necessary for divine purposes. Supervaluationism makes it true that $k$ is unnecessary for divine purposes only if $k$ is unnecessary for divine purposes on every admissible precisification. The standard position therefore does not prohibit a perfect being from allowing $k$. 
But suppose that the amount of evil in $k$ is clearly unnecessary for divine purposes. Here is van Inwagen.

If there is a purpose that is served by allowing the “age of evil” to have a certain duration, doubtless the same purpose would be served if the age of evil were cut short by a day, a year or even a century.¹⁵

Let’s suppose that the actual amount of unnecessary evil is the amount contained in an additional day in the “age of evil”. Suppose the amount of evil in $k$ is close to the amount depicted in figure (2).

\[
\begin{array}{c|c|c|c}
0 & \text{Necessary Evil} & k & \text{Unnecessary Evil} \\
\end{array}
\]

\textit{Fig. 2}

The amount of evil $k$ is clearly unnecessary for divine purposes. But it is also obvious in figure (2) that $k$ does not include a great deal of unnecessary evil. Still it is true on every admissible precisification that the amount of evil in $k$ is unnecessary for divine purposes. So even under the assumption that $k$ does not contain a great deal of unnecessary evil the standard position does not allow a perfect being to permit $k$.

Consider the interpretation of the standard position that is most favorable to theism. It is also the most plausible version of that principle. The standard position on evil holds that a perfect being would not permit any amount of evil $k_n$ that is \textit{definitely} unnecessary. The amount of evil
$k_n$ is definitely unnecessary for divine purposes just in case it is unnecessary on every admissible precisification.

SP1. A perfect being would not permit an amount of evil $k_n (k > k_n > 0)$ in $S$

if and only if, on every admissible precisification, $k_n$ is unnecessary for

divine purposes.

We can therefore conclude that a perfect being would not permit the amount of evil we find in the actual world if—as van Inwagen proposes in the No Minimum argument—the actual amount of evil is definitely unnecessary for divine purposes.

The Vague Minimum Thesis in (2a) guarantees that there is no discrete transition between the amount of evil that is unnecessary for divine purposes and the amount of evil that is necessary for divine purposes. But this presents no problem for the standard position on evil. The standard position in SP1 entails that a perfect being would not permit any amount of evil that is definitely unnecessary for divine purposes. And SP1 and (2a) are perfectly consistent.

3. Alternative No Minimum Theses.

Supervaluation semantics provides a simple countermodel to the No Minimum Thesis. No matter how we make the predicate ‘is necessary for divine purposes’ precise there will be an exception to the generalization expressed in that thesis. So it is reasonable to replace that thesis with the Vague Minimum Thesis.
Jeff Jordan has proposed another version of the no minimum thesis that is consistent with the *Vague Minimum Thesis*.\(^ {16}\)

For any amount of evil \(k_n (k > k_n > 0)\) that is sufficient for divine purposes, there is some increment \(i\) such that \(k_n - i\) is also sufficient for divine purposes.

Consider whether the proposed thesis advances van Inwagen’s *No Minimum* argument. Suppose that the new thesis asserts (2c).

\begin{align*}
2c. \quad &\text{For any amount of evil } k_n (k > k_n > 0) \text{ if } k_n \text{ is such that any greater amount of evil is } \textit{definitely} \text{ unnecessary for divine purposes then for some increment } i (i > 0), k_n - i \text{ is such that any greater amount of evil is definitely unnecessary for divine purposes.}
\end{align*}

(2c) entails that every amount of evil is definitely unnecessary for divine purposes. But of course the *No Minimum* argument assumes that at least some evil is necessary for divine purposes. So (2c) does not advance the *No Minimum* argument. But suppose instead the thesis asserts (2d).

\begin{align*}
2d. \quad &\text{For any } k_n (k > k_n > 0) \text{ if } k_n \text{ is such that any greater amount of evil is (at least) indefinitely unnecessary for divine purposes then for some increment } i (i > 0), k_n - i \text{ is such that any greater amount of evil is (at least) indefinitely unnecessary for divine purposes.}
\end{align*}
(2d) entails that every amount of evil is indefinitely unnecessary for
divine purposes. (2d) is therefore consistent with the standard position in
SP1. According to SP1 a perfect being is prohibited from allowing an
amount of evil that is definitely unnecessary for divine purposes. So it is
no violation of SP1 that a perfect being allows an amount of evil that is
on the border of evil that is unnecessary for divine purposes.

3.1 A Degree-Theoretic Solution

According to degree-theoretic analyses of vagueness there are no truth-
value gaps. Borderline predications such as “the amount of evil \( k_n \) is not
clearly unnecessary for divine purposes” are assigned some real value in
the (closed) interval \([0,1]\). These real value assignments are typically
interpreted as degrees of truth with 1 corresponding to true simpliciter
and 0 corresponding to false simpliciter.\(^{17}\)

The degree-theoretic interpretation of the No Minimum argument is
certainly consistent. The degree-theoretic interpretation of premise (1)
states that it is true simpliciter—or true to degree 1—that the actual
amount of evil \( k \) is unnecessary for divine purposes. We could of course
weaken premise (1) to it is assertable that the actual amount of evil \( k \) is
unnecessary for divine purposes. In supervaluation semantics there is a
range in the amounts of evil that are definitely unnecessary for divine
purposes. In degree theory there is a range in the amounts of evil that
are assertably unnecessary for divine purposes.
Suppose we assume a conservative range of assertablity. Let’s say that the amount of evil in $k_n$ is assertably (un)ecessary for divine purposes if and only if $k_n$ is assertably (un)necessary for divine purposes to degree $n$ ($.7 < n \leq 1$). The degree-theoretic semantics of vagueness includes a truth-functional or quasi-truth-functional system for the classical connectives including $|\neg p| = |1 - p|$. So the amount of evil in $k_n$ is not assertably (un)ecessary for divine purposes if and only if $k_n$ is assertably (un)ecessary for divine purposes to degree $n$ ($0 \leq n \leq .7$).

There is therefore a range in the amounts of evil that is neither assertably necessary for divine purposes nor assertably unnecessary for divine purposes. Call the degree-theoretic interpretation of premise (2), \textit{No Assertable Minimum}.

2e. There is no amount of evil $k_n$, ($k \geq k_n > 0$) in $S$ such that for every increment $i$ ($i > 0$) $k_n$ is assertably unnecessary for divine purposes and $k_{n-i}$ is assertably necessary for divine purposes.

Premise (1) and \textit{No Assertable Minimum} are consistent with the degree-theoretic interpretation of premise (5). Premise (5) now states that there is some amount of evil that is assertably necessary for divine purposes.

But does the degree-theoretic interpretation of the \textit{No Minimum} argument present a problem for the standard position on evil? Van Inwagen suggests that the actual amount of evil in $k$ is assertably unnecessary. But the most that we can derive from the \textit{No Minimum} argument is that a perfect being may allow some instances of evil that
are not assertably unnecessary. Perhaps a perfectly good being would not permit any evil that is even so much as non-assertably unnecessary for divine purposes. But the interpretation of the standard position most favorable to theism states that a perfect being would not permit any instance of evil that is assertably unnecessary for divine purposes.

SP2. A perfect being would not permit an amount of evil $k_n (k > k_n > 0)$ in $S$ if

and only if $k_n$ is assertably unnecessary for divine purposes.

We can therefore conclude that a perfect being would not permit the amount of evil we find in the actual world if—as van Inwagen proposes in the No Minimum argument—the actual amount of evil is assertably unnecessary for divine purposes.

No Assertable Minimum in (2e) guarantees that there is no discrete transition between the amount of evil that is unnecessary for divine purposes and the amount of evil that is necessary for divine purposes. But this presents no problem for the standard position on evil. The standard position in SP entails that a perfect being would not permit any amount of evil that is assertably unnecessary for divine purposes. And SP2 and (2e) are perfectly consistent.

3.2 Anti-Luminous Evil.

Consider an amount of evil $k_n, (k > k_n > 0)$ in $S$ concerning which we are confident that any greater amount of evil is unnecessary for divine purposes. Indeed we can be fairly confident that the actual amount of evil $k$ is such that any greater amount of evil is unnecessary for divine
purposes. Suppose further that we know that \( k \) is such that any greater amount of evil is unnecessary for divine purposes. Can we reach the conclusion that, for any amount of evil \( k_n, (k_n \geq k_n > 0) \), if we know that \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes then, for some \( i (i > 0) \), we know that \( k_{n,i} \) is such that any greater amount of evil is unnecessary for divine purposes? Consider an epistemicist version the No Minimum Thesis.\(^{18}\)

2f. For any amount of evil \( k_n, (k_n \geq k_n > 0) \) in \( S \) if we know that \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes then

for some \( i (i > 0) \), we know that \( k_{n,i} \) is such that any greater amount of evil is unnecessary for divine purposes.

Since we know that the actual amount of evil is such that any greater amount of evil is unnecessary for divine purposes we also reliably believe that the actual amount of evil is such that any greater amount of evil is unnecessary for divine purposes. But if we reliably believe that \( k_n \) is such that any greater evil is unnecessary for divine purposes then for some increment \( i (i > 0), k_{n,i} \) such that any greater evil is unnecessary for divine purposes. There is, for some \( i (i > 0) \), no noticeable difference between the amount of evil \( k_n \) and the amount of evil \( k_{n,i} \). So we simply cannot be confident that \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes and not be confident that \( k_{n,i} \) is such
that any greater evil is unnecessary for divine purposes. Reliability in this context depends on condition (R).

R. For any amount of evil \( k_n \), (\( k \geq k_n > 0 \)) in \( S \) if we know that \( k_n \) is such that

any greater amount of evil is unnecessary for divine purposes then for

some \( i \) (\( i > 0 \)), \( k_{n-i} \) is such that any greater amount of evil is unnecessary for divine purposes.

But suppose it is true that for any amount of evil \( k_n \), (\( k \geq k_n > 0 \)) in \( S \) if \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes then we know that \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes. The supposition is that unnecessary evil is luminous.

L. For any amount of evil \( k_n \), (\( k \geq k_n > 0 \)) in \( S \) if \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes then we know \( k_n \) is such that any greater amount of evil is unnecessary for divine purposes.

The reliability condition (R) and the luminosity condition (L) entail the No Minimum Thesis in (2f). But it is evident that (L) is false.

According to epistemicist theories of vagueness every amount of evil is either necessary for divine purposes or unnecessary for divine purposes. The phenomenon of vagueness is simply a reflection of our ignorance of the precise border between amounts of evil that are
necessary for divine purposes and amounts that are unnecessary for
divine purposes. There are certainly amounts of evil $k_n$ such that
informed and competent language-users are not prepared to assert that
$k_n$ is unnecessary for divine purposes and also not prepared to assert
that $k_n$ is not unnecessary for divine purposes. These are amounts of evil
that are too close to the margins of unnecessary evil for us—or for
anyone whose judgment in these matters is similarly limited—to reliably
believe they are unnecessary for divine purposes. So there are certainly
amounts of evil $k_n$ in $S$ that are such that any greater amount
of evil is unnecessary for divine purposes and also such that we do not
know that any greater amount of evil is unnecessary for divine purposes.

Unnecessary evil is not luminous.

Restricted to limited agents—agents that are not omniperceptive
and not omniscient—we have the epistemicist interpretation of the No
Minimum Thesis in (2g).

(2g) There is no amount of evil $k_n$, $(k \geq k_n > 0)$ in $S$ such that for every
increment $i$ ($i > 0$) $k_n$ is reliably believed unnecessary for divine
purposes and $k_{n-1}$ is reliably believed necessary for divine
purposes.

(2g) is true and it is consistent with there being an amount of evil $k_n$
such that $k_n$ is the least amount of evil such that any greater evil is
unnecessary for divine purposes. The interpretation of the standard
position most favorable to theism states that a perfect being would not
permit any instance of evil that are reliably believed unnecessary for divine purposes.

SP3. A perfect being would not permit an amount of evil $k_n (k > k_n > 0)$ in $S$ if

$k_n$ is reliably believed to be unnecessary for divine purposes.

But the most that we can conclude from the epistemicist interpretation of the No Minimum argument is that a perfect being may not allow any instances of evil that are reliably believed to be unnecessary for divine purposes. Of course we cannot conclude that a perfect being may allow instances of evil that we do not reliably believe are unnecessary for divine purposes, since such instances of evil may in fact be unnecessary for divine purposes.

We can therefore conclude that a perfect being would not permit the amount of evil we find in the actual world if—as van Inwagen proposes in the No Minimum argument—the actual amount of evil is reliably believed to be unnecessary for divine purposes.


There is no amount of evil $k_n$ such that, on every admissible precisification, $k_n$ is unnecessary for divine purposes and $k_n - i$ is necessary for divine purposes. There is therefore no precise transition between evil that is unnecessary for divine purposes and evil that is necessary for divine purposes. But this presents no problem for the standard position on evil. The standard position holds that a perfect
being would not permit $k_n$ just in case $k_n$ is unnecessary for divine purposes on every admissible precisification.

But suppose there is also a vague border between the amount of evil that is unnecessary on every precisification and the amount of evil that is not unnecessary on every precisification. So what counts as a set of admissible precisifications is itself a matter of semantic indecision. At some point in the sequence between $k$ and 0 there is some amount of evil $k_n$ such that, on every precisification in some set of admissible precisifications, $k_n$ is unnecessary for divine purposes. It is therefore definite that $k_n$ is unnecessary for divine purposes. But on some precisifications in another set of admissible precisifications $k_n$ is not unnecessary for divine purposes. It is therefore not definite that it is definite that $k_n$ is unnecessary for divine purposes. The predicate ‘is necessary for divine purposes’ is second-order vague.

If it is indefinite whether it is definite that $k_n$ is unnecessary, then it is indefinite whether $k_n$ is unnecessary for divine purposes on every admissible precisification. $k_n$ is on the border between the amount of evil that is definitely unnecessary for divine purposes and the amount of evil that is indefinitely unnecessary for divine purposes. Figure (3) depicts this situation.

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---|----------------------------------------|----------------------------
.......>  

$k_{n-j}$ Indefinitely $k_n$ Unnecessary Evil Unnecessary Evil
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. . . >
It is second-order vague whether the amount of evil in $k_n$ is unnecessary for divine purposes. It is first-order vague whether the amount of evil in $k_{n.j}$ is unnecessary for divine purposes. But the amount of evil in $k_n$ and $k_{n,j}$ are both on the border of unnecessary evil. So the fact that it is definite that $k_n$ is unnecessary for divine purposes relative to some set of admissible precisifications should not entail that a perfect being is prohibited from permitting the amount of evil in $k_n$. The amount of evil in $k_n$ might nonetheless be on the border of unnecessary evil.\textsuperscript{19} It might be second-order or third-order vague whether the amount of evil in $k_n$ is unnecessary for divine purposes.

Let’s suppose it is superdefinite that $k_n$ is unnecessary for divine purposes just in case the proposition is definite at every higher order of vagueness. If it is not superdefinite that $k_n$ is unnecessary for divine purposes then for some precisification at some higher order of vagueness, $k_n$ is not unnecessary for divine purposes. Therefore the amount of evil in $k_n$ is on the borderline of evil that is unnecessary for divine purposes. We therefore arrive at the conclusion that the standard position on evil prohibits a perfect being from permitting the evil in $k_n$ if and only if it is superdefinite that $k_n$ is unnecessary for divine purposes. But that is just to say that the standard position prohibits a perfect being from permitting $k_n$ if and only if $k_n$ is unnecessary for divine.
purposes and \( k_n \) is not on the borderline of evil that is unnecessary for
divine purposes. If the predicate ‘is unnecessary for divine purposes’ is
higher-order vague, the principle SP4 specifies the conditions under
which a perfect being would not permit evil. And these are again
conditions most favorable to van Inwagen’s position.

SP4. A perfect being would not permit an amount of evil \( k_n \) \((k \geq k_n > 0)\)
in \( S \)
    if and only if it is superdefinite that \( k_n \) is unnecessary for divine
    purposes.

The standard position in SP4 does not entail that there is a discrete
transition between the amount of evil that a perfect being would permit
and the amount of evil a perfect being would not permit. The thesis in
(2h) guarantees that the transition between impermissible evil and
permissible evil is not discrete.

2h. There is no amount of evil \( k_n \), \((k \geq k_n > 0)\) in \( S \) such that for every
    increment \( i \) \((i > 0)\) it is superdefinite that \( k_n \) unnecessary for divine
    purposes and superdefinite that \( k_{n-i} \) is not necessary for divine
    purposes.

(2h) reformulates the Vague Minimum Thesis. According to (2h) the
transition is vague between the amount of evil that is unnecessary for
divine purposes and the amount of evil that is necessary for divine
purposes. But this presents no problem for the standard position on evil.
The standard position in SP4 entails that a perfect being would not
permit any amount of evil that is superdefinitely unnecessary for divine purposes. And SP4 and (2h) are perfectly consistent.

5. Omniscience and Vagueness.

Supervaluationists urge that there are no hidden boundaries for vague predicates that are accessible only to omniscient beings. It is not true, for instance, that God knows the precise boundary between every possible instance of being bald and not being bald. And it is not true that God knows the precise boundary between the amount of evil necessary for divine purposes and the amount of evil unnecessary for divine purposes. According to the supervaluationists this is because there is no precise boundary to be known. Instead supervaluationists maintain that vagueness is a matter of semantic indecision. And since there are no sharp boundaries for vague predicates at any level of vagueness semantic indecision must continue upward through our metalanguage and so on.

Supervaluationism concludes that we replace the No Minimum Thesis with the Vague Minimum Thesis. According to the Vague Minimum Thesis there are borderline cases between amounts of evil that are unnecessary for divine purposes and amounts of evil that are necessary for divine purposes. So in section (4) we suggested that the standard position on evil is better formulated as requiring that a perfect being not permit any amount of evil $k_n$ that is definitely unnecessary. The amount of evil $k_n$ is definitely unnecessary for divine purposes just in case it is
unnecessary on every admissible precisification of ‘unnecessary for divine purposes’.

SP1. A perfect being would not permit an amount of evil $k_n$ ($k \geq k_n > 0$) in $S$

if and only if, on every admissible precisification, $k_n$ is unnecessary for divine purposes.

According to SP1 a perfect being cannot permit an amount of evil that is definitely unnecessary for divine purposes. Let’s suppose that $k_n$ is definitely unnecessary for divine purposes. Our central question is whether an omniscient being would \textit{know} that $k_n$ is definitely unnecessary for divine purposes. It does seem reasonable to propose that an omniscient being would know (at least) every proposition that is definitely true. Consider then the characterization of omniscience in $O_1$.\textsuperscript{20}

$O_1. (\forall x)(x \text{ is omniscient} \equiv (\forall p)(x \text{ knows } p = x \text{ believes } p) \& (x \text{ believes } p = \text{Def } p))$

According to $O_1$ a being is omniscient if and only if it knows all and only those propositions that are definitely true. So if there are propositions $p$ that are indefinitely true then no omniscient being knows that $p$. On any view of omniscience according to which God knows every true (definite or indefinite) proposition this consequence is unwelcome.\textsuperscript{21}

Suppose that supervaluationists maintain that there is simply no difference between truth and definite truth. Then of course omniscient
beings could not know any indefinite truths since there are no indefinite truths. If p is an “indefinite truth” then p is by definition on the border between being definitely true and being definitely false. And not even an omniscient being could discover that there is no admissible precisification under which p is not true. So omniscient beings would know the indefinite truth p only if omniscient beings would favor admissible precisifications under which p is true. But there simply is no reason to favor admissible precisifications under which p is true over precisifications under which p is false.

There is a more serious problem for the characterization in O₁. It is quite reasonable to believe that the knowledge of omniscient beings is closed under the S4 axiom. And so we should expect O₂ to be true for all omniscient beings.

O₂. (∀x)(x is omniscient = (∀p)(x knows p = x knows that x knows p))

According to O₂ an omniscient being knows everything that he knows and so on upward. But if O₂ governs the knowledge of every omniscient being, then the characterization in O₁ cannot be true. Omniscient beings cannot know every proposition that is definitely true.

Suppose p is definitely true or true under every admissible precisification. It follows from O₁ that every omniscient being knows that p is true. But then from O₂ it follows that every omniscient being knows that he knows that p is true. And from O₁ again we derive the conclusion that it is definite that it is definite that p is true. But this conclusion
might well be false. Not every proposition that is definitely true is *definitely* definitely true. But then omniscient beings cannot know every proposition that is definitely true.

If omniscient beings do not know every proposition that is definitely true then we are forced to reject SP1. It is not in general true that a perfect being would not permit an amount of evil \( k_n \) that is definitely unnecessary for divine purposes. The inference is straightforward. If \( O_1 \) is false then a perfect being *might not know* that \( k_n \) is definitely unnecessary for divine purposes. But if he does not know that \( k_n \) is definitely unnecessary for divine purposes then of course he might permit \( k_n \). The principle in SP1 is therefore false.

Certainly supervaluationists have the option to reject the S4 axiom in \( O_2 \). But it follows from the rejection of \( O_2 \) that omniscient beings do not know everything that they know. And that is an especially unwelcome conclusion. Certainly considerations of anti-luminosity and safety urge that less-than-omniperceptive and less-than-omniscient beings cannot in general know what they know. But such considerations urge nothing against omniscient and omniperceptive beings. The only remaining alternative is to reject the characterization in \( O_1 \).

As we have noted \( O_1 \) is false only if perfect beings do not know every proposition that is definitely true. And so we are forced to reject the principle in SP1. These conclusions are less serious than they appear. The principle SP1 was not intended to govern higher-order
vagueness for the predicate ‘is unnecessary for divine purposes’. The principle was intended to govern first-order vagueness for that predicate. But certainly supervaluationists are primarily concerned about the general problem of vagueness for that predicate.

Should we expect every omniscient being to know every definitely true proposition? It seems perfectly reasonable to hold that omniscient beings might fail to know indefinitely true propositions. These propositions are not true relative to every admissible precisification of their vague terms. Supervaluationists might urge that it is at least as reasonable to hold that omniscient beings do not know indefinitely definite propositions. These propositions are not definitely true relative to every admissible way to resolve the vagueness of ‘admissible precisification’. Suppose, for instance, that it is indefinite whether $k_n$ is unnecessary for divine purposes. $k_n$ is therefore on the border of evil that is unnecessary for divine purposes. But suppose it is indefinite whether it is definite that $k_n$ is unnecessary for divine purposes. $k_n$ is again on a border of evil that is unnecessary for divine purposes. On this view omniscient beings do not know that $k_n$ is unnecessary for divine purposes unless $k_n$ is not on some border of the amount of evil that is unnecessary for divine purposes. So this position gives consistent treatment to every proposition that is on some border of those unnecessary for divine purposes.
Supervaluationists can resolve these problems and retain a simple characterization of omniscience. According to SP5 a proposition p is superdefinitely true just in case p is definitely true at every (higher) order of vagueness. Suppose p is the proposition \( \text{Indef}_2 A \), or the proposition that it is indefinite that it is indefinite that A. In that case p is superdefinitely true if and only if \( \text{Def}_n \text{Indef}_2 A \) for every order \( n (n \geq 3) \). So p is superdefinitely true if and only if ‘\( \text{Indef}_2 A \)’ is definitely true at every order of vagueness greater than or equal to the third order. In short A is not on any border of being second-order indefinite A. But suppose p is the proposition A. In that case p is superdefinitely true if and only if \( \text{Def}_n A \) for every order \( n (n > 0) \). Supervaluationists should urge that omniscient beings know every proposition that is superdefinitely true. Now suppose we restrict the propositional quantifier to all and only those propositions that are superdefinitely true. An omniscient being knows every proposition characterized in the simpler \( O_3 \).

\[
O_3. \quad (\forall x)(x \text{ is omniscient } \equiv (\forall p)(x \text{ knows } p \equiv p))
\]

\( O_3 \) states that for every proposition p, every omniscient being knows p. \( O_3 \) is perfectly consistent with \( O_2 \), since the proposition that x knows that x knows that p does not entail that it is definite that it is definite that p. It follows from \( O_2 \) that an omniscient being knows p only if he knows that he knows p. And that is a consequence of omniscience we should expect.
Now suppose p is the proposition that it is indefinite that \( k_n \) is unnecessary for divine purposes. If it is superdefinite that p then an omniscient being knows that it is indefinite that \( k_n \) is unnecessary for divine purposes. So according to O₃ it is perfectly possible that an omniscient being knows that it is indefinite that A and that he knows that it’s indefinitely indefinite that B and so on.

We noted in section (6) that a better formulation of the standard position on evil prohibits a perfect being from allowing the evil in \( k_n \) if and only if it is superdefinite that \( k_n \) is unnecessary for divine purposes. The principle SP4 specifies the conditions most favorable to theism under which a perfect being would not permit evil.

SP4. A perfect being would not permit an amount of evil \( k_n \) \((k > k_n > 0)\) in \( S \)

if and only if it is superdefinite that \( k_n \) is unnecessary for divine purposes.

Suppose that it’s superdefinitely true that \( k_n \) is unnecessary for divine purposes. According to O₃ the proposition that \( k_n \) is unnecessary for divine purposes is among the propositions that every omniscient being knows. So happily O₂ and O₃ are consistent with the standard position in SP4. A perfect being would know that \( k_n \) is unnecessary for divine purposes according to O₃ and a perfect being would not permit \( k_n \) according to SP4.

6. Conclusions
According to van Inwagen the standard position on evil is true only if there is a least amount of evil such that any greater evil is unnecessary for divine purposes. But that position is mistaken. The Vague Minimum Thesis in (2b) guarantees that there is no discrete transition between the amount of evil that is unnecessary for divine purposes and the amount of evil that is necessary for divine purposes. And the thesis in (2a) is perfectly compatible with the standard position on evil in (SP1).

Certainly there are other interpretations of the Vague Minimum Thesis forthcoming, for instance, from degree-theoretic accounts of vagueness and epistemicist accounts of vagueness. But (2e) and (2g) do not advance van Inwagen’s No Minimum argument and as it happens neither do (2c) and (2d).

It is perhaps true that the amount of evil necessary for divine purposes is second-order or third-order vague. If the predicate ‘is necessary for divine purposes’ is a higher-order vague predicate, then the standard position prohibits a perfect being from permitting the amount of evil \( k_n \) if and only if it is superdefinite that \( k_n \) is unnecessary for divine purposes. If it is not superdefinite that \( k_n \) is unnecessary for divine purposes, then for some admissible precisification at some order of vagueness \( k_n \) is not unnecessary for divine purposes. It follows that \( k_n \) is on the borderline of evil that is unnecessary for divine purposes. And a perfect being need not prevent evil that is on the borderline of unnecessary evils. But higher-order vagueness presents no problem for
the standard position on evil. The reformulated *Vague Minimum Thesis* in (2h) guarantees that there is no discrete transition between the amount of evil that is unnecessary for divine purposes and the amount of evil that is necessary for divine purposes. And the thesis in (2h) is perfectly consistent with the standard position in SP4.

Omniscient beings know every proposition that is superdefinitely true. If it is superdefinitely true that \( k_n \) is unnecessary for divine purposes then God knows that he cannot allow the amount of evil in \( k_n \). Omniscient beings do not know any proposition that is not superdefinitely true. If it is not superdefinitely true that \( k_n \) is unnecessary for divine purposes then the amount of evil in \( k_n \) is on the *border* of the amount of evil that is clearly unnecessary for divine purposes. If \( k_n \) is clearly on the border then God knows that \( k_n \) is on the border of evil that is unnecessary for divine purposes. But he does not also know that \( k_n \) is unnecessary for divine purposes.

The remaining question is the exact amount of actual evil in \( k \). Suppose, as van Inwagen seems to suggest, that it is superdefinite that the amount of evil in \( k \) is unnecessary for divine purposes. The standard position then prohibits a perfect being from permitting \( k \) and the amount of evil we find in the actual world presents an important obstacle to theistic belief. But suppose that for some precisification at some order of vagueness the actual amount of evil in \( k \) is not unnecessary for divine
purposes. It then follows that $k$ falls somewhere on the border of unnecessary evil and this presents no problem at all for theism.
Notes


2 The unfortunate locution ‘the minimum amount of evil necessary for divine purposes D’ refers to the least amount of evil such that any greater evil is unnecessary for D. If $k$ is the least amount of evil such that any greater evil is unnecessary for divine purposes, then of course $k - i$ is necessary for D and $k - 2i$ is necessary for D and so on for any amount of evil less than $k$ and greater than 0. But $k$ is the total quantity of evil necessary for D. Van Inwagen calls that the minimum evil necessary for D.


‘The Magnitude, Duration, and Distribution of Evil: A Theodicy’ *op. cit.* pp. 103-104.

Two points are worth mentioning here. First the infinite divisibility of the evil between 0 and $k$ might entail that some evils that are imperceptibly small. That conclusion is controversial. Jeff Jordan argues against imperceptible harms or evils. See his ‘Evil and van Inwagen’, *Faith and Philosophy* Vol. 20 (2003) 236-39. Frank Arntzenius and David McCarthy offer a strong argument in favor of imperceptible harms or evils. See their ‘Self-Torture and Group Beneficence’ *Erkenntnis* 47 (1997) 129-144. Here I remain neutral on the point. Second it does not affect the *No Minimum* argument whether the infinite series is countable or uncountable.

There is a stronger version of the *No Minimum Thesis* that van Inwagen might have had in mind. It is not clear from the text of the argument. The stronger version gives wide scope to the quantification over increments.

There is some $i (i > 0)$ such that for any amount of evil $k_n$, $(k \geq k_n > 0)$ and if $k_n$ is such that any greater amount of evil is unnecessary for divine purposes then $k_{n-1}$ is such that any greater amount of evil is unnecessary for divine purposes.

Suppose instead it is urged that 50 turps is necessary for divine purposes and any amount of evil greater than 50 turps is unnecessary
for divine purposes. In that case there is a minimum amount of evil such that any greater amount of evil is unnecessary for divine purposes (viz., 50 turps). A perfect being may therefore allow the total amount of evil necessary for divine purposes (viz., 50 turps). And that is perfectly consistent with the standard position on evil.


11 We are here suggesting that it is necessary to divine purposes that there is some amount of evil (or other) greater than \( k \) and there is no amount of evil greater than \( k \) such that it is necessary to divine purposes. The suggestion is analogous to the consistent assertion that it is obligatory that some moral agent (or other) saves Smith and there is no moral agent such that it is obligatory that he saves Smith.

12 ‘The Problem of Evil, the Problem of Air, and the Problem of Silence’ op. cit. note 11, page 77.

13 ‘The Magnitude, Duration, and Distribution of Evil: A Theodicy’ op. cit. p. 103

14 The No Minimum Thesis entails the Vague Minimum Thesis but the converse does not hold.

NMT. There is no amount of evil \( k_n, (k \geq k_n > 0) \) in \( S \) such that for some admissible precisification, any amount of evil greater than \( k_n \) is unnecessary for divine purposes and some amount of evil greater
than $k_{n-i}$ is necessary for divine purposes.

**VMT.** There is no amount of evil $k_n, (k > k_n > 0)$ in $S$ such that for *every* admissible precisification, $k_n$ is unnecessary for divine purposes and $k_{n-i}$ is necessary for divine purposes.

*Prove* NMT entails VMT: Suppose VMT is false. Then there is some $k_n$ and $k_{n-i}$ such that on every admissible precisification $k_n$ is unnecessary for divine purposes and $k_{n-i}$ is necessary for divine purposes. It is true of $k_{n-i}$ that any greater amount of evil is unnecessary for divine purposes. But then it follows from NMT that no amount of evil greater than $k_{n-2i}$ is necessary for divine purposes. But that is false since the amount of evil in $k_{n-i}$ is necessary for divine purposes. Therefore NMT entails VMT.

*Prove* VMT does not entail NMT: Assume VMT and that, for some admissible precisification, $k_n$ is unnecessary for divine purposes and $k_{n-i}$ is necessary for divine purposes. Contrary to NMT it follows that, for some admissible precisification, any amount of evil greater than $k_{n-i}$ is unnecessary for divine purposes and some amount of evil greater than $k_{n-2i}$ is necessary for divine purposes. So VMT does not entail NMT. The weaker thesis in VMT is true but (as we’ve seen) the stronger thesis in NMT is false.

15 ‘The Magnitude, Duration and Distribution of Evil: A Theodicy’ *op. cit.* p. 103


I am not suggesting that any epistemicist would or does endorse (2f). I am suggesting that (2f) might advance van Inwagen’s No Minimum argument. The following argument has obvious affinities with Timothy Williamson’s anti-luminosity argument in his Knowledge and its Limits (Oxford: Oxford University Press, 2000), esp. sections 4.2, 4.3 and 4.6.

If the definite description in ‘on the border of evil unnecessary for divine purposes’ is restricted to that amount of evil that is definitely indefinitely unnecessary for divine purposes, then use the indefinite description in ‘on a border of evil unnecessary for divine purposes’ for amounts of evil that are indefinitely indefinitely unnecessary for divine purposes.

See John Hawthorne, ‘Vagueness and the Mind of God’ Philosophical Studies 122 (2005) 1-25. In a very interesting discussion Hawthorne considers three definitions of omniscience including what I refer to as $O_1$. It is $O_1$ that Hawthorne finds most plausible.

Cf. Cian Dorr, ‘Vagueness Without Ignorance’, Philosophical Perspectives Vol. 17 (2003) 83-114. Dorr urges that every omniscient being knows a proposition $P$ if $P$ is true. But as we have noted this
entails that omniscient beings know that $k_n$ is unnecessary for divine purposes even when it is superdefinitely true that $k_n$ on the borderline between amounts of evil that are necessary for divine purposes and amounts of evil that are unnecessary for divine purposes. And to my ear—though certainly not to Dorr’s—this sounds awful.

22 This account is similar to one discussed in Timothy Williamson’s in *Vagueness* (Routledge: London, 1994). See the discussion of operator ‘definite*’ p. 160 ff.