

Power Necessity

JOHN MARTIN FISCHER
Yale University

Various philosophers have recently offered versions of a "basic" argument for the incompatibility of causal determinism and freedom to do otherwise.¹ The idea which drives the argument is as follows: if determinism obtains, then the past plus the natural laws imply that I behave as I do now. Since the past is now fixed—out of my control—and so are the natural laws, it follows that I am now not free to do other than I actually do, if determinism is true.

Let "N" stand for "power necessity"—that kind of necessity involved in the basic argument for incompatibilism. If a proposition saying that I perform a certain act is power necessary (at a time), it follows that I perform the action and that I am not free (at the relevant time) to do otherwise. One version of the argument for incompatibilism—the "modal version"—can be seen to depend on the "main modal principle": $(Np \ \& \ N(p \supset q)) \supset Nq$.² The argument has roughly the following form:

- 1) Np (where "p" stands for a statement that posits the existence of some earlier event or circumstance)
- 2) $N(p \supset q)$ (where " $p \supset q$ " stands for a statement entailed by the laws of nature)

- 3) Nq (where "q" stands for a statement that posits some human action.)³

Of course, the corresponding modal principle for logical or metaphysical necessity is valid. But Michael Slote has suggested recently that the main modal principle used in the incompatibilist's argument is *invalid*.⁴ Slote's strategy is first to point out that there are various types of necessity—epistemic, deontic, and "causal-alethic"—for which the relevant modal

principle fails. Slote suggests that the failures can be explained in virtue of the “selectivity” of the pertinent forms of necessity. Finally, Slote assimilates “power necessity” to the forms of necessity for which the modal principle fails, and he suggests a kind of selectivity which allegedly applies to power necessity. In this paper I shall set out Slote’s position, and I shall take issue with part of it: I shall criticize Slote’s explanation of the purported failure of the main modal principle for power necessity.

I. Knowledge and Power

Slote claims, “It is generally agreed that ‘A knows that p’ and ‘A knows that $(p \supset q)$ ’ do not entail ‘A knows that q’ ... People may fail to make inferences they are entitled to make.”⁵ Thus, if Slote is correct, epistemic necessity is an exception to the main modal principle. And if power necessity either has an “epistemic component” or simply can be assimilated to epistemic necessity in respect of failing to abide by the main modal principle, then the incompatibilist’s argument would be invalid.

Daniel Dennett refers to Slote’s article as a “pioneering article”, although he points out that Slote “overlooks the possibility that the form of ‘selective necessity’ he describes is in fact disguisedly epistemic.”⁶ Dennett claims that power necessity is epistemic in a way which allows it to violate the main modal principle. In a more recent article, Slote (moving in Dennett’s direction) says, “... although the notion of (not) being able to do otherwise at issue in the free-will controversy is not simply an epistemic modality, it may in unsuspected ways contain epistemic elements sufficient to unhinge [it from the main modal principle].”⁷

The “Slote/Dennett” strategy assimilates the “power” version of the main modal principle to the epistemic version with an eye to casting doubt on the power version of the principle. It will be useful to begin by asking why it is thought that the epistemic version of the main modal principle fails; it is important to distinguish different reasons for rejecting the epistemic version of the principle.

One way in which one could be lead to reject the epistemic version of the principle would be to fail to distinguish it from a related principle. (I am not necessarily supposing that Slote is guilty of this failure.) It is important to distinguish between the principle of closure of knowledge under *known* implication (the epistemic version of the main modal principle) and closure of knowledge under (logical) implication. And whereas it is relatively uncontroversial that knowledge is not closed under impli-

cation, it is more controversial whether knowledge is closed under *known* implication.

Suppose that A knows that p. And imagine also that p logically implies q (but that A does not know that p implies q). It doesn't seem to follow that A knows that q, and so, apparently, knowledge is not closed under implication. Slote's statement, "People may fail to make inferences they are entitled to make," is ambiguous. On one reading, it (quite plausibly) denies closure of knowledge under implication. But of course one should not conflate the principles of closure of knowledge under implication and closure of knowledge under *known* implication.

Another possible route to a rejection of the epistemic version of the main modal principle would be to claim that closure of knowledge under implication is a *necessary condition* of it (and to deny closure of knowledge under implication). If closure under known implication required closure under implication, then (of course) the failure of closure under implication would entail the failure of closure under known implication.

Although Slote does not explicitly adopt this strategy, his remarks strongly suggest it. Slote *does* make the parallel claim about the parallel modality, power-necessity; that is, he suggests that closure under logical implication is a necessary condition for the power version of the main modal principle:

Anyone who assumes the validity of arguing from 'Np' and 'N(p \supset q)' to 'Nq' would seem to be tacitly assuming that the necessity expressed in the operator 'N' is both agglomerative (closed with respect to conjunction introduction) and closed under logical implication, so that one can, e.g., validly move from 'Np' and 'N(p \supset q)' to 'N(p & p \supset q)' and from the latter to 'Nq'.⁸

But I do not believe that closure of knowledge under known implication requires closure of knowledge under logical implication. If epistemic necessity were closed under logical implication and agglomerative, then (as Slote points out) one could *derive* closure under known implication. But this shows that closure under implication and agglomerativity are *sufficient* for closure under known implication, not that they are necessary. It seems to me that one can hold that knowledge is closed under known implication while admitting the falsity of either closure under implication or agglomerativity (or both). It is possible that closure under known implication is a valid principle which cannot be derived from more "basic" principles. So the apparent failure of closure under implication does not in itself

establish a failure of closure under known implication.

Let us now briefly consider a third kind of attempt to establish the inadequacy of the principle of closure of knowledge under known implication: an appeal to examples. Dretske has presented a number of examples which, he claims, are intuitively plausible counterexamples to closure of knowledge under known implication.⁹ Consider Dretske's famous "zebra example":

- i) A knows that there is a zebra in front of him.
- ii) A knows that if it is a zebra in front of him, it is not a cleverly disguised mule.

But:

- iii) A does not know that it is not a cleverly disguised mule in front of him.

Dretske's claim is that (i) and (ii) can be true in a situation in which (iii) is also true. If so, then knowledge would not be closed under known implication.

But of course Dretske's intuition here is highly controversial. If (iii) really is true in the example, then why is it plausible to think that (i) can also be true? One's reasons for accepting (iii) might impel one to reject (i). Alternatively, one's reasons for accepting (i) might cause one to *reject* (iii). Indeed, it is controversial whether an appeal to any "Dretske-type" example strongly supports the compatibility of claims like (i), (ii), and (iii) and thus the rejection of the principle of closure of knowledge under known implication.¹⁰

So far we have not found a convincing reason to reject the principle of closure of knowledge under known implication. The examples (of the sort discussed above) that purport to establish its inadequacy are controversial. But there is a final strategy that is more promising for casting doubt on the principle.

Perhaps the principle fails in situations in which one's beliefs are not "fully integrated". Suppose that one knows (and thus believes) that *p*, and that one knows (and thus believes) that *p* implies *q*. But imagine that one has not "put these two beliefs together", and thus that one *doesn't* believe that *q*. Since knowledge requires belief, it seems that one doesn't here know that *q*. The apparent failure of closure under known implication here results from a kind of epistemic "carelessness" or lack of integration—it results from the failure of closure of *belief* under known (and believed) implication.

I think that there can certainly be cases of epistemic fragmentation of the sort just described. This gives a second reading to Slote's claim, "People may fail to make inferences they are entitled to make." Thus, whereas various strategies fail to establish the inadequacy of the principle of closure of knowledge under known implication, the final strategy seems to me to succeed. Notice that in a case where a person believes that *p* and that *p* implies *q* but does not believe that *q*, he fails to make a particular inference; he *has reason* to believe that *q*, but he doesn't *actually* believe *q*. If the analogy with the epistemic version of the main modal principle is to be useful, Slote will need to show that the kind of factor which produces the failure of closure of knowledge under known implication also produces the failure of the main principle for the other modalities, and particularly, for power necessity. If the final strategy works against the epistemic version of the main modal principle, we will need to see whether a similar strategy can work against the power version of the principle.¹¹

II. Relationality and Selectivity

Slote argues that there are non-epistemic modalities which offer exceptions to the main modal principle. If there were some feature which explained why these modalities provide exceptions to the main principle, and if this feature were also possessed by power necessity, then it would be plausible to suppose that power necessity also is not governed by the main modal principle.

One example of a kind of necessity which Slote claims offers counter-examples to the main modal principle is deontic necessity of the sort imposed by an obligation.¹² An obligation, let us suppose, arises from a *particular* voluntary undertaking (for example, a promise to a particular person). Imagine that I have promised to Jones that I will go to the party, and that I have promised to Smith that if I go to the party, I'll bring champagne. So

4) I have an obligation to go to the party.

And

5) I have an obligation to bring champagne, if I go to the party.

But

6) I do not have an obligation to bring champagne.

After all, I have not made a promise to anyone to bring champagne; to whom would I owe the obligation specified in (6)?¹³

As Slote points out, the sort of deontic necessity involved in obligation is a kind of “relational necessity”. But he says:

... relationality alone cannot explain why a given form of deontic or moral necessity fails the principle of agglomeration. Timothy Smiley has, for example, suggested that the moral ‘ought’ may express relative necessity, so that ‘ought p’ is true if and only if ‘p’ follows logically from some ideal moral code, i.e., is necessary in relation to (the fulfillment of) such a code. But such relational necessity is agglomerative: if ‘p’ and ‘q’ both follow classically from a code, so does their conjunction. On the other hand, some forms of relational necessity can arise only in certain narrowly circumscribed ways; and when restrictions on the way a given kind of necessity can come into being unhinge it from agglomerativity (or closure or our main principle), we may say that such necessity is *selective*. Thus if obligation is nonagglomerative, that is, as we have seen, because of limitations on the way (relational) obligations can arise; it is because obligations to do specific things typically derive from *undertakings* (to individuals) *to do those very things*. So obligation is not only relational, but selective. And both of these factors enter into the “logic” of the notion.¹⁴

Let’s look at another of Slote’s purportedly “selective” kinds of necessity: non-accidentality.¹⁵ Suppose that Jules is sent to the bank by his superior, so that

7) It is not accidental that Jules is at the bank now.

Note that Jules’ being at the bank entails that he is alive, and if what is logically necessary is non-accidental, then

8) It is not accidental that if Jules is at the bank now, then he is alive now.

But imagine that the only reason Jules is alive now is that five minutes ago he made an accidental and unintentional swerve which prevented him from being flattened by a truck. So

9) It is accidental that Jules is alive now.¹⁶

Non-accidentality seems to involve being called for by a specific plan; this factor produces “selectivity”. A plan may call for X, X may require Y, but the plan may not call for Y—a plan need not call for all that it presupposes.¹⁷ The selectivity of non-accidentality issues in the failure of

the main modal principle for this sort of necessity.

In general, then, selectivity is alleged to issue from kinds of “particularity”—particular acts or undertakings or plans. And this explanation of selectivity appears to fit with our previous account of the selectivity of epistemic necessity. Even if an agent *has reason* to believe a proposition *q*, he may not *actually infer* that *q*. The failure of agents to perform the particular acts of “putting their beliefs together” explains the selectivity of epistemic necessity.

Having produced examples of kinds of necessity for which the main modal principle fails, Slote now claims that power necessity is *also* such a kind of necessity. Slote says:

When we say of any past event that we can *now* do nothing about it, I think we are saying that our *present* desires, abilities, beliefs, characters, etc., are no part of the explanation of it. And, more generally, the particular kind of factor in relation to which unavoidability exists at any given time, the factor “selected” by such necessity, is simply, some factor (or set of factors) that brings about the unavoidable thing *without making use of (an explanatory chain that includes) the desires, etc., the agent has around that time.*¹⁸

Slote’s argument against the main modal principle is now straightforward. If *p* is a statement saying that some past event occurs, then since *p* is about an event whose occurrence is *not* due to a causal chain including my present motivational states,

10) It is now unavoidable that *p*.

Now Slote says, “And appropriate laws of nature have the same sort of necessity because whatever it is that makes them be as they are (certain deeper laws, the basic structure of the universe or what have you) is surely something that does not involve our present abilities and desires.”¹⁹ So, where *q* says that some action of mine now occurs (and $p \supset q$ is entailed by the laws of nature),

11) It is now unavoidable that $p \supset q$.

But, since the explanation of my present action *does* (according to Slote) refer to my present desires, beliefs, etc.,

12) It is now *not* unavoidable that *q*.

If the factor cited by Slote is indeed what produces power necessity, then he can apparently explain why power necessity is not governed by the main modal principle.

III. Criticism

It is important to see what the dialectical situation is here (as regards the free-will debate). Of course, if one assumes that some sort of compatibilist account of freedom—such as the “conditional analysis of freedom”—is correct, then it must follow that the main modal principle fails for power necessity (given the truth of the premises). But it would be question-begging simply to assume such a compatibilist analysis from the beginning. Slote’s strategy must be construed as follows, if he is to avoid begging the issue. He begins by pointing out that there exist kinds of necessity for which the modal principle fails, and so he can argue that it *may* also fail for power necessity.²⁰ He then offers an explanation of the failure of the principle for certain kinds of necessity, an explanation which is alleged also to apply to power necessity.

I believe that there are two problems with Slote’s approach. First, even though Slote does not explicitly assume a conditional analysis of freedom, it may be that his account of “unavoidability”—the sort of necessity pertinent to the free will debate—is plausible only if some sort of conditional account of freedom is correct. Thus, his explanation of the failure of the main modal principle for power necessity might depend on the conditional analysis of freedom. A defense of compatibilism which in this way depended on (or presupposed) some sort of conditional analysis of freedom would obviously be weak.

But there is another problem with Slote’s strategy on which I wish to focus here. It seems to me that Slote’s explanation of the “selectivity” of power necessity (and thus the failure of the main modal principle) is unacceptable. Consider again Slote’s claim, “When we say of any past event that we can *now* do nothing about it, I think we are saying that our *present* desires, abilities, beliefs, characters, etc., are no part of the explanation of it.” But why assume that there is just *one* explanation of an event? There may be various different explanations of an event, and similarly, there may be various different explanations of (or factors that bring about) an “unavoidable thing” such as a proposition. Given that there can be more than one explanation of the truth of a proposition, it is important to distinguish two senses of unavoidability:

- A) It is now unavoidable for an agent that *r* if and only if there exists an explanation of *r* which does not refer to the agent’s present motivational states.

- B) It is now unavoidable for an agent that *r* if and only if there exists no explanation of *r* which refers to the agent's present motivational states.

Having distinguished these two senses of unavoidability, let us examine Slote's claims that (10), (11), and (12) are all true. First, let's consider the claims, adopting sense (A). I shall grant that (10) is true. But why exactly is (11) thought to be true? How does Slote proceed from the power necessity of the laws to that of a statement (such as (11)) which is about a particular agent and action? By stipulation, we know that *an* explanation of my present action contains reference to my present motivational states, so how do we know that there is an explanation of the connection between the relevant past event and my present action (i.e., that there is an explanation of (11)) which does not refer to my present motivational states?

In order better to understand Slote's claim about (11), it is useful to distinguish between a law and its instantiation. A law is *general*—it posits a connection between certain general properties (or types of events). And it is plausible to suppose that my particular present motivational states do not enter into an explanation of this sort of general proposition. How could my present particular desires and beliefs be part of an explanation of a general law? Slote can be seen to begin with the claim that the general law which entails (11) is power necessary, in sense (A). And in order to proceed from the claim that the pertinent general law is power necessary to the claim that a particular instantiation such as (11) is power necessary, it appears that Slote needs to assume that explanation is closed under universal instantiation.²¹ That is, Slote appears to assume that if there is a suitable explanation of the general law, then it follows that there is such an explanation of its instantiation. I shall grant Slote this inference, and the truth of (11), on sense (A) of unavoidability.

The problem is that (12) seems to be false, on sense (A). To establish that (12) is true, on (A), it is *not* sufficient to point out that there exists some explanation of my action which does refer to my present motivational states. What must be shown is that there exists *no* explanation of my action which does *not* so refer. But Slote has never argued for this claim; he has only suggested that there exists some explanation of my action which does refer to my present motivational states.

Under causal determinism, there surely will be at least one explanation of my present action which does not refer to my present motivational states. If causal determinism obtains, then there exists a proposition describing "intrinsic" features of the state of the universe prior to my birth,

which, together with the natural laws, entails that q obtains. So there is at least one pertinent kind of explanation of my present action, and (12) appears to be false, on sense (A).

Now let us consider the three claims, on sense (B) of unavoidability.²² On (B), (12) can be granted. But (11) becomes problematic. If indeed an explanation of q proceeds via my present states, then it might seem that an explanation of $p \supset q$ does as well. Of course, it may be that there is no explanation of the *general* law (which entails $p \supset q$) which refers to my present motivational states, but it doesn't obviously follow that there exists no such explanation of *its instantiation*. One could think that (11) is true, on sense (B), by failing to distinguish (11) from the general law which entails it. And note that, in contrast to the situation with sense (A), the fact that explanation is closed under universal instantiation does not support the truth of (11), on sense (B).

But whereas (11) becomes controversial on (B), it is *not* obviously false. In assessing (11), it is important to consider how we explain an instantiation of a general law. Slote might argue as follows. The only way to explain the instantiation of a law is by reference to the law itself. Further, since the law (which entails $p \supset q$) and its explanation make no reference to my present motivational states, it follows that the explanation of the *instantiation* makes no reference to my present motivational states. If this picture of explanation is correct, then Slote could defend (11). For the purposes of this discussion, it is not necessary to resolve the question of the status of (11). It suffices to notice that, on sense (B), Slote's three propositions, (10), (11), and (12) are at least plausible.

...The problem with (B) is that it is an unacceptable explication of the ordinary, intuitive conception of unavoidability. It seems to me that if there is an explanation of r which does not refer to my present states, then this suffices to render r unavoidable for me, even if there also exists an explanation of r which does refer to my present motivational states. Suppose, for instance, that wind conditions (and the condition of my boat) are such that the only way I can sail is westward. But imagine that I do not know this—I believe I could go eastward, if I wanted—and that I “freely choose” to go westward. There *is* an explanation of my sailing westward which refers to my present motivational states, and yet my sailing westward is *unavoidable*: it would occur, no matter what my motivational states were. It is possible that one “freely” (or at least voluntarily) perform an action which is nevertheless unavoidable, and this possibility points to the unacceptability of (B).

It should be evident that (B) is inadequate insofar as it seems to make it impossible for any *action* to be unavoidable.²³ If *r* says that I perform a certain action, then presumably there exists at least one explanation of *r* which refers to my practical reasoning or my motivational states; otherwise, it would be hard to see how *r* could describe an action of mine (rather than a mere event). But now on (B) *r* is not considered unavoidable. Insofar as we think that actions can be unavoidable, we should resist (B).

The structure of my objection to Slote is as follows. Slote unjustifiably refers to “the” explanation of an event (or proposition, etc.). But there can be different explanations of an event or of the truth of a proposition. Given this fact, Slote’s account of unavoidability is ambiguous. On sense (A), (10) and (11) can be granted, but (12) is evidently false. And sense (B) is an unacceptable account of unavoidability. We have looked at a plausible and an implausible account of unavoidability. The plausible account renders Slote’s claims about the three propositions false, and the account which renders the claims (possibly) true is implausible. Perhaps Slote did not distinguish these two senses sufficiently carefully. Perhaps he was thinking of (A) when focusing on unavoidability and (B) when focusing on the argument’s three propositions. Insofar as Slote has not offered a plausible account which renders his three claims true, he has not successfully explained the purported failure of the main modal principle for power necessity.

Slote has suggested (in personal correspondence) a third interpretation of unavoidability:

It is now unavoidable for an agent that *r* if and only if the “best” explanation of *r* does not refer to the agent’s present motivational states.

On this approach, it might be argued that (10), (11), and (12) are all true. But it is clear that everything hangs on the notions of the “best” or “most adequate” explanation— notions which Slote does not develop or even sketch. Obviously, Slote must say something about these notions, in order for his theory to have substantive content.

Further, it seems to me that the sort of example discussed above shows the inadequacy (or at least the incompleteness) of the third suggestion. When I sail westward voluntarily, I take it that the “best” explanation of my sailing westward does refer to my motivational states; I sail westward because I really want to do so. Yet it is *unavoidable* that I sail westward. What makes it true that I can’t avoid sailing westward may play no role

in my sailing westward and thus may be irrelevant to the (best) explanation of my sailing westward.²⁴

Slote claims that the selectivity of certain kinds of necessity is generated by particular undertakings or events (promises, plans, irresistible impulses, etc.). The selectivity does not come from mere relationality (cf. “ought”). But notice that the notion of “explaining” is ambiguous; one can *offer* a particular explanation to a person, and there can *exist* an (adequate) explanation. The first notion involves a particular act of explaining, and it might generate selectivity, but of course it is not plausible to connect power necessity with the mere act of explaining something to someone. (An action does not become unavoidable simply because someone—perhaps mistakenly—accepts an explanation of it which makes no reference to the agent’s present motivational states.) Power necessity (on Slote’s (A)) derives from the *existence* of an adequate explanation of a certain sort, and this kind of factor would not seem to produce selectivity, but mere relationality. So power necessity (on Slote’s (A)) would appear to be more properly assimilated to the deontic necessity expressed by “ought” (on Smiley’s account) than the necessity expressed by “obligation”; “ought” is derivability from an ideal moral code, and “power necessity” is derivability from an adequate set of explanatory factors (not including one’s present motivational states). But if so, then it is not surprising that power necessity (on (A)) has not been shown to be selective, and that Slote’s three claims have not been shown to be consistent.

We are now in a position to see why Slote has not exhibited a suitable parallel between the failure of the epistemic version of the main modal principle and the alleged failure of the power version of the principle. The failure in the epistemic case was explained by an agent’s failure to perform a particular act of epistemic integration; he didn’t actually form a belief which he had reason to form. But the failure to *form* a belief is similar to the failure to *offer* or *accept* an explanation; whereas these factors are plausibly taken to be selectivity-generating, the failure to *offer* or *accept* an explanation is *not* plausibly connected to power necessity (or its absence). The failure to perform a particular act of offering or accepting a certain sort of explanation (not involving reference to the agent’s present motivational states) has nothing to do with the issue of the power necessity of the action. “Particularity” of a certain sort may generate “selectivity” of epistemic necessity, but it hasn’t been shown that such particularity is involved in power necessity.²⁵

IV. Conclusion: Elbow Grease

Slote and Dennett suggest that, if power necessity is partly epistemic, then since epistemic necessity doesn't obey the main modal principle, power necessity might not either. Further, Slote claims (a) that there are certain non-epistemic kinds of necessity for which the main modal principle fails, and (b) that there exists an explanation of the failure in those cases which can be extended to the case of power necessity.

I have not challenged the claim that the epistemic version of the principle fails, and I have not challenged (a). But I have challenged (b); that is, I have pointed out that Slote's explanation of the purported failure of power necessity to obey the main modal principle is inadequate. The cases of epistemic and non-epistemic failure seem to be crucially different from the case of power necessity. So if the basic argument for incompatibilism fails, we don't yet have an explanation of its failure. If we are to secure "elbow room" by denying the main modal principle, I am afraid that this will require some more elbow grease.²⁴

NOTES

1. Carl Ginet, "Might We Have No Choice?," in K. Kehrer (ed.), *Freedom and Determinism*, (Random House, New York, 1966); David Wiggins, "Towards A Reasonable Libertarianism," in T. Honderich (ed.), *Essays on Freedom of Action*, (Routledge and Kegan Paul, Boston); J.W. Lamb, "On A Proof of Incompatibilism," *The Philosophical Review* 86, January 1977; and Peter van Inwagen, "The Incompatibility of Free Will and Determinism," *Philosophical Studies* 27, 1975, and *An Essay On Free Will* (Clarendon Press, Oxford, 1983), esp. pp. 55-105.
2. I here follow: Michael Slote, "Selective Necessity and the Free-Will Problem," *Journal of Philosophy* 79, January 1982, p. 9.
3. *Ibid.*, p. 7.
4. *Ibid.*
5. *Ibid.*, p. 5.
6. Daniel Dennett, *Elbow Room: The Varieties of Free Will Worth Wanting*, (MIT Press, Cambridge, 1984), pp. 148-149.
7. Michael Slote, "Review of Peter van Inwagen's *An Essay on Free Will*," *Journal of Philosophy*, 82, June 1985, p. 328.
8. Slote, 1982, p. 10.
9. F. Dretske, "Epistemic Operators," *Journal of Philosophy* 67.24, December 1970, pp. 1007-23.
10. For a systematic discussion of the closure principle (and its relationship to skepticism), see: Anthony Brueckner, "Skepticism and Epistemic Closure," *Philosophical Topics* 13, Fall, 1985, 89-118.
11. The principle of the closure of knowledge under known implication is sometimes used by the "Cartesian skeptic". (See: Brueckner, 1985) Such a skeptic might argue as follows. Suppose I know some "mundane" proposition about the world, p. Surely also

I know (or can easily be brought to know) that if p, then there is no evil genius deceiving me into falsely believing that p. And if closure holds, then it follows that I know that there is no evil genius deceiving me into falsely believing that p. But the skeptic insists that I *don't* know this latter proposition (i.e., I can't "rule out" the skeptical "counter-possibility" to p), so the skeptic concludes that I don't know that p.

Now if epistemic fragmentation or carelessness shows the closure principle invalid, then the skeptic's argument, as stated, fails. But it should be clear that this is an unsatisfying response to the skeptic. The skeptic's true target is the epistemically *integrated* agent who appreciates the relationship between the two beliefs in question. It would obviously be an unsatisfying and disappointing response to the skeptic to point out that (only) epistemically careless agents can be said to know mundane propositions about the world.

The skeptic who employs the closure principle will want to modify it to accommodate the problems raised by the failure to "put one's beliefs together". A revision such as the following might be appropriate:

"If a person knows that p and knows that p implies q and he concludes that q as a result of his beliefs that p and that p implies q, then he knows that q."

Such a version of the closure principle is obviously not impugned by the final strategy (which involves lack of epistemic integration). Further, it can be employed to get the strong skeptical result that any agent who makes certain extremely reasonable (and trivial) inferences from beliefs he holds does not know any mundane proposition p. My point is not that the skeptic's argument necessarily works. Rather, my point is that the strategy which impugns closure under known implication (and which may serve *Slote's* purposes) will not impugn a related principle which is just as useful to the Cartesian skeptic as the original principle.

12. Slote, *op. cit.*, pp. 11-15.

13. *Ibid.*, p. 14.

14. *Ibid.*, p. 13. Some philosophers have also denied that "ought" is agglomerative. For instance, Marcus argues from the existence of genuine moral dilemmas and the principle that "ought implies can" that ought is non-agglomerative: Ruth Barcan Marcus, "Moral Dilemmas and Consistency," *Journal of Philosophy* 77.3, March 1980, pp. 121-136, esp. pp. 133-134. Insofar as "can" is a kind of possibility and possibility is clearly non-agglomerative, the non-agglomerativity of "ought" might not be so surprising.

Further, it seems that "ought p" is not closed under logical implication (at least, where "ought" is construed as an operator on propositions or sentences). The closure problem for ought comes from very well-known "Good Samaritan"-type cases. It ought to be the case that I help the person being mugged. That I help a person being mugged implies that a person is being mugged. But it *doesn't* follow that it ought to be the case that a person is being mugged. *If* (as Slote seemed to suggest) such conditions as agglomerativity and closure under implication were considered *necessary* for the validity of the main modal principle, then there would be pressure to reject the main principle even for "ought". Here, I shall simply follow Slote in distinguishing "ought" from "obligation" as regards selectivity.

15. *Ibid.*, p. 16.

16. If this example isn't entirely convincing, Slote points out that it may be entirely accidental that Jules exists at all, though not accidental that he is at the bank now: *Ibid.*, p. 16.

17. *Ibid.*, p. 17.

18. *Ibid.*, p. 19.

19. *Ibid.*

20. *Ibid.*, p. 22.

21. Note that the assumption that if E explains $((\forall x)(\forall y)(R(x) \supset S(y)))$, then E explains $((Ra \supset Sb))$ is clearly weaker than the assumption that explanation is closed under logical implication. Michael Bratman has convinced me that explanation is *not* closed under logical implication. Suppose, for instance, that we have an explanation of Smith's being cured of cancer. Whereas Smith's being cured of cancer entails that Smith got cancer, it needn't be the case that we have an explanation of Smith's having got cancer. The case of the failure of the closure of explanation under implication here is similar to the "Good Samaritan"-type cases of the alleged failure of the closure of "ought" under implication.
22. My discussion of sense (B) has been significantly changed due to very insightful and helpful comments by David Shatz.
23. I owe this point to Chris Hill.
24. There is another worry about Slote's accounts of unavoidability which has been brought to my attention by Chris Hill. It seems that none of Slote's accounts captures what we intend when we excuse an action on the grounds that it was unavoidable. Suppose Jones kills someone because he is a psychopath or because he is in a blind rage. It appears that Jones' action is not unavoidable because there exists an explanation of it which does not refer to his present motivational states (or because the *best* explanation of it does not refer to his present motivational states). Rather, it is unavoidable because there is an explanation which *does* so refer and which shows that his powers of reason have been obliterated or diminished by his motivational states.
25. Knowledge is "epistemic necessity"; it comes from belief *plus* something (which I shall call the "necessitating component"—justification, tracking, etc.). The failure of the epistemic version of the main principle discussed above comes from the belief component, rather than the necessitating component. It is for this reason a relatively "superficial" way in which the principle fails. For the reasons discussed above (in footnote 11), most of the discussion of the alleged failure of closure of knowledge under known implication has focused on alleged failures of closure for the *necessitating* component of knowledge. Only such a failure will be useful to an anti-skeptic. Further, I conjecture that only a failure of closure in the necessitating component of knowledge could help us to understand how power necessity could fail to abide by the main modal principle.
26. Here I have argued that Slote's explanation of the purported failure of the main modal principle is inadequate, but I am not certain that the main principle, appropriately understood, is valid for power necessity. I develop some reasons to think that it hasn't been *established* as valid in: John Martin Fischer, "Freedom and Miracles," forthcoming, *Noûs*. It seems likely to me that the main principle is, if valid, "basic." I have benefited greatly from comments by Michael Bratman, Anthony Brueckner, Chris Hill, David Shatz, and Michael Slote.