

# **A Master Argument for Incompatibilism?**

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## **1. Introduction**

The past 25 years have witnessed a vigorous discussion of an argument directed against the compatibilist approach to free will and responsibility. This reasoning, variously called the “consequence argument,” the “incompatibility argument,” and the “unavoidability argument,” may be expressed informally as follows: If determinism is true then whatever happens is a consequence of past events and laws over which we have no control and which we are unable to prevent. But whatever is a consequence of what’s beyond our control is not itself under our control. Therefore, if determinism is true then nothing that happens is under our control, including our own actions and thoughts. Instead, everything we do and think, everything that happens to us and within us, is akin to the vibration of a piano string upon being struck, with the past as pianist, and could not be otherwise than it is.

While a number of philosophers take this reasoning to crush the prospects of compatibilism, others challenge its assumption that unavoidability “transfers” from sufficient condition to necessary condition or from cause to effect. The ensuing debate has occasionally been vitriolic—Hume once remarked that the free will issue is “the most contentious question of metaphysics, the most contentious science”—yet undeniably fruitful in generating more detailed examinations of ability and practical freedom. Whether we incline towards compatibilism or

incompatibilism, this latter development is likely to be of lasting value.

As a compatibilist, I believe that the consequence argument fails to prove incompatibilism, and here I will develop criticisms of it that, for the most part, are already in the existing literature. Although a short essay cannot provide the theoretical account of practical freedom needed to underpin and justify this compatibilist critique, it will clarify the tasks that lie ahead.

## **2. Development of the Argument**

The consequence argument was independently developed in the 1970s by David Wiggins (1973), Peter van Inwagen (1975), James Lamb (1977), and Carl Ginet (1980). Since then, versions have been advanced in van Inwagen 1983, Widerker 1987, Ginet 1990, O'Connor 1993, 2000, and Fischer 1994. The core reasoning is similar to the “Master Argument” of Diodorus Cronos, who argued that since the past is fixed and inevitable, and the impossible cannot follow from the possible, then nothing is possible except the things that do happen or will happen. Given an apparent assumption of the argument, namely, that the past determines the present and future, then nothing other than what does happen or will happen can happen and, consequently, no one can do other than one does or will do (Mates 1961: 36-40, White 1985: 69-91, Knuuttila 1993: 14-16).

The emergence of formal representations for modal reasoning has led to a renewed examination of the modal elements in descriptions of action and capabilities. Abbreviating an agent S's ability at time t to bring about a situation p as “ $A_{s,t}p$ ” then “ $\sim A_{s,t}p$ ” expresses S's inability at t to bring about p, “ $\sim A_{s,t}\sim p$ ” is S's inability at t to prevent p, and “ $N_{s,t}p$ ” the claim that p is unavoidable for S at t, that is, “ $p \ \& \ \sim A_{s,t}\sim p$ .” So represented, proposals about the governing

principles of these practical modalities can be more readily discerned and debated.

In several publications, Peter van Inwagen has forcefully presented a clear formulation of the consequence argument (see THIS VOLUME). It utilizes an operator “N” where “Np” expresses the universal unavoidability of p or, in van Inwagen’s preferred locution, “p and no one has or ever had any choice about whether p,” and the following inference rules:

$$\alpha \quad \sim p \therefore Np$$

$$\beta \quad Np, N(p \supset q) \therefore Nq.$$

Then, where “ $\sim$ ” expresses logical necessity, “ $P_0$ ” the state of the world at some time in the remote past, “L” the conjunction of the laws of nature, and “P” an arbitrary true proposition, the following is a consequence of determinism:

$$1. \quad \sim((P_0 \& L) \supset P).$$

It is easy to derive NP as follows:

2.	$\sim(P_0 \supset (L \supset P))$	1, propositional logic
3.	$N(P_0 \supset (L \supset P))$	2, rule $\alpha$
4.	$NP_0$	premise
5.	$N(L \supset P)$	3, 4, rule $\beta$
6.	NL	premise
7.	NP	5, 6, rule $\beta$

Accordingly, determinism renders every truth unavoidable. Van Inwagen takes the premises of this argument as “obviously true”, rule  $\alpha$  as “obviously valid” and rule  $\beta$  as something that “appeals immediately to the reflective intellect” (1983: 124). While he notes that  $\beta$  is the most

difficult element of the argument to defend (p. 96) and the “most doubtful thesis the incompatibilist must accept” (p. 222), he stresses that “one could have no reason for being an incompatibilist” without accepting this rule (1989: 405).

While it is often true that the consequences of what is unavoidable are themselves unavoidable (van Inwagen 1983: 98), the argument’s bite makes itself felt when it rules out certain abilities simply because events are determined, abilities we would normally assume agents to have. For example, suppose that in large office at 11.59.30 am EST on March 12, 2005, Margo notices a copy of Lady Chatterley’s Lover on Suzanne’s desk. She picks it up, reads a few sentences and decides that she’d like to read a bit more in the evening. Since Suzanne is on her coffee break and no one else is in the immediate vicinity, Margo discretely slips the book into her briefcase at 11:59.50. She briefly considers returning it but then moves on, leaving the book in her briefcase the rest of the day. Let P represent the state of affairs of the book being in Margo’s briefcase at exactly noon. If determinism is true, then some remotely past state of the universe,  $P_0$ , together with laws of nature, L, necessitate that P obtains and that no one has any choice about that. According to the argument, since no one is able to prevent  $P_0$  and L from obtaining, then no one is able to prevent P from obtaining, including Margo who at 11:59.52 is alert, cognizant that it is Suzanne’s book and that she ought not steal it, and possessed of the physiological and psychological capacities needed to stop, remove the book from her briefcase and return it to the desk within the next eight seconds. If responsibility for returning the book implies an ability to do so—and van Inwagen understands his “having a choice” locution to be relevant to moral responsibility (1983: 104-105, 184-188)—then Margo is not responsible for her theft if determinism is true, indeed, no one is responsible for anything.<sup>1</sup>

Rule  $\beta$ , or similar closure rules and principles that “transfer” unavoidability from antecedents to consequents, are common to all versions of this elegant argument for incompatibilism.<sup>2</sup>  $\beta$  is also featured in Ginet’s rendition (1980, 1983), while others (e.g., Fischer 1994: chp. 1) appeal to an indexed counterpart:

$$\beta' \quad N_{s,t}p, N_{s,t}(p \supset q) \therefore N_{s,t}q, \text{ for any agent } S \text{ and time } t.$$

Wiggins uses a variant of the Diodoran principle that the impossible cannot follow from the possible, namely, that if at time  $t$  it is inevitable that not- $p$ , then  $p$  cannot follow from what could be the case at a later time  $t'$  (1973: 43-44). So, if I could bring about  $q$  but do not, and my not doing so is caused by not- $p$ , then my bringing about  $q$  would entail  $p$ . Since not- $p$  is inevitable then, by the principle, I could not bring about  $q$ . The argument offered by Lamb assumes that if an event  $E$  is a logical consequence of a set  $F$  of true propositions, and  $S$  can prevent  $E$ , then  $S$  can do something such that some member of  $F$  would be false (1977: 23, 29). When combined with the premises that the past and laws cannot be altered, this principle of “can-entailment” justifies an inference to the conclusion that no agent can refrain from doing what is determined.

The arguments by Wiggins and Lamb differ from the van Inwagen/Ginet version in that the past and laws are connected to the unavoidable action or its result through entailment rather than the relation expressed by “ $N(p \supset q)$ .” What is common to the two approaches is the assumption of the “transfer” or “closure” of unavoidability under a consequence relation, viz.,

R1.        Whatever is a consequence of what is unavoidable is itself unavoidable.

Assuming that unavoidability is a type of necessity, this principle gains credibility from the widely accepted modal law,

M1.        Whatever is a consequence of a necessity is itself necessary.

The point is that there are versions of R1 besides  $\beta$  are capable of generating the consequence argument, including those that are immune to counterexamples suggesting that  $\beta$  would fail in an indeterministic universe (Widerker 1987, Vihvelin 1988).<sup>3</sup> Some writers favor this version of R1:

$$R2. \quad Np, \sim(p \supset q) \therefore Nq,$$

with “N” read in Ginet’s fashion (Widerker 1987: 41). Alicia Finch and Ted Warfield (1998) also favor R2, describing it as “less vulnerable to criticism” than van Inwagen’s  $\beta$  (p. 522) and as “clearly valid” (p. 525). With it, a simpler version of the consequence argument is available:

- |    |                                  |           |
|----|----------------------------------|-----------|
| 1. | $\sim((P_o \ \& \ L) \supset P)$ | premise   |
| 2. | $N(P_o \ \& \ L)$                | premise   |
| 3. | NP                               | 1, 2, R2. |

An indexed counterpart of R1 appears in Talbott 1988: 247, and this counterpart of R2,

$$R3. \quad N_{s,t}p, \sim(p \supset q) \therefore N_{s,t}q, \text{ for any agent } S \text{ and time } t,$$

is deemed by Timothy O’Connor to be “clearly even more intuitive” than rule  $\beta'$  (O’Connor 2000: 9). It is easy to derive both R2 and R3 from rules  $\alpha$  and  $\beta$ , though neither  $\beta$  nor  $\beta'$  follow from R2 or R3 without additional assumptions. Finally, O’Connor (1993: 209) has also proposed,

$$R4. \quad N_{s,t}p, N_{s,t}(p \supset q) \therefore N_{s,t}q, \text{ for any } p, q \text{ such that } q \text{ is made true later than } p,$$

in order to avoid counterexamples to  $\beta'$  found in Widerker 1987 and Zagzebski 1991: 165-168.

Another problem for rule  $\beta$  is presented in McKay and Johnson 1996 which shows that if the ability to bring about  $p$  is an ability to ensure that  $p$  obtains, then rules  $\alpha$  and  $\beta$  support the

inference from  $Np$  and  $Nq$  to  $N(p \ \& \ q)$ —the so-called rule of agglomeration. That is, since  $\sim(p \supset (q \supset (p \ \& \ q)))$  is logically true, then  $N(p \supset (q \supset (p \ \& \ q)))$  follows by rule  $\alpha$ . By successive applications of rule  $\beta$  we get  $N(p \ \& \ q)$ . However, just as ability to ensure does not distribute over a disjunction, unavoidability is not closed under conjunction. Suppose a man is able to flip a coin but does not. Then, both “the coin does not land heads” and “the coin does not land tails” are true, and there is nothing he can do to prevent them from being true since it is not within his power to ensure that the coin lands head nor within his power to ensure it lands tails. Thus, both “ $N$ (the coin does not land heads)” and “ $N$ (the coin does not land tails)” are true. However, the conjunction “the coin does not land heads and the coin does not land tails,” while true, is within his power to prevent because he is able to flip the coin. Thus, “ $N$ (the coin does not land heads and the coin does not land tails)” is not true.

This difficulty is not insurmountable. That unavoidability is not agglomerative does not show that the particular propositions  $NP_0$  and  $NL$  could be true and  $N(P_0 \ \& \ L)$  false (Finch and Warfield 1998: 523), and we need not go through agglomeration to justify the premise  $N(P_0 \ \& \ L)$  since it is true in its own right (pp. 523-524). Even if we abandon rule  $\beta$ , the McKay-Johnson argument does not affect R2 or R3; agglomeration cannot be derived in the above manner by means of these rules since  $\sim(q \supset (p \ \& \ q))$  is not true (though Blum 2000 provides a different derivation). McKay and Johnson suggest reading “ $Np$ ” as “ $p$  and no one can or could (choose to) do anything that might lead to  $p$ ’s being false.” This yields a strong unavoidability that rules out even a weak ability to prevent  $p$ , i.e., an ability to do something such that  $\sim p$  might be true (an ability that is disjunctive-distributive), but preserves the premises of van Inwagen’s argument. The coin toss counterexample to agglomeration for this strengthened operator fails, so the barrier

is removed to accepting a rule structurally identical to  $\beta$  with “N” so understood and retaining van Inwagen’s original argument. In this volume, van Inwagen also construes the unavoidability operator along these lines, providing a model that validates both  $\beta$  and agglomeration. (I will say something about his revision in section 5 below.)

Regardless of what version of the consequence argument is adopted, its appeal would be considerably diminished were it insisted at the outset that a necessary condition of one’s being able to prevent a situation  $q$  is that it not be already determined that  $q$  will occur, or, in what comes to the same thing, that not- $q$  be consistent with the past and laws. For suppose that  $Np$  holds and that the entailment of  $q$  by  $p$  is a consequence of determinism; then it is already determined that  $q$  holds and that no one will bring about  $q$ . If so, then according to the proposed condition, no agent is able to prevent  $q$  and  $Nq$  follows immediately. Naturally, those who have not yet ruled out compatibilism will hardly be persuaded by an argument that begins by placing an indeterministic condition on ability. What makes the consequence argument so attractive is that it is plausible prior to any analysis of ability (Foley 1979: 73-74, van Inwagen 1980: 100, Slote 1982: 22).

### **3. Compatibilist Responses**

Compatibilists have attacked the consequence argument from the outset (e.g., Stoic critics of the Diodoran version (White 1985, chp. 4)). Some deny its relevance to moral responsibility by rejecting the assumption that moral responsibility requires an ability to do otherwise (Frankfurt 1969, Dennett 1984, Fischer 1994). There is considerable debate whether a principle of alternative possibilities can be so easily abandoned, but, in any case, the parallel direct argument

against the compatibility of determinism and responsibility remains to be contended with (see note 1). Another compatibilist response is that rule  $\beta$  fails on the conditional analysis of ability that compatibilists have traditionally favored (Gallois 1977, Foley 1979). However, the conditional analysis suffers from defects of its own (Lehrer 1964, Berofsky 1987, Kane 1996), and van Inwagen emphatically rejects it (1977a, 1977b, 1979, 1983, 1990).

Despite the failure of the conditional analysis, the strategy of attacking the consequence argument through an account of the relevant practical modalities is ultimately the route a compatibilist must pursue. This point is emphasized by Michael Slote (1982) who argues that rule  $\beta$  rests on the questionable assumptions that the unavoidability operator is both agglomerative and closed under entailment (p. 10). He contends that not all modal operators are agglomerative, closed under entailment, or governed by  $\beta$ -like rules, e.g., certain epistemic and deontic operators, as well as the alethic modality of “nonaccidentality.” Such modalities are selective inasmuch as they hold only relative to certain circumstances, say, as an obligation holds relative to a particular promise but not to another. Perhaps unavoidability is similarly selective. For example, a particular event in the past may be unavoidable relative to our present desires, beliefs, skills, and dispositions insofar as they are incapable of changing that event, yet relative to these same factors we might be able to do other than what we are caused to do (pp. 19-20). If so, rules like  $\beta$  and R2 fail.

These are rich suggestions if the ability needed for practical thinking and responsibility is “selective” as Slote suggests, especially if it includes epistemic elements (Dennett 1984: 148-149, Slote 1985: 328, Kapitan 1986b:). Unfortunately, Slote’s largely promisory remarks have left his essay open to criticism. Some deny that he has adequately motivated the denial of the

closure principles for any type of necessity (O'Connor 1993: 212-214), and even if a  $\beta$ -like principle fails for some types of necessity, he has not shown it to fail for van Inwagen's notion of unavailability (Fischer 1986, van Inwagen 1990). Moreover, even if a prospective action is not unavoidable given the agent's present doxastic and motivational states, it may be relevantly unavoidable with respect to yet other conditions that have nothing to do with such states (Fischer 1994: 40-44).

A more detailed compatibilist response to the consequence argument begins by challenging the premises that the past cannot be altered or that the laws of nature cannot be violated (Narveson 1977, Gallois 1977, Lewis 1981, Horgan 1985). On the face of it, this approach seems utterly absurd; how are we mortals able to alter what has already happened or change the laws that govern the course of nature? Are not the following principles absolutely ironclad?

Fixity of the Laws. No one is able to bring about that a law of nature is violated.

Fixity of the Past. No one is able to bring about that the past is altered.

(Here, the extension of 'the past' is fixed by the time at which the ability is possessed.) In fact, the response in question is subtler than a brute denial of these apparent truths. The critical move is that there is more than one concept of an ability to bring about a situation, thus, more than one concept of unavailability, and while on some construals the Fixity Principles are beyond challenge, there is another in which they are jeopardized. Moreover, the concept of unavailability for which the Fixity Principles are correct is not closed under a relation of consequence, whereas when closure does hold then one or both of the Fixity Principles is endangered. This type of argument—hereafter, the “main compatibilist response”—requires a careful look at the relevant practical modalities.

In general terms, an agent is able to bring about a situation  $p$  just in case he or she is able to perform an action of which  $p$  would be a consequence. However, different sorts of consequence relation permit distinctions among types of ability. One type is captured by the following:

Broad Ability:  $S$  is broadly able at  $t$  to bring about  $p$  iff there is a course of action  $K$  such that at  $t$  (i)  $S$  is able to do  $K$ , and (ii) were  $S$  to do  $K$  then  $p$ .<sup>4</sup>

This formula leaves open what consequence relation underlies the conditional in (ii). The entailment of  $p$  by the action is one candidate, but since what we are able to do typically depends upon the cooperation of the environment, e.g., bringing it about that a door is open, we can also interpret the conditional as asserting that  $p$  would be a “consequence” of  $S$ ’s  $K$ -ing if  $p$  would obtain were  $S$  to do  $K$  in the prevailing circumstances. Counterfactual dependency is one variety of such conditional dependency.

So defined, one is broadly able to bring about logical and mathematical necessities, an odd-sounding result given that the locution “brings about” suggests causation, as when I bring about the vibration of a tuning fork upon striking it against a hard surface or that my team wins by scoring a winning goal. So understood, what is “brought about” comes to obtain as a result of one’s action, e.g., its causal effects, and therefore, cannot be a situation that obtains of necessity or prior to undertaking that action. More liberally, let us say that one brings about whatever becomes true or begins to obtain by virtue of one’s action, so that those who killed John Kennedy brought it about that Mrs. Kennedy became a widow, that a certain trigger was pulled, that John Kennedy perished while Churchill was still living, and that the conditional “the Eiffel Tower is in Paris  $\supset$  John Kennedy is dead” is true. Expressing it by the phrase “make it the case that,” we may characterize this liberal notion of causal ability as follows:

Causal Ability: S is causally able at t to bring about p iff there is a course of action K such that at t (i) S is able to do K, and (ii) S's doing K would make it the case that p.<sup>5</sup>

Causal ability is obviously more restrictive than broad ability, though the latter remains a necessary condition so that broad inability implies an analogous causal inability. Both notions capture the sense in which ability involves opportunity to achieve a certain result, namely, that in the prevailing circumstances one would achieve that result were one to undertake a certain action.

Return to the main compatibilist response. Granting that Margo is able to return the book to Suzanne's desk, then she is both broadly and causally able to bring it about that the book is on the desk at noon. Since it is entailed by the past ( $P_0$ ) and the laws (L) that the book is in Margo's briefcase at noon (P), then, were she to return the book to Suzanne's desk at noon, P would not obtain. However, if P were to not obtain then  $P_0 \& L$  would not obtain, in which case,

(a) Margo is able to do something such that if she did it then  $P_0 \& L$  would not obtain.

Consequently, by definition, Margo is broadly able to bring about  $\sim(P_0 \& L)$ , and if this is so, then one of the following would be true:

(b) Margo is able to do something such that if she did it then  $P_0$  would not obtain.

(c) Margo is able to do something such that if she did it then L would not obtain.

Compatibilists differ about which is preferable; while the "local miracle" approach opts for (c), the so-called "backtracking" approach favors (b).<sup>6</sup> In either case, Margo is broadly able to bring about either that L does not obtain or that  $P_0$  does not obtain. So, if the unavoidability operator is defined in terms of broad ability, then one of the premises of both van Inwagen's and the simpler version of the consequence argument is false.<sup>7</sup>

If ability to bring about is interpreted in the causal sense, on the other hand, then the premises of the consequence argument are true; Margo cannot change the past or laws, that is, she cannot “make it the case that” either  $P_0$  or  $L$  does not obtain through anything she does. However, since Margo is able to return the book to Suzanne’s desk, and by so doing would make it the case that  $\sim P$ , then she is causally able to bring about  $\sim P$ . We thereby have a counterexample to rule  $\beta$ , and to any of the other mentioned candidates for a transfer rule with unavoidability interpreted in the causal sense. In sum, the main compatibilist response is this: while the consequence argument is valid on the broad sense of ability, its premises are false, and though the premises hold on the causal sense, it is invalid since the appropriate closure rule fails. As David Lewis (1981: 120-121) concluded, there is no one consistent reading of the critical modality that would render the argument sound.

#### **4. Strict Ability**

The main compatibilist response faces two immediate problems. First, as it stands, it operates with an undefined notion of an “ability to do,” one that allows that agents are able to do other than what they are caused to do. Those who wonder about the viability of compatibilism are correct in demanding a fuller account. Second, neither broad nor causal ability is rich enough to account for all ascriptions of responsibility since neither can explain certain cases where one lacks responsibility because one is unable to bring about a desired result. Here I will develop this second problem and argue that the main compatibilist response can withstand the necessary qualifications, while reserving the first problem until the next section.

Like broad ability, causal ability is also extraordinarily liberal given the manner in which

we ordinarily ascribe ability. While it is clear enough that one is causally unable to bring about necessary truths, the definition allows that one is causally able to bring about what one produces accidentally or unintentionally, or without the faintest conception of what is being accomplished. For example, my daughter bowled a strike the very first time she rolled a bowling ball down the lane. Five-year-old novice that she was, she was unable to duplicate that feat in the next 500 or so tries. Was she able to throw a strike on her maiden attempt? It might be thought that one is able to do whatever one does. Yet her throwing a strike was a matter of pure luck; we wouldn't hesitate to explain her subsequent failures to throw a strike by saying that she lacked the general ability or skill to throw a bowling ball in such a way to knock down all the pins. In short, there is a further sense of ability whereby she was unable to bring it about that all the pins are knocked down on a single roll even though on a particular occasion she was able to do so in both the broad and causal senses.

How does skill differ from luck? One difference is that a skilled bowler can roll a strike regularly, that is, on all or a relatively high percentage of attempts (Brown 1988, 1990). It might be thought that skill is simply a causal ability to regularly bring about a certain sort of result by performing a particular kind of action, what we might call regular causal ability. Yet, even this is not enough, regardless if regularity is construed as a guarantee or a comparatively high degree of probability. I am able to hit a certain sequence of keys on my computer keyboard even though I never have. Suppose that any time I were to hit that sequence I would invariably log onto a particular Pentagon computer; then I have a regular causal ability to bring about my being logged onto that computer since being logged on would be a regular result of hitting just that sequence. Do I have the skill to bring it about that I am logged on to that computer? It would

seem not. Do I have this skill if I actually hit a sequence of keys that logs me on? Again, it seems not, or at least this is what I hope the FBI would conclude after a proper investigation. After all, I am an amateur, not a seasoned hacker, and I blindly stumbled into the Pentagon computer system. I lacked proper know-how, not in hitting the particular sequence of keys I did—I may have done that very deliberately—but in logging onto the particular Pentagon computer as a result. If I can remember how I got there then I may very well acquire the skill as a result of my experiment, but that's because I have picked up a valuable piece of information.<sup>8</sup>

The point is that skill involves some measure of know-how in addition to a regular connection between action and result. If we add opportunity to know-how and regularity, we may speak of an agent as having the strict ability at a time to bring about a certain result. To characterize this notion more precisely we first define a notion of consequence:

Reliable Consequence: p is a reliable consequence of S's doing action K at time t just in case (i) S's intentionally K-ing at t made it the case that p, (ii) at t, S acted on a plan according to which his K-ing then would make it the case that p, (iii) there is a regular connection between S's doing K-type actions and p-type results as envisioned in S's plan at t.

This relation can obtain even when p is not brought about intentionally and S only tacitly envisions the appropriate plan, for it is sufficient if p is embedded in the plan as a foreseen or foreseeable result of a K-type action.<sup>9</sup> Accordingly, p would be a reliable consequence of S's K-ing at t just in case p would result from S's undertaking by way of a plan then envisioned by S. In this sense, strict ability requires know-how. So we have,

Strict Ability: S is strictly able at t to bring about p iff there is a course of action K such that

at t (i) S is able to do K, and (ii) p would be a reliable consequence of S's doing K.

Strict ability entails broad and causal ability, but it differs in requiring that “bringing about” involves both a regular connection between an undertaking and a result as well as the agent’s conceptions of the undertaking, the result, and a of strategy for producing the latter from the former.<sup>10</sup>

The notion of strict ability is critical to our discussion; its absence can block both prospective and retrospective ascriptions of responsibility despite presence of a corresponding regular causal ability. Think of what is accomplished through the use of computers, from writing an email message to landing an airplane safely to selling stocks online, situations that result from simple basic actions that people perform with the slightest movements. Suppose a machine operator, Bradley, can freeze the operation of his machine should he receive notice of a safety threat by pressing the keys F1, K, A, N, O, N, in that order followed by “Enter” on his computer keyboard. One day he is instructing a trainee, Mike, and is about to tell him the six-membered code when he receives an emergency signal. The alarm causes Bradley to suffer a heart attack from which he immediately perishes before he can give the code to Mike. The latter, who has heard only that the code is a six-membered sequence, frantically tries various combinations that spring to mind, but to no avail; the machine fails to shut down and several workers are injured. Was Mike responsible for the injuries suffered? Presumably not, and the reason is that he was unable at that point to bring the machinery to a halt. On a keyboard with 75 keys, there are nearly a couple hundred billion possible six-membered sequences, not counting those with double-keyed members, and Mike can hardly be blamed for not hitting the right sequence in the short interval he had. Yet, the action of hitting keys F1, K, A, N, O, N, in that order followed by

“Enter” is easily something he was then able to do, and had he done it then he would have stopped the machine and prevented the injuries. In short, Mike had the regular causal ability to stop the machine but lacked the strict ability to do so.

The point is that there are cases when an agent lacks responsibility for a situation because of a strict inability to prevent it despite the presence of both broad and causal abilities to prevent it.

This is evidence that both prospective and retrospective ascriptions of responsibility are governed by the principle that S is morally responsible at t1 for bringing about p at t2 only if S is strictly able at t1 to bring about p at t2. If so, then the consequence argument poses a threat to compatibilism only if it can be shown that determinism precludes strict ability to do otherwise, and interpreting ‘N’ in this strict fashion makes the argument no less plausible.

Yet, on the face of it, the main compatibilist response easily withstands the shift to strict ability. Obviously Margo lacks the strict ability to prevent P<sub>0</sub> & L, but granting that she has the causal ability to bring about the book’s being on the desk at noon, it is but a small step to claim that she also has the strict ability to do so; all we need to add is that ~P would be a reliable consequence of the action that she is able to perform. The case has been described in such a way to make this addition reasonable.

## **5. Replies and Rejoinders**

The second problem facing the main compatibilist response is more challenging. The assumption that agents are able to do other than what they are caused to do has been thought to beg the question against the incompatibilist since it appears to “presuppose” that an ability to do otherwise is compatible with determinism (an objection noted in Kane 1996: 51-52). Van

Inwagen writes that it would be “nice” to see a counterexample to rule  $\exists$  that did not presuppose compatibilism (1983, 102), and some would make this a condition on any acceptable counterexample (Ekstrom 2000, 40-41; Crisp and Warfield 2000: 175). Three things need pointing out here. First, the compatibilist need not argue from compatibilism to the claim that Margo, say, has the ability to do otherwise, and thus, he or she is not “presupposing” the compatibility thesis qua premise. Second, the ability claim is offered as a non-problematic assessment of Margo’s current skills, opportunities, and knowledge. As long as this ascription is not prima facie outlandish then the ball is thrown back into the incompatibilist’s court; why isn’t Margo able to return the book to Suzanne’s desk? In what way is she incapacitated? Incompatibilists have made similar undefended ability claims in their discussions of the transfer principles (e.g., that an agent is able to refrain from tossing a coin, McKay and Johnson 1996). Third, the response that Margo is unable to place the book back on Suzanne’s desk because she is caused to do otherwise is tantamount to begging the question on behalf of the incompatibilist. Defending the consequence argument by stipulating that a counterexample to  $\beta$  must not be consistent with or “presuppose” an assumption that an agent is able to do other than what is determined, is unlikely to impress anyone not already committed to incompatibilism.

Nevertheless, if the compatibilist’s claim that Margo is able to do otherwise cannot be separately explicated and defended, then the consequence argument has not been shown to be unsound on either the broad, causal, or strict readings of ability. To be sure, an account of the ability-to-do or of the “openness” of a course of action is essential to secure the counterexample to the argument, but why suppose that such an account is not available? While the familiar conditional analyses of old-fashioned compatibilism might be deficient, these are not the only

candidates to be found in the literature.<sup>11</sup> It will not do to scoff and complain that the alternative accounts obviously misuse the term ‘able’ prior to any examination of their merits; rejecting any one of these compatibilist analyses must be based on an argument that it is inadequate for the purposes of ascribing responsibility.

Still, by acknowledging that Margo is able to do something that would imply a difference in the past or in the laws, the compatibilist must agree that if determinism is true then agents have abilities whose exercise would require either prior miracles or an altered past. This conditional may appear “incredible,” as O’Connor insists:

When I wonder what is now in my power to do, I am wondering what is open to me given the way things are and have been and the laws that constrain how things might be. . . . I want to know which of those abilities I am able to exercise in the present circumstances. . . . An ‘ability’ to act here and now, the actual exercise of which strictly requires a prior condition that is lacking and which I cannot in any way contribute to bringing about, is, in the sense at issue, no ability at all. (This is essentially what closure under logical entailment for unavoidability implies.)<sup>12</sup>

Several points can be made in response. First, the locutions “given the way things are and . . . might be” and “the present circumstances” must fall within the scope of “wondering” and “know,” respectively, if O’Connor’s description of what happens in deliberation is accurate. Given our limited grasp of the actual facts, what we wonder about and want to know is what we can do given what we take to be the relevant past, present, and future circumstances. However, the conviction that what we take to be relevant allows for different open alternatives is entirely consistent with adopting a deterministic stance (Kapitan 1986a). Second, that one is strictly able

to something that would require a change in the past or laws if we did it may seem incredible, but why any more so than the incompatibilist's affirming that Margo would be unable at 11:59:52 am to return the book to Suzanne's desk by noon if determinism were true, especially when we grant that Margo would retain the requisite skill, knowledge, and opportunity to take the book out of her briefcase and place it on Suzanne's desk during the said interval? Third, in his last sentence, O'Connor assumes the closure of ability under entailment—or, under the relation denoted by “requires”—noting that it is implied by closure for unavoidability. But any compatibilist who disputes the latter will equally reject closure for ability, as argued in sections 6 and 7 below.

In this volume, van Inwagen speaks of an agent's ability to bring about  $p$  in terms of “access” to a region (world) in which  $p$  is true. To avoid the McKay-Johnson counterexample to rule  $\beta$ , he introduces the notion of exact access to a region, defined as access to a region but to none of its proper sub-regions, and proposes the following construal of “N”:

$Np$  iff  $p$  and every region to which anyone has exact access is a sub-region of  $p$ .

This, he claims, gives us the notion of the sheer inescapability from  $p$ , that is, from the region or world determined by  $p$ , i.e., the idea that there is nothing one can do that even might lead to the falsity of  $p$ . Now, if  $Np$  and  $N(p \supset q)$  are true then every region to which anyone has exact access is a sub-region of both  $p$  and  $p \supset q$ , so that no one has exact access to any region outside  $q$ .

Hence,  $Nq$  is true and rule  $\beta$  is valid. Similarly, agglomeration is retained, for if both  $Np$  and  $Nq$  hold then the only regions to which anyone has exact access are sub-regions of both  $p$  and  $q$ , that is, to sub-regions of  $p \& q$ .

Van Inwagen is well aware that compatibilists will not accept his account of ability and,

instead, would favor an analysis—no doubt “some version of the conditional analysis”—that will sanction the conditional that an agent like Margo can perform an act such that if she did then  $P_0$  & L would be false.<sup>13</sup> But this move, he writes,

... is contrived and ad hoc; ... it seems that our freedom can only be the freedom to add to the actual past; it seems that our freedom can only be the freedom to act in accordance with the laws of nature.” (THIS VOLUME)

Contrived? Ad hoc? No more so than van Inwagen’s own rendition of “N” in terms of exact access to regions of logical space. Nor does it beg the question any more than insisting that one is able to only what is consistent with the past and laws. According to van Inwagen’s account, if  $Np$  holds then not only is  $p$  unavoidable for everyone, but so is anything that  $p$  implies, for if one had exact access to  $q$  where  $q$  implies  $\sim p$  then one would have exact access to  $\sim p$ . Similarly, if  $N(p \supset q)$  holds then anything anyone is able to do must preserve the truth of  $p \supset q$ , in which case no one has exact access to  $\sim(p \supset q)$ . It immediately follows that the truth of  $q$  must be preserved by anything anyone is able to do. But  $A\sim p$  can be true only if someone has exact access to a region in which  $\sim p$  is true, that is, only if some region to which someone has exact access is not a sub-region of  $p$ . No one has such access if  $Np$  and  $N(p \supset q)$  hold. Of course rule  $\beta$  can be validated in this manner, but only through a construal of ability that explicitly excludes anyone from being able to prevent what is already determined. Predictably, the compatibilist will reject this analysis.

I noted above that the neutral observer should be unimpressed by a presentation of the consequence argument that begins with an analysis of ability explicitly requiring that what one is able to bring about must be consistent with the past and laws. Similarly, he or she should not be

swayed by a defense of the argument that relies upon such an analysis.

## 6. The Diodoran Strategy

At this stage, it might seem that the debate has reached an impasse (Fischer 1994: 83-85, Kane 1996: 51-52), and some readers might harbor a suspicion that the compatibilist-incompatibilist divide over free will is unresolvable.<sup>14</sup> I think this would be premature; since the study of the practical modalities has a healthy future in front of it there are little grounds for supposing that the powerful reasoning underlying incompatibilism can be so easily quieted. There are other possibilities of developing the consequence argument that turn on new interpretations of, or on interrelations among, the notions of ability and unavoidability. Let us examine a few in these next three sections.

Recall that the conclusion of the consequence argument is relevant to moral responsibility only if it is interpreted as asserting a strict unavoidability of whatever is determined.

Abbreviating broad, causal, and strict ability by “A<sup>b</sup>,” “A<sup>c</sup>,” and “A<sup>s</sup>” respectively, letting ‘→’ represent entailment, and taking uniform indices and operands to be implicit, these operators are related as follows:

$$A^s \rightarrow A^c \rightarrow A^b.$$

Contraposing, there is this pattern of entailment for types of inability:

$$\sim A^b \rightarrow \sim A^c \rightarrow \sim A^s.$$

and, similarly, for unavoidability:

$$N^b \rightarrow N^c \rightarrow N^s.$$

This shows that insofar as something is unavoidable in any of the three senses of unavoidability then it is also strictly unavoidable. If so, establishing the consequence argument is a matter of

justifying the inference that P is unavoidable in some sense—for then it will also be strictly unavoidable—whenever  $P_0 \& L$  is unavoidable in some sense (see Ginet 1990: 97). Satisfying this minimal inference pattern is necessary if the consequence argument is sound.

The next thing to note is that the interdefinability of the practical modalities suggests that a suitable closure rule for unavoidability might be derivable from a simpler and more appealing closure rule concerning ability. This method for defending the consequence argument begins by noting the similarity of the pattern,

P1.  $\underline{A}p, q$  is a consequence of  $p \therefore \underline{A}q$

where  $\underline{A}$  is an ability operator, to the Diodoran principle,

M2. Whatever is a consequence of a possibility is itself possible.

Accordingly, if rules like  $\beta$ , R1 and their variants acquire plausibility through similarity to the modal law,

M1. Whatever is a consequence of a necessity is itself necessary,

then P1 gains credibility from M2. Moreover, just as M1 and M2 are equivalent, perhaps an instance of P1 could be used to derive a suitable instance of,

P2.  $\underline{N}p, q$  is a consequence of  $p \therefore \underline{N}q$

where  $\underline{N}$  is an unavoidability operator correlated to  $\underline{A}$ . Consider, for example, the following refinement of P1:

P3.  $\underline{A}p, p$  entails  $q \therefore \underline{A}q$ .

Since entailment contraposes, we can easily derive,

P4.  $\underline{A}\sim q, p$  entails  $q \therefore \underline{A}\sim p$ ,

which van Inwagen has described as “clearly analytic” (1977: 94) and a “trivial truth” (1983:72).

From P4 we obtain,

$$P5. \quad \sim \underline{A}\sim p, p \text{ entails } q \therefore \sim \underline{A}\sim q,$$

Proof. Suppose that  $\sim \underline{A}\sim p$  and that  $p$  entails  $q$ . If  $\sim \underline{A}\sim q$  were false then we would have  $\underline{A}\sim q$  and, by P4,  $\underline{A}\sim p$ . But this contradicts the supposition. With P5, it is but a short step to,

$$P6. \quad \underline{N}p, p \text{ entails } q, \therefore \underline{N}q.$$

Similar reasoning allows us to derive other forms of closure for unavoidability.<sup>15</sup> Can this “Diodoran” strategy of arguing for incompatibilism from a P1-like rule provide a means for satisfying the minimal inference pattern of the consequence argument?<sup>16</sup>

At issue is whether the Diodoran strategy applies to appropriate instances of these general patterns set forth in terms of the three types of ability and unavoidability so far uncovered.

Consider, first, the following rule for broad ability:

$$C1. \quad A^b p, p \text{ entails } q \therefore A^b q.$$

Proof. Suppose that  $A^b p$  and  $p$  entails  $q$ . Then, by the definition of “broad ability,” there is a course of action that  $S$  is broadly able to do such that  $p$  would obtain. Since  $p$  entails  $q$ , then  $q$  would also obtain. Then,  $S$  is broadly able to do something that would result in  $q$ , that is,  $A^b q$ . By the reasoning that took us from P3 to P6, we derive the following instance of P6:

$$C2. \quad N^b p, p \text{ entails } q \therefore N^b q.$$

Similarly, with

$$C3 \quad A^b p, N^b(p \supset q) \therefore A^b q$$

(see note 15) we obtain,

C4.  $N^b p, N^b(p \supset q) \therefore N^b q.$

Proof. Suppose both  $N^b p$  and  $N^b(p \supset q)$ . Being broadly unable to prevent  $p$ , there is no course of action that  $S$  is broadly able to do whose performance would result in  $\sim p$ , and, similarly for  $p \supset q$ . So, there is no course of action  $S$  is able to perform that would result in  $\sim q$ ; if there were, then by C3  $S$  would be broadly able to do an action which would ensure  $\sim p$ , contrary to the supposition. Hence,  $\sim A^b \sim q$ . Since  $q$  follows from the supposition, we have  $N^b q$ , and in this way we derive both C2 and C3. Of course, with  $N^b q$  we can immediately prove  $N^s q$ , in which case, the following rule is also valid:

C5.  $N^b p, p \text{ entails } q \therefore N^s q,$

which would deliver the incompatibilist's goal in one step.

Do we have the means for satisfying the minimal inference pattern? Not at all. Return to the case of Margo and recall that her ability to return the book to Suzanne's desk by noon yields her strict ability to bring about  $\sim P$ , that is,

(a)  $A^s \sim P,$

which is the cornerstone of the main compatibilist response. Accepting this ability claim under the assumption that  $P$  is already determined, the compatibilist must deny both

(b)  $N^s P,$

and, by the above entailments,

(c)  $N^b P.$

Given that  $(P_0 \ \& \ L)$  entails  $P$ , then the valid rules C2 or C3 require the compatibilist to deny

(d)  $N^b(P_0 \ \& \ L).$

The appeal to the Fixity Principles is of no avail in defense of (d). As long as we are speaking of

broad ability then C1-C5 must be accepted, and given that Margo is broadly able to bring about  $\sim P$  and that  $P_0 \& L$  entails  $P$ , then she is able to do something such that  $P_0 \& L$  would be falsified. Hence, Margo is broadly able to bring about  $\sim(P_0 \& L)$ , contrary to (d) and the main compatibilist response is safe despite the derivation of C2, C4, and C5.

Does the situation change if we shift to causal ability? Here the Fixity Principles are unquestionably true and we can readily accept,

(e)  $N^c(P_0 \& L)$ ,

and consequently,

(f)  $N^s(P_0 \& L)$ .

The question now is whether a plausible closure rule can carry us from either (e) or (f) to the strict unavoidability of  $P$  and thereby secure a sound instance of the minimal inference pattern. Is the Diodoran strategy of any help here?

Let us consider. If we had,

C6.  $N^c p, p \text{ entails } q \therefore N^c q$

then from (e) we could derive,

(g)  $N^c P$

and we could prove what is desired, namely,

(b)  $N^s P$ .

contrary to the compatibilist's (a). Similarly, if we had,

C7.  $N^c p, N^c(p \supset q) \therefore N^c q$ .

we could derive (g) and our work would be finished. Now, can either of C6 or C7 be justified?

We could derive C6 by the reasoning that allowed the derivation of P6 from P3 if we had the

relevant instance of P3 for causal ability, namely,

C8.  $A^c p, p \text{ entails } q \therefore A^c q.$

But since what is entailed by what someone brings about need not itself be something that is brought about, e.g., necessary truths, then C8 fails. However, a related principle holds:

C9.  $A^c p, p\text{'s obtaining would make it the case that } q \text{ obtains } \therefore A^c q,$

assuming that the “makes it the case” relation is transitive. Now if we had,

C10.  $\sim A^c \sim p, p\text{'s obtaining would make it the case that } q \text{ obtains } \therefore \sim A^c \sim q,$

we could derive,

C11.  $N^c p, p\text{'s obtaining would make it the case that } q \text{ obtains } \therefore N^c q,$

and use it to obtain (g) from (e). But we cannot establish C10 from C9 in the manner in which we derived P5 from P3 because the “makes it the case” relation does not contrapose. This is a good thing, for C10 is invalid in any case. Consider. My having been born with a certain deformity in my hands (p) would have made it the case that I not play Beethoven’s Moonlight Sonata on the piano within the next hour (q). I am not now causally able to bring it about that I was not born with that deformity, so  $\sim A^c \sim p$  holds. However, since I am able to play that sonata on the piano within the next hour then I am able to prevent my not playing it on the piano within the next hour, in which case  $A^c \sim q$  holds and  $\sim A^c \sim q$  does not. Consequently, C10 fails.

An alternative Diodoran route to C6 and C11 goes through,

C12.  $A^c p, p \text{ entails } q, q \text{ is false } \therefore A^c q,$

that is, if an agent can do something that makes it the case that p then, since p entails q and q is false, then the agent’s making it the case that p would also make it the case that q. With this

principle—deemed “unassailable” by William Hasker (1989:112-114)—we avoid the problem that doomed C8. Moreover, C12 is particularly relevant to the compatibilist claim that a person is able to bring about a situation which is already determined will not obtain. If it is true, we can establish C6 as follows. Suppose that we have both  $N^c p$  and  $p$  entails  $q$ , but that  $N^c q$  is false, i.e.,  $\sim N^c q$ . Then  $\sim(q \ \& \ \sim A^c \sim q)$ , that is, either  $\sim q$  or  $A^c \sim q$ . Since  $p$  entails  $q$  and  $N^c p$  implies  $p$ , then  $q$  is true. Accordingly,  $A^c \sim q$  is true. Since  $\sim q$  entails  $\sim p$  and  $\sim p$  is false, then, by C12,  $A^c \sim p$ . But  $A^c \sim p$  contradicts  $N^c p$  which is given. Consequently, with C12 we establish C6 and, by similar reasoning, C11. With either C6 or C11 we have the means for deriving (g) and, hence, (b) from the premise (e). The conclusion of the consequence argument would then be secured by way of acceptable premises.

Does this clinch it? Once again, the compatibilist who thinks that Margo is able to return the book to Suzanne’s desk accepts,

(h)  $A^c \sim P$ .

and consequently rejects,

(g)  $N^c P$ .

and, thereby, concludes that C6, C7 and C11 are all invalid. Since C6 and C11 are derivable from C12, then the compatibilist is forced to deny the validity of C12. Is this feasible? Yes, and the route to so doing is to recognize that the following instance of C12 is invalid:

(i)  $A^c \sim P$ ,  $\sim P$  entails  $\sim(P_0 \ \& \ L)$ , it is false that  $\sim(P_0 \ \& \ L) \ \therefore A^c \sim(P_0 \ \& \ L)$ .

Accepting (h), each of the premises of (i) can be granted, but since Margo is unable to make it the case that  $\sim(P_0 \ \& \ L)$  obtains then the conclusion is obviously false. So, C12 is invalid and the proof of C6 and C11 collapses.

It is important to distinguish C12 from the valid C9 and, thus, from this equally valid refinement of C9:

C13.  $A^c p$ ,  $p$ 's obtaining would make it the case that  $q$  obtains,  $q$  is false  $\therefore A^c q$ ,

While this rule cannot be used to derive C11, it might be thought to show that the compatibilist is committed to denying one or both of the Fixity Principles. Consider this instance of C13:

(j)  $A^c \sim P$ ,  $\sim P$ 's obtaining would make it the case that  $\sim(P_0 \ \& \ L)$  obtains, it is false that  $\sim(P_0 \ \& \ L)$   $\therefore A^c \sim(P_0 \ \& \ L)$ .

Since (h) holds, and it is false that  $\sim(P_0 \ \& \ L)$ , one might be tempted to use (j) in deriving,

(k)  $A^c \sim(P_0 \ \& \ L)$

which would violate the Fixity Principles. One way to avoid this is to deny (h), but if we do then we are committed to affirming (g) and, thus, the desired (b). To block this inference the compatibilist need only notice that while (j) is valid, the premise,

(l)  $\sim P$ 's obtaining would make it the case that  $\sim(P_0 \ \& \ L)$  obtains

is clearly false since the counterfactual dependency of  $\sim P$  upon  $\sim(P_0 \ \& \ L)$  is simply not of the “make it the case” variety. Hence, C13 does not threaten the compatibilist with an embarrassing denial of the Fixity Principles.

Despite its initial appeal, the Diodoran strategy affords no effective reply to the compatibilist critique as long as discussion is confined to broad and causal ability. The valid rules C2, C4, and C5 for broad ability cannot be coupled with true premises to satisfy the minimal inference pattern, and the considerations raised against C6, C7, and C11 suggest that there is little hope for finding a valid closure rule for causal unavoidability.

## 7. Strict Ability and the Closure Principles

Perhaps the minimal inference pattern can be satisfied by considerations of strict ability alone.

Since,

$$(f) \quad N^s(P_0 \ \& \ L).$$

is undoubtedly true, perhaps we can infer

$$(b) \quad N^sP$$

directly by means of a closure principle for strict unavoidability, namely,

$$C14. \quad N^s p, p \text{ entails } q \ \therefore N^s q$$

or,

$$C15. \quad N^s p, N^s(p \supset q) \ \therefore N^s q.$$

Are these rules valid? No. Once again, the example of Margo is as effective against C14 and C15 as it is against C6 and C7. Furthermore, even if C14 and C15 follow from a Diodoran rule for strict ability such as,

$$C16. \quad A^s p, p \text{ entails } q \ \therefore A^s q$$

or,

$$C17. \quad A^s p, \text{ if } p \text{ were the case then } q \text{ would be the case} \ \therefore A^s q,$$

the cognitive requirements on strict ability block the closure of strict ability over the involved consequence relations. The computer examples of section 4 (above) show that an agent might be strictly able to bring about that a certain sequence of keys is struck within a ten second interval, but not strictly able to bring about each of the causal consequences of that event or the abstruse necessary truths it entails since these would not be reliable consequences. Again, by virtue of

certain biological laws, my inhaling cigar smoke may entail that my nervous system is in chemical state NIC. Ignorant as I am of physiology, I have utterly no conception of this state much less than that it is brought about by my smoking a cigar. It was induced by something I did intentionally, but, lacking the requisite concepts, I did not bring it about reliably. These examples render the likes of C16 and C17 futile.<sup>17</sup>

Do any closure principles hold for strict ability and unavoidability? How do we deal with the powerful suggestion that if unavoidability is a type of necessity and ability is a type of possibility then both practical modalities should be governed by closure principles akin to the modal laws M1 and M2? In fact, the classifications are only partly correct. A critical difference between these practical modalities and the alethic modalities is that strict ability and strict unavoidability harbor epistemic elements that the ordinary alethic modalities lack. While allusions to “blind necessity” (and “blind possibility”) are entirely apt, the sort of ability worth caring about is blessed with vision, fortunately.

Still, is it not correct to maintain that you can do what is required by what you can do (O'Connor 2000, 17)? For example, Jenine might be obligated to see to it that her son is enrolled in the college of his choice, and in most institutions of higher learning this would involve her undertaking a substantial course of action composed of many subsidiary steps, for instance, paying the application fee. Assuming that she is able to act as she ought, must she not also be able to perform all the subsidiary actions required to complete the larger course of action? Well, of course, but this answer must be properly formulated in terms of the appropriate consequence relation suggested by ‘required’. For example, the following principle is plausible:

C18.  $A^s p, q$  would be a reliable consequence of S's bringing about p  $\therefore A^s q$

where the temporal parameter on the consequence relation is the same as that on the ability operator. That is, if at  $t$  agent  $S$  correctly envisions both that  $p$  would result from a considered action and that  $q$  would result from  $p$ , then at  $t$   $S$  accurately anticipates that  $q$  would be a result of his action. It is in this way that  $S$ 's ability to bring about  $p$  implies an ability to bring about whatever is reliably "required" by bringing about  $p$ . So, if Jenine is strictly able to enroll her son in the chosen college then she is strictly able to perform any act reliably required by so doing. As a refinement of C18 we have,

C19.  $A^s \sim p, \sim q$  would be a reliable consequence of  $S$ 's bringing about  $\sim p \therefore A^s \sim q$

and so,

C20  $\sim A^s \sim q, \sim q$  would be a reliable consequence of  $S$ 's bringing about  $\sim p$   
 $\therefore \sim A^s \sim p$ .

Hence,

C21.  $N^s q, \sim q$  would be a reliable consequence of  $S$ 's bringing about  $\sim p \therefore N^s p$

While each of C20-C213 holds, the following rule,

C22.  $N^s p, q$  would be a reliable consequence of  $S$ 's bringing about  $p \therefore N^s q$ .

is invalidated any time  $S$  possesses more than one way of reliably bringing about  $q$ . Inability to prevent a situation from obtaining does transfer to any action which would reliably prevent it, but there is no automatic transfer from sufficient conditions to actions.<sup>18</sup>

Compatibilists need have no quarrel with any of C18-C21 since these rules cannot be used to support the consequence argument. To illustrate, suppose, as before, that  $P_0 \& L$  entails  $P$  and we accept the counterfactual,

(m) If Margo were to bring about  $\sim P$  then  $\sim(P_0 \ \& \ L)$  would obtain,

as well as what the compatibilist insists upon, namely,

(n) Margo is strictly able to bring about  $\sim P$ .

If we had C17 then we could infer the implausible,

(o) Margo is strictly able to bring about  $\sim(P_0 \ \& \ L)$ ,

and thereby reveal the implausibility of the compatibilist's position. However, C17 is invalid.

Alternatively, one might try to infer the implausible (o) from (n) by means of the valid C18 if the following held:

(p)  $\sim(P_0 \ \& \ L)$  would be a reliable consequence of Margo's bringing about  $\sim P$ .

Yet it is pretty certain that (p) fails. Even if a theory of causation allowed that  $\sim(P_0 \ \& \ L)$  would be a causal consequence of Margo's bringing about  $\sim P$ , it would be a reliable consequence only when Margo correctly envisions a route from her returning the book to Suzanne's desk to  $\sim(P_0 \ \& \ L)$ . But this sort of envisionment is clearly impossible for any finite agent like ourselves since  $\sim(P_0 \ \& \ L)$  is beyond our cognitive grasp.<sup>19</sup> So (p) is implausible as well. Alternatively, from C14 and the obviously true,

(q)  $P_0 \ \& \ L$  and Margo is strictly unable to prevent  $P_0 \ \& \ L$ .

we could infer the negation of the compatibilist's (n). However, we have noted that C14 and other rules of the P2 sort for strict ability are invalid. On the other hand, the valid C20 could be used to infer the negation of (n) from the negation of (o) if (p) were true, contrary to what the compatibilist wants. However, (p), as we have seen, is false.

The upshot? The Diodoran strategy is of no more use in deriving a suitable closure rule for strict unavoidability than it was for causal unavoidability, and the closure rule that is valid,

namely, (C21), is something the compatibilist can live with. To the extent that we have so far articulated the practical modalities, the consequence argument has not succeeded.

## 8. Strengthening the Unavoidability Operator

While we have distinguished three senses in which an agent *S* is able to bring about *p*, they are alike in that the action *S* is able to do that would bring about *p* is such that its exercise would ensure *p*. But now we must deal with a weaker notion whereby *S* is able to bring about *p* if *S* is able to act so that it might be the case that *p* (O'Connor 2000, 13), an adjustment that yields weakened senses of broad, causal, and strict ability. From the standpoint of responsibility ascriptions, we should not restrict attention to actions that ensure a result since there are relevant senses of ability that do not require any such guarantee. Prospectively, we can ascribe responsibility for probable outcomes of acts (see Kane 1996: 55). Retrospectively, uncharitable fans might blame a basketball player for missing a lay-up in a closely contested game even though any of the actions open to him would only make it highly probable that the ball would go through the basket. Again, a teacher might blame a student for failing to submit a paper on time even though when the paper was assigned there was no plan of action at the student's command that would guarantee that the paper would be completed and submitted on time. Sometimes, the probabilities of success are slight; if I deliberately feed you a kind of mushroom I know to be 5% fatal, I am blamable for bringing about your death should you perish upon eating it.

A weakened sense of the ability to bring about corresponds to a strengthened unavoidability operator so that  $N_{s,t}p$  holds just in case “*p* is true and the agent *s* cannot act (at or subsequent to *t*) in such a way so much as might be the case that not-*p*” (O'Connor 2000: 13, McKay and

Johnson 1996: 119, and van Inwagen (THIS VOLUME)). Whether this operator is to be interpreted as broad, causal, or strict unavailability, or is better defined in terms of regular causal ability, is uncertain, so let us simply give it a new label, “N<sup>w</sup>”, assume that it entails strengthened strict unavailability, and see if we can justify the appropriate reasoning in accord with the minimal inference pattern. As before, there is no barrier to accepting,

$$(r) \quad N^w(P_0 \& L)$$

with the operator indexed to Margo at 11:59:52. The proposed transfer principle is either

$$C23. \quad N^w p, p \text{ entails } q \therefore N^w q$$

for O’Connor, or

$$C24. \quad N^w p, N^w(p \supset q) \therefore N^w q$$

for McKay and Johnson and van Inwagen. Have we here a means of justifying the main inference pattern? Not at all, for anyone who accepts (r) and resists the conclusion,

$$(s) \quad N^w P$$

will take the case of Margo and the book to be as much a counterexample to C23 and C24 as it is to C6, C7, C11, C14, and C15. If we grant that Margo is strictly able to ensure that  $\sim P$ , that is,

$$(a) \quad A^s \sim P.$$

then it follows that she is able to do something that might bring about  $\sim P$ , that is,

$$(t) \quad A^w \sim P$$

holds when interpreted in the strict sense. If so, then by the definition of unavailability,

$$(u) \quad N^w P$$

is false read in the strict sense. But since we can readily concede (r) whenever P is entailed by  $P_0 \& L$ , then C23 and C24 are invalidated when N<sup>w</sup> is taken in the strict sense. Since, by hypothesis,

the strict reading of  $N^w$  is entailed by the broad and causal readings of  $N^w$ , it follows that C23 and C24 are also invalid in the broad and causal senses. Therefore, the revised argument of O'Connor, McKay and Johnson, and van Inwagen, fares no better than its predecessors, The main compatibilist response emerges unscathed, as before.

## **9. Conclusion: The Compatibilist's Task**

At this stage we have explored the Diodoran strategy and concluded that it fails to generate a valid closure rule of unavoidability that can justify the reasoning of the minimal inference pattern. Of the closure rules that are valid, either they cannot be mated to corresponding true premises, as is the case with C1-C5, C9, and C13, or they are unable to generate the desired conclusion from its premises, as with C18-C21.

Nothing precludes the definition of still further senses of 'able' and 'unavoidable', or the proposal of further closure principles in terms of which the incompatibilist's argument might be cast. One route for doing this is to understand that since an undefined notion of consequence was used in the characterization of broad, causal and strict ability, then there are as many species of ability under each of these three headings as there are consequence relations. So, with  $n$  distinct consequence relations we have  $3n$  concepts of ability to bring about and  $3n$  unavoidability operators. Every such operator would be correlated with  $n$  different candidates for transfer rules, each asserting the closure of that operator under a specific consequence relation, generating  $3n \times n$  distinct rules for unavoidability in all. Perhaps among this multitude there are some capable of providing the right sort of inferential mechanism that the consequence argument needs. Until they are unearthed, however, I conclude that there is good reason to be suspicious of the claim

that any variant of the consequence argument can achieve a wholesale refutation of compatibilism.<sup>20</sup>

This assessment provides compatibilists with momentary breathing room at best. As indicated in section 5 above, those who accept that responsibility for a situation implies ability to bring it about and, perhaps, an ability to prevent it, must explain how agents are able to do other than what they are caused to do. Without it, they can give no defense of their counterexamples. With it, they can be confident that the consequence argument, by itself, is no refutation of their position. Incompatibilists might shake their heads in exasperation, even scorn, about the prospects for success in this endeavor, and insist that the compatibilist misuses the term “able.” But as long as the compatibilist provides an account of the ability-to-do that will underwrite the main compatibilist response to the consequence argument then the incompatibilist has no choice but to confront the proposed account squarely. The battle can only be decided on the terrain that drives concern about free will, specifically, the nature and presuppositions of moral responsibility. While the standard conditional analysis of ability is flawed we are not automatically pushed to accept an indeterminist analysis if the other compatibilist accounts of practical freedom already in the market place do the job (see note 11). If they are ultimately shown to be deficient, it should be remembered that the field of modality is rich with possibilities, theoretical as well as practical, and with a sharpened set of metaphysical tools the compatibilist may yet produce what is needed.<sup>21</sup>

## NOTES

1. If responsibility does not imply “having a choice,” a parallel argument can be given by construing “Np as “no one is, or ever has been, even partly responsible for the fact that p,” an argument whose rules and premises van Inwagen takes to be equally plausible (1983, 104-105, 183-188). This “direct” argument for the incompatibility of determinism and responsibility is criticized in Kapitan 1986b, Ravizza 1994, and Fischer and Ravizza 1998, chp. 6. It is defended in Warfield 1996 against Ravizza 1994, and a refined version is given in an unpublished manuscript by Michael McKenna who criticizes the treatment of the argument in Fischer and Ravizza 1998.

2. John Fischer (1994: 62-66) presents what he calls the “conditional version” of the “Argument for Incompatibilism” and contends that it does not utilize a “transfer principle” of the sort used in van Inwagen’s argument. Van Inwagen (1994: 99) alleges that this argument is invalid, though Fischer is careful to point out that while the argument is not formally valid it is nonetheless reasonable to accept its conclusion given the content of its premises (p. 228, n.43, and see Fischer and Ravizza 1996: 220-222). Contrary to Fischer’s contention, I have argued that his conditional version tacitly relies on a type of transfer principle (Kapitan 1996: 432-433).

3. The proposed counterexamples to rule  $\beta$  by David Widerker (1987) and Kadri Vihvelin (1988) depend upon an assumption of indeterminism. For this reason they do not achieve what a compatibilist might hope, namely, a demonstration that  $\beta$  fails in a deterministic universe, a point

emphasized by McKay and Johnson (1996: 118). The indeterministic examples are also discussed in O'Connor 1993 and 2000: 9-14 and Crisp and Warfield 2000.

4. See, for instance, John Fischer who writes: "The strategy I have been presenting construes certain statements of the form, "S can bring about such-and-such," as implicitly involving conjunctions. The two conjuncts are a "can-claim" such as "S can do X" and a conditional, such as "If S were to do X, then Y would occur" (1994: 75). Gallois (1977: 102) also suggested this analysis, and arguably, van Inwagen's definition of "can render false" fits the pattern as well (1983: 68). The apparent circularity of the definition can be mitigated by treating the definiendum as "ability to bring about" and offering a separate account of the "ability to do" of the definiens (as I do in Kapitan 1996).

5. Carl Ginet provides a similar formula: "It was open to S at t to make it the case that p if and only if it was open to S at t to act in such a way that had S so acted, S would thereby have made it the case that p" (Ginet 1990, p. 102). I merely economize in calling this sort of ability "causal," acknowledging a difference between "causing" and "making it the case that" (see Kim 1974 and Hasker 1989: 105). The distinction between broad and causal ability is noted in Gallois 1977: 102-104, Lewis 1981: 120, and Horgan 1985: 347. Vihvelin 1991, 1995a, 1995b argues that counterfactual power over the past or laws is not itself a causal ability, even given Lewis's counterfactual analysis of causation. Ekstrom 1995, 1998 contests Vihvelin's claim, suggesting that the proponent of the consequence argument can profit by adopting a Lewisonian analysis of causation. However, a problem with this analysis is that it ignores the apparent temporal

directionality of causation.

6. David Lewis's local miracle approach does not require that the action Margo is able to do is itself a law-breaking event; rather, the law may be broken by some "divergent miracle" occurring shortly before her action (Lewis 1981, Horgan 1985, and Kapitan 1991b: 337-338, notes 4 and 5). That the compatibilist might opt for a backtracking approach is noted in Greenspan 1976, and articulated in several places, including Narveson 1977, Foley 1979, Fischer 1983, Horgan 1985, and Peacocke 1999: chp. 7, sec. 4. Choice of either alternative partly depends upon one's approach to counterfactuals. While the backtracking theory requires the entire past to be substantially altered in order to retain the laws, the local miracle approach alters the laws and requires only a slight adjustment of the past.

7. If unavailability is not agglomerative, then the correlated notion of ability is not disjunctive-distributive. Thus, even if Margo is able to bring about ( $\sim P_0$  or  $\sim L$ ) it would not follow that she is able to bring about  $\sim P_0$  or able to bring about  $\sim L$ . But then one must either defend the claim that the truth of (a) does not require the truth of one of (b) or (c), or avoid interpreting the premises in terms of broad ability.

8. Mark Brown (1988) accounts for skill in terms of what he calls a "reliable" connection between action and result: I am able to reliably bring about p if p is true at every world within a relevant cluster of worlds, where a cluster is relevant if it "corresponds to choices of actions of which I am actually capable" (p. 5). For example, a skilled archer reliably brings about the

arrow's hitting the bull's-eye since in every world—or in most worlds—in which he intentionally performs certain actions the arrow hits the bull's-eye. While an ordinary archer might not hit the bull's-eye at will, he may very well be able to reliably bring about the arrow's hitting the target. By omitting cognitive elements Brown's notion of reliability does not capture what I am here calling 'strict ability' or 'skill'. The principal shortcoming of his account—and hence, of his semantics for the language of ability—is that its concept of ability is not rich enough for responsibility ascriptions, as I argue in the next three paragraphs of the main text. Both O'Connor (1993, 2000) and Ginet (1990) acknowledge that there is a notion of ability that includes a cognitive requirement, though it plays little role in their development and defense of the consequence argument. Others who acknowledge cognitive conditions on ability include Dennett 1984: 116-118, Vihvelin 1988, Kapitan 1989, 1991a, 1996, and Glannon 1995.

9. There are several accounts of intentional action where the intentional status of projected actions is understood in terms of plans or envisioned routes. See, for example, Goldman 1970, chp. 3; Castañeda 1975, chp. 12; Brand 1984, chps. 1, 8, and 9; Bratman 1987, chps. 3 and 8, and Mele and Moser 1994.

10. The problem with the definitions of broad and causal ability is that by allowing someone to be able to bring about whatever results from his or her undertakings they squeeze ability out of blind luck. That the sort of ability relevant to responsibility requires skill has been emphasized by several philosophers, notably, Kenny 1975, Gert and Duggan 1979, Shatz 1988: 185, and Brown 1988, 1990. On the importance of general ability (skill) for responsibility see Wallace

1994: 182-192. See also John Fischer's discussion of Kenny's example in 1994: 25-29.

11. See, for example, the accounts offered in Dennett 1984; Berofsky 1987; Mele 1996; and Bok 1998. In previous writings I have defined a notion of doxastic openness as follows: a course of action A is doxastically open at time t to agent Sam, say, just in case relative to what Sam then takes himself to believe, (i) if he undertook to A then he would A, and if he undertook to refrain from A-ing then he would refrain, and (ii) his undertaking A is as yet contingent (Kapitan 1996, 437). Only actions that an agent conceives can be doxastically open for him or her. I then argue that by adding the efficacy conditionals, namely, that Sam actually would do A (or refrain from doing) depending on whether he undertook to do so (or not), we produce a notion of the ability-to-do (or, of a course of action being an "open alternative") that is rich enough to justify ascriptions of responsibility (see Kapitan 1986b, 1989, 1996, 2000).

12. O'Connor 2000: 17. See also Greenspan 1976, 244 which makes a similar point.

13. Here's an example of a compatibilist analysis in terms of access to regions of logical space. For any time t and course of action K, an agent S at t has access to both (1) some region in which S performs K whenever K is an open alternative for him at t and (2) to some region corresponding to p whenever p would be a reliable consequence of S's K-ing. Then  $N_{s,t}p$  holds whenever p is true and there is no course of action S is able to do that would reliably result in  $\sim p$ . On this analysis, rule  $\beta$  fails. Naturally, the notion of an agent's being able to perform an action, must itself be characterized in compatibilist terms (see note 11 above).

14. Strawson 1986 and Double 1991 express skepticism that the debate between compatibilists and incompatibilists can ever be satisfactorily resolved or that either position can be adequately defended, but I have argued that their critiques are unconvincing (Kapitan 1990, 1994). A more promising, less skeptical, “hybrid” view that combines elements of both compatibilism and incompatibilism is developed in Smilansky 2000.

15. For example, if we have “ $\underline{A}p, \underline{N}(p \supset q) \therefore \underline{A}q$ ,” a refinement of P1, we can obtain “ $\underline{N}p, \underline{N}(p \supset q) \therefore \underline{N}q$ ,” assuming that  $\underline{N}(p \supset q)$  contraposes to yield, “ $\underline{A}\sim q, \underline{N}(p \supset q) \therefore \underline{A}\sim p$ .”

Likewise, “ $\underline{N}p$ , If p were the case then q would be the case  $\therefore \underline{N}q$ ” is derivable from “ $\underline{A}p$ , if p were the case then q would be the case  $\therefore \underline{A}q$ ” given the transitivity of conditional dependency, a defensible claim when the relevant contexts or circumstances in which the dependency holds are held constant, as argued by Lycan 1984: 449, Honderich 1988: 33, and Lowe 1990: 84-85. Note that a pattern F is a refinement of pattern G just in case any structure that exhibits F also exhibits G (cf., Castañeda 1975: 69).

16. The Diodoran strategy is explicit in Talbott 1986: 458-460 and Hasker 1989: 111-115, but employed whenever the consequence argument is defended by appeal to a closure principle for ability (for example, in van Inwagen 1983: 72, and O’Connor 2000: 17).

17. If we acknowledge cognitive requirements on the ability-to-do (note 11) then a similar

argument can be used against the principle: “if S can do X and doing X would be truly describable as doing Y, then S can do Y.” On the other hand, if the description of S’s action as being one of doing “Y” is external to “can” because it falls outside the constitutive cognitive operator, however, as J. M. Fischer suggests (1994, 28), then while the principle is true enough, it cannot be used to refute compatibilism since “can” would have no more force than “broadly able,” thereby inviting the main compatibilist response once again.

18. J. M. Fischer makes a similar point in arguing against the principle that if S cannot do X and doing X would be doing Y then S cannot do Y (Fischer 1994, 29). It should be noted that C22 cannot be derived from C18 in the manner in which P6 was obtained from P3, since the relation of reliable consequence does not contrapose to produced the required lemmas.

19. This provides another means of countering Laura Ekstrom’s attempt to rescue the consequence argument by means of David Lewis’s theory of causation (see note 5 above).

20. Two other versions of the consequence argument are presented in Ginet 1990: 101-106 and Fischer 1994: 62-66. I have criticized the former in Kapitan 1991a: 238-239, and 1996: 433-435, and the latter in 1996: 432-433.

21. I am indebted to Robert Kane and Saul Smilansky for their helpful comments on an earlier version of this paper.

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