I. Introduction

IN HIS ARTICLE, "The incompatibility of free will and determinism", Peter van Inwagen says:

And almost all philosophers agree that a necessary condition for holding an agent responsible for an act is believing that that agent could have refrained from performing that act. There is, however, considerably less agreement as to how 'can' (in the relevant sense) should be analyzed. This is one of the most difficult questions in philosophy. It is certainly a question to which I do not know any non-trivial answer. ([5], p. 185)

And David Hume exhorts, in his Inquiry concerning human understanding, "But to proceed in this reconciling project with regard to the question of liberty and necessity; the most contentious question of metaphysics, the most contentious science..." ([4], Section VIII, Part 1, Par. 73).

The problems of the analysis of "can" or "ability" and the reconciliation of freedom and causal determinism are notoriously difficult. It is therefore with great interest that we read and critically examine Keith Lehrer's article, "'Can' in theory and practice: a possible worlds analysis", in which Lehrer proposes to "provide an analysis of 'can' statements within the framework of possible world semantics". ([8], p. 241) Lehrer claims that "under the analysis provided, conflict between theory and practice, between freedom and determinism, may be resolved". ([8], p. 241) I will briefly summarize Lehrer's proposal, and I argue that Lehrer both fails to provide an

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informative, useful analysis of "ability" and fails to provide an argument exhibiting the compatibility of freedom and determinism. In Section II, I summarize Lehrer's analysis and his proposed reconciliation. In Section III, I criticize the analysis. In Section IV, I argue that Lehrer's example of *flexor digitorum profundus* does not support his attempt to reconcile freedom and determinism. In Section V, I argue that Lehrer's "duplicate universe" also does not support the purported reconciliation.

II. Analysis and reconciliation

In previous articles, Lehrer has rejected a causal conditional analysis of "ability", arguing that no causal conditional provides a sufficient condition for "ability". ([6] and [7]; cf. [1], [2], and [9]) Lehrer argues that while "If I were to try (will, choose, decide) to perform a P-type act, I would perform a P-type act" might be true, it still might not be true that "I can perform a P-type act", since I may be unable to try (will, choose, decide) to perform the act. In Lehrer's recent article, he offers the example of a person who is pathologically afraid of snakes. ([8], p. 248) This person is so afraid of snakes that he is unable to try to touch the python which is in a basket in front of him. Even though it is true that if he were to try to touch the snake, he would touch the snake, Lehrer claims that it is not true that the person can touch the snake, since he is unable to try to touch the snake. Lehrer's analysis of "ability" is designed (in part) to ameliorate this sort of problem of the causal conditional analysis.

Lehrer adopts Pollock's "possible worlds" framework for the semantic treatment of subjunctive conditionals, although he concedes that adoption of the framework of either Stalnaker or Lewis would yield equivalent results. ([8], p. 247) Lehrer points out that we cannot specify the truth conditions of "I could have at time *t*₁ touched the snake at time *t*₂" (given that I did not in fact touch the snake at *t*₂) as: "In all possible worlds with the same physical laws as the actual world which are minimally different from the actual world so as to accommodate my trying at *t*₁ to touch the snake at *t*₂, I touch the snake at *t*₂". The possible worlds framework simply provides a semantic theory for subjunctive conditionals, and thus the problems afflicting the subjunctive conditional analysis will also plague an analysis
which embodies the possible worlds framework for subjunctive conditionals without any modifications. It might be true that in all possible worlds with the same physical laws as the actual world which are minimally different from the actual world so as to accommodate my trying at $t_1$ to touch the snake at $t_2$, I succeed in touching the snake at $t_2$; yet I may be unable in the actual world to try at $t_1$ to touch the snake at $t_2$, and so unable at $t_1$ in the actual world to touch the snake at $t_2$.

To solve the sort of problem which this example raises—the existence of a crucial advantage in a minimally different possible world which does not exist in the actual world—Lehrer introduces an “accessibility relation” on possible worlds. ([8], p. 254) Lehrer also abandons the conditional analysis for independent reasons; I focus in this paper on the issues raised by the introduction of the accessibility relation. Lehrer claims that a possible world $p$ minimally different from the actual world and having the same physical laws as the actual world is accessible from the actual world for an agent only if the agent has no advantage toward (say) touching the snake in the possible world $p$ which he lacks in the actual world and which is “inadmissible” (“admissibility” is explained below). Lehrer’s proposed analysis is this:

'S could (at $t_i$) have done $A$ at $t_n$' is true in the actual world $W$ if and only if there is a possible world $w$ having the same laws as $W$ and minimally different from $W$ so that 'S does $A$ at $t_n$' is true in $w$ in such a way that any advantage $S$ has in $w$ for doing $A$ at $t_n$ which he lacks in $W$ is admissible for $S$ from $W$ and $t_n$ is past. An advantage $S$ lacks in $W$ is admissible for $S$ from $W$ if and only if either (a) the advantage results from $S$ doing something $B$ at $t_j(t_i \leq t_j \leq t_n)$ when he has no additional advantage for doing $B$ at $t_j$ in $w$ which he lacks in $W$ or (b) the advantage results from $S$ doing something $C$ at $t_k(t_i < t_k \leq t_n)$ when $S$ has no additional advantages for doing $C$ at $t_k$ in $w$ which he lacks in $W$ except those advantages admissible to $S$ from $W$ resulting from what $S$ does prior to $t_k$. ([8], pp. 256—257)

If one combines a conditional analysis of “can” with a possible worlds analysis of conditionals, one gets what might be called a possible worlds analysis of “can”—an analysis which says that a person can do, or could have done, something in the actual world just in case there is a possible world related in a certain way to the actual world in
which the person *does* do that thing. Presumably any analysis of "can" ought to be formulable as a possible worlds analysis. What has recommended conditional analyses of "can" to many philosophers is that they are compatibilist analyses; they so construe statements of the form "S can do A" and "S could have done A" that these can be true in a deterministic world in which the person does not do the action in question. But Lehrer's new proposal shows that there can be compatibilist analyses of "can" that are not conditional analyses; once we have the possible worlds framework at our disposal and construe the task of analyzing "can" as that of giving a possible worlds analysis, there is no need for the compatibilist to limit his search for an acceptable compatibilist analysis to that subset of possible worlds analyses that are conditional analyses.

Lehrer claims that his analysis effects a reconciliation between freedom and determinism—theory and practice. It will be useful to have before us Lehrer's formulation of his solution:

On our analysis what becomes of the apparent conflict between theory and practice? Suppose that a person does not perform an action at a specific time and that his not doing so is determined, indeed, ancestrally determined. Does it follow on our analysis that the person could not have performed the action at the time in question? The answer to the question depends on whether the presence of an antecedent condition determining the person's inaction entails the lack of some advantage he needed to perform the action. If the presence of such a condition entails the lack of some advantage, then any possible world having the same laws as the actual world in which the person performs the action will be one in which the determining condition is absent and, therefore, one in which the person has some advantage for performing the action he lacks in the actual world, to wit, the absence of the condition in question.

Our earlier reflections indicate, however, that not every condition that determines the non-occurrence of an action need entail the lack of some advantage to the person for performing the action. The non-occurrence of an action at a time being determined and ancestrally determined by antecedent conditions does not entail that the person in question would require some advantage he lacks in the actual world for him to perform the action. ([8], pp. 263—264)

Lehrer's reconciliation involves two steps: the claim that the causal determination of an agent's not performing an act need not entail the lack of an advantage required for the agent's performing the act, and the analysis of ability.
III. Analysis

I believe that Lehrer has not offered a useful, "reductive" analysis of "ability". By a reductive analysis, I mean the analysis of a disputed, unclear, or controversial notion in terms of less disputed, less vague, or less controversial notions. The problem is that Lehrer's analysis makes crucial use of the notion of "having an advantage"; Lehrer never provides an account of "having an advantage in a possible world which one lacks in the actual world", and it is hard to see how Lehrer could provide an account of "having an advantage" without making reference to the notion of "ability". And if we take "having an advantage" as primitive or unanalyzed, then it is unclear whether our intuitions are any less confused and disputed about "having an advantage" than about "ability". Lehrer has not reduced the controversial, unclear notion of "ability" to less controversial, clearer notions.¹

A natural explication of "I have an advantage in possible world p toward doing A which I lack in the actual world" is: "I am able in possible world p but not in the actual world to do something which would result in, facilitate, or constitute my doing A." But of course, this account of "having an advantage" explicitly helps itself to the notion of "ability". It is hard to find an account of "having an advantage" which doesn't make use of the notion of "ability".

Although Lehrer doesn't offer an explication of "having an advantage", he does indicate certain conditions under which an agent would have an advantage in a possible world which he lacks in the actual world. Lehrer says that if something "prevents" a person from doing B in the actual world, then any possible world in which the person does B is a world in which the person has an advantage which he lacks in the actual world. ([8], pp. 257—258) Lehrer claims that what "prevents" the agent from doing B in the actual world is an "obstacle" to his doing B, and in a possible world in which he does B, the obstacle would have to be removed; this removal of an obstacle is

¹ Terence Horgan independently comes to a similar conclusion in [3]. While I agree with Horgan's conclusion about Lehrer's failure to elucidate the notion of an advantage, I take a different tack in this paper insofar as I explicitly address the examples and arguments Lehrer brings to bear against the position which Horgan and I defend.
(or yields) an advantage which the agent lacks in the actual world. ([8], pp. 257—258)

I would argue that "ability", "having an advantage", "being prevented", and "obstacle" are parts of a circle of interrelated notions which are themselves subject to dispute and which are not easily reducible to non-disputed notions. A theorist who argues that I am "unable" in the actual world to touch the snake will argue that I am "prevented" from touching the snake, that there is an obstacle to my touching the snake, that I lack an advantage required for touching the snake. If we are unsure about whether I am unable to touch the snake, we will be equally unsure about whether I am "prevented" from touching the snake, or about whether there is an "obstacle" to my touching the snake, or whether I require an advantage which I lack in order to touch the snake. Appeal to intuitions about "preventing" and "obstacles" does not vitiate the apparent circularity in Lehrer's analysis. Lehrer neither reduces via explicit reductive analysis the notion of "ability" to undisputed notions, nor shifts the problem to an area where we have firmer intuitions about an unanalyzed notion.

IV. Reconciliation: Flexor digitorum profundus

Not only does Lehrer fail to meet van Inwagen's challenge to produce an informative analysis of "ability", he also does not successfully reconcile freedom (ability to do otherwise) and determinism. An incompatibilist claims that if my not performing a certain act is causally determined, then in any possible world in which I perform this act, I have an advantage which I lack in the actual world.

Lehrer states, "The non-occurrence of an action at a time being determined and ancestrally determined by antecedent conditions does not entail that the person in question would require some advantage he lacks in the actual world for him to perform the action." ([8], p. 264) Yet, the incompatibilist can mimic Lehrer's own reasoning to deny Lehrer's claim. Lehrer himself is not unaware of this sort of strategy. ([8], pp. 263—264) The incompatibilist begins with the claim that if the non-occurrence of an event in the actual world is causally determined, then there is some condition which is sufficient for the event's
non-occurrence. Thus, the occurrence of the event would require the non-occurrence of the sufficient condition of the non-occurrence of the event; that is, an obstacle to the occurrence of the event would have to be eliminated, in order for the event to occur. But Lehrer has argued that if an obstacle which exists in the actual world is absent in a particular possible world, then an advantage which the agent lacks in the actual world which is inadmissible exists in that possible world, and that possible world is inaccessible to the agent.

A theorist inclined toward incompatibilism will claim that the causal determination of the non-occurrence of an event entails that some condition prevents the occurrence of the event; that is, there is some obstacle to the occurrence of the event. If one accepts this claim, then Lehrer's analysis of "ability" will yield the result that freedom is incompatible with causal determinism. Lehrer's own analysis of "ability" and his argument about "obstacles" and "advantages" will lead one who asserts that the causal determination of the non-occurrence of an event entails the existence of an obstacle to the occurrence of the event to incompatibilism.

Kant, himself a reconciler of freedom and causal determinism, reminded us of an "old saw" about the gulf between theory and practice; I have argued that Lehrer's argument cuts both ways. For Lehrer to evade the cutting edge of the incompatibilist's argument, he needs to support his claim that the causal determination of the non-occurrence of an action need not entail that the agent lacks some advantage he needs in order to perform the action.

One approach which would suffice for Lehrer's purposes would be to produce a situation in which some condition C causally necessitates at $t_i$ the non-occurrence at $t_n (t_i < t_n)$ of some action $A$, where we would say that the agent could (at $t_i$ or later) have performed action $A$ at $t_n$; that is, Lehrer would establish his claim if he could produce a situation in which the causal determination at $t_i$ of the non-occurrence at $t_n$ of $A$ does not result in the agent's lacking at $t_i$ or later some advantage required by the agent in order to perform $A$ at $t_n$.

It is to provide such an example that Lehrer invites us to consider flexor digitorum profundus:

... imagine that I leave the fingers of my left hand relaxed at $t_n$. From the simple fact that I do this, it would be peculiar to suppose that I could not have clenched
my fingers into a fist instead. Yet, there is a certain muscle in my arm, flexor digitorum profundus to be precise, that must be flexed for my hand to be so clenched, and that muscle is, in fact, unflexed. The flexing of that muscle is a necessary condition of my clenching my fingers into a fist, and that condition is unfulfilled. ([8], p. 253)

Later in the article, Lehrer again adverts to flexor:

Again, suppose I do not clench my fingers into a fist at a specific moment. That flexor digitorum profundus was unflexed just prior to that moment determines the fingers not being clenched. Yet it hardly follows from the antecedent condition of that muscle being unflexed that I could not have clenched the fingers. On the contrary, I could have clenched the fingers, and had I chosen to do so, flexor digitorum profundus would have been in a flexed state at the required time. ([8], p. 264)

Has Lehrer provided a situation in which condition $C$ causally determines at $t_i$ the non-concurrence of action $A$ at $t_n$, but the agent could at $t_i$ or later have performed $A$ at $t_n$? I believe that Lehrer has not provided this sort of example, and we can see that he has not done so by making explicit the suppressed time index for “could” in Lehrer’s example. If the unflexed state of flexor digitorum profundus determines at $t_i$ the non-clenching of my fingers at $t_n$, then the incompatibilist will argue (indeed, it follows immediately from incompatibilism) that I cannot at $t_i$ or later clenched my fingers at $t_n$. The surface plausibility of Lehrer’s example results from pushing the suppressed time index of “could” back to a time earlier than $t_i$; so, perhaps I could have at some time $t_h (t_h < t_i)$ clenched my fingers at $t_n$, even though the unflexing at $t_i$ causally necessitates the non-clenching at $t_n$.

But the incompatibilist insists that the intuition that there is some $t_h$ prior to $t_i$ at which I am able to clench my fist at $t_n$ does not survive critical scrutiny. Given that the state of the universe at $t_h$ (along with the physical laws which obtain) causally necessitates the state of the universe at $t_i$, and the unflexing at $t_i$ causally necessitates the non-clenching at $t_n$, the incompatibilist will point out that the state of the universe at $t_h$ causally necessitates the non-clenching at $t_n$ (on the assumption of the transitivity of causal necessitation). And again, it follows immediately from incompatibilism that the causal necessita-
tion at $t_h$ of the non-clenching at $t_n$ is incompatible with my being able at $t_h$ to clench my fist at $t_n$.

Lehrer has not produced a non-question-begging example of the compatibility of the causal determination at $t_i$ of the non-occurrence of an action at $t_n$ and the ability at $t_i$ or later of the agent to perform the action at $t_n$. Lacking this sort of example, Lehrer has not offered any reason to reject the claim that if in the actual world, condition $C$ causally determines at $t_i$ the non-occurrence of action $A$ at $t_n$, then in any world in which the agent performs $A$ at $t_n$, he has some inadmissible advantage at some time between $t_i$ and $t_n$ (inclusive) toward performing action $A$ at $t_n$. The acceptance of this claim together with Lehrer's analysis of "ability" yields incompatibilism.

V. Reconciliation: Duplicate universe

Although Lehrer is addressing himself to a different issue, one might think that he has provided the sort of example which he needs in section twelve. ([8], p. 265) Here, Lehrer asks us to engage in "a bit of fanciful speculation". Lehrer asks us to suppose that at some time $t_n$ a universe which is an exact duplicate of our universe springs into being (without a past causal history of its own). In this duplicate universe, what my counterpart can at $t_n$ do at $t_n$ is fixed independently of my counterpart's history; indeed, my counterpart lacks a causal history, and what it is able to do is entirely a function of the state of the duplicate universe at $t_n$—no states of the duplicate universe at times previous to $t_n$ are relevant to what my counterpart in the duplicate universe can at $t_n$ do at $t_n$ or later. One might be tempted to infer that there are cases in which the fact that some antecedent condition causally determines the non-occurrence of $A$ at $t_n$ does not mean that I cannot at $t_n$ have done $A$ at $t_n$; if ability attributions are sometimes fixed with no reference to past history, then it seems possible that I could at $t_n$ perform $A$ at $t_n$, even though there is some antecedent condition which necessitates my not performing $A$ at $t_n$.

This temptation should be resisted. First, Lehrer's argument that no facts about the past history of the duplicate universe are relevant to ability ascriptions depends on there being no past history of the duplicate universe. However, I claim that there being no past history
of the duplicate universe rules out the truth of causal determinism in the duplicate universe. This is because the first state of the duplicate universe is uncaused. So, Lehrer's duplicate universe is not one in which determinism could be true and ability attributions are made without reference to past history. Lehrer has not shown that it is possible that determinism be true in a universe and that ability attributions be independent of the past history of that universe.

One might resist my claim that there being no past history of the duplicate universe rules out causal determinism in the duplicate universe. Indeed, on the following standard characterization of causal determinism, the duplicate universe would seem to be deterministic: a universe is causally deterministic just in case given the causal laws which obtain in the universe and the total state of the universe at any particular time, the states of the universe at all other times, past and/or future (if there are any past and/or future times), are determined. (Note that on this characterization, a one-state universe would be "vacuously" deterministic.)

However, my intuition about this case is that the example of the duplicate universe exhibits an inadequacy in the standard characterization of the doctrine of causal determinism. Normally, the doctrine of causal determinism is taken to be a stronger doctrine than that of universal causation (the claim that all events are caused), but if the above characterization captured a form of causal determinism, then causal determinism but not universal causation would be true in the duplicate universe.

This problem suggests the following refinement in the characterization of causal determinism: a universe is causally deterministic just in case (a) universal causation is true in the universe, and (b) given the causal laws which obtain in the universe and the total state of the universe at any particular time, the states of the universe at all other times, past and/or future (if there are past and/or future times), are determined.

Strengthening the characterization of causal determinism in this way obviates the need to say that in some cases there are uncaused events in a causally deterministic universe. Yet one might resist this move, arguing that the question of whether causal determinism holds in a universe should not depend on whether there is an uncaused
first state of the universe or an infinite sequence of states extending backward in time. That is, insofar as causal determinism is supposed to pose a problem for our ordinary notion of responsibility, whether causal determinism holds in a universe shouldn't depend (even partially) on whether there is an uncaused first state or an infinite temporal sequence of states. On the basis of this sort of consideration, one might insist on the standard characterization of causal determinism at the expense of the strengthened version; this view concedes that in some cases there are uncaused events in a causally deterministic universe.

This approach does not help to rescue the attack on incompatibilism; if one makes ability ascriptions independently of considerations of ancestral determination in a causally deterministic universe, these ascriptions will concern uncaused events (the initial events). But a case where ability ascriptions concerning uncaused events are independent of considerations of past causal history is not a refutation of incompatibilism (even if the uncaused events occur in a causally deterministic universe); what is needed is a case where ability ascriptions concerning caused events are independent of past causal history.

I believe that to call the duplicate universe deterministic (and then to claim that one has provided an example of the independence of ability attributions from considerations of ancestral determination) would be to engage in a rather brazen form of anabaptist subterfuge. But independently of which way one's intuitions impel one about the issue of whether Lehrer has provided an example in which determinism is true in a universe and ability ascriptions in that universe are independent of its past history, I take the following objection to be a more serious objection to Lehrer's example.

Has Lehrer produced an example in which determinism is true in the actual universe and ability ascriptions in the duplicate universe are independent of the past history of the actual universe? Lehrer is correct to say that what I can at \( t_n \) do at \( t_n \) or later in a particular universe is a function of the state of that universe at \( t_n \), and the prior states of the universe are relevant to what I can at \( t_n \) do at \( t_n \) or later only insofar as the prior states determine the state at \( t_n \). But if determinism is

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\(^2\) I borrow the epithet from T. H. Irwin and W. H. Wilcox, Jr.—users of the epithet but of course not practitioners of the art.
true in the actual universe, the states of the actual universe prior to \( t_n \) causally determine the state of the actual universe at \( t_n \). In Lehrer's example, if determinism is true in the actual universe, some condition \( C \) at a time prior to \( t_n \) determines the nature of the state of the actual universe at \( t_n \). The incompatibilist holds that the causal determination by condition \( C \) at \( t_i \) (before \( t_n \)) of my not performing action \( A \) at \( t_n \) entails that I am not able in the actual universe at \( t_n \) to perform \( A \) at \( t_n \).

Thus, in the duplicate universe, insofar as the properties of the actual universe are precisely duplicated, my counterpart is unable at \( t_n \) to do \( A \) at \( t_n \). Although in the duplicate universe the abilities at \( t_n \) of my counterpart are read off the state of the universe at \( t_n \), it does not follow that states of the actual universe prior to \( t_n \) are irrelevant to the state of the duplicate universe at \( t_n \); states of the actual universe prior to \( t_n \) will be relevant to ability ascriptions in the duplicate universe at \( t_n \) to the extent that some patterns of ability ascriptions will be foreclosed by some states of the actual universe at times prior to \( t_n \).

My main point is that an incompatibilist could turn against Lehrer his own point that the existence of an ability at a time is a real or genuine state of the world at that time. If my non-clenching at \( t_n \) in the actual world was determined by a state existing at \( t_i \) in the actual world, then it is not true at \( t_n \) in the actual world that I am able at \( t_n \) to clench my fist (according to the incompatibilist). Therefore, since my counterpart in the duplicate universe at \( t_n \) has the same state as I have in the actual world at \( t_n \), he is not able at \( t_n \) to clench his fist at \( t_n \).

VI. Conclusion

Lehrer has not offered any non-question-begging support for his claim that the causal determination of the non-occurrence of an action need not entail the lack of an advantage required to perform the action. Of course, compatibilists generally want to claim that some causal sequences issuing in the non-occurrence of an event prevent the event from happening, while other causal sequences issuing in the non-occurrence of an event do not prevent the event from happening. A compatibilist claims that in some cases, the fact that a causal sequence issues in the non-occurrence of an action entails
that the agent lacks an advantage he requires to perform the action, while in other cases, the fact that a causal sequence issues in the non-occurrence of an action does not entail that the agent lacks an advantage he requires to perform the action. But Lehrer cannot simply assert this, without providing a satisfactory account of the differences between the two sorts of causal sequences. To claim that some causal sequences necessitate while others don’t is not to provide an argument for compatibilism, but simply to assert the truth of compatibilism. We can see that Lehrer’s failure to provide an informative, non-question-begging account of ability—specifically, his reliance on the unanalyzed notion, “having an advantage”—is intimately connected to his failure to provide a useful reconciliation of freedom and determinism.

In this paper, I have claimed that Lehrer’s purported analysis of “ability” is not a reductive analysis, and that it doesn’t satisfactorily reconcile theory and practice, insofar as Lehrer offers no argument which would convince anyone inclined toward incompatibilism that incompatibilism is false. I do not here claim that incompatibilism is true; I merely say that Lehrer doesn’t establish that it is false. Lehrer’s ambitious and subtle analysis is appealing to me because it abandons the subjunctive conditional analysis of “ability”, yet I do not believe it has provided an acceptable alternative.

The project of using the possible worlds framework to analyse “ability” would probably rely on the reduction of the notion of ability to (among others) the notion of comparative similarity (or minimal difference) among possible worlds. To the extent that one believes that comparative similarity or minimal difference is a clearer notion than “ability”, a useful shift in the philosophical focus would have been effected. However, Lehrer does not produce such an analysis, since he relies on the notion of “having an advantage”, and I remain sceptical about the project of producing a reductive analysis of “ability”.
References


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