

DOING OTHERWISE IN A DETERMINISTIC WORLD

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ABSTRACT. An influential version of the Consequence argument, the most famous argument for the incompatibility of free will and determinism, goes as follows: For an agent to be able to do otherwise, there has to be a possible world with the same laws and the same past as her actual world in which she does otherwise. However, if the actual world is deterministic, there is no such world. Hence, no agent in a deterministic world can ever do otherwise. In this paper, I discuss a recent version of this argument due to Christopher Franklin: the ‘No Opportunity argument’. I argue that the No Opportunity argument overgeneralizes. If its premises were true, things would be obstacles to doing otherwise that have nothing to do with determinism and that intuitively are not obstacles.

§1 Introduction

Many incompatibilists argue that agents in a deterministic world lack free will because they can never do otherwise. These incompatibilists typically admit that deterministic agents may have the skill, general ability, or capacity to do things they do not actually do. But they maintain that these agents lack, on any given occasion, the power to exercise this capacity. Sometimes this point is also put by saying that deterministic agents lack the ‘opportunity’ to do otherwise. When I talk in the following about the ability to do otherwise, I mean ability in this strong sense that includes both having a capacity and the opportunity to exercise it.¹

The most influential argument for this type of incompatibilism is the Consequence argument. One version of the argument goes as follows: For an agent to be able to do otherwise, there has to be a possible world with the same laws and the same past as the actual world in which the agent does otherwise. However, if the actual world is deterministic, there is no such world. Hence, no agent in a deterministic world can ever do otherwise (see van Inwagen 1983: 83–93 and Fischer 1994: 87–98). I will call this argument the ‘*No Possibility*

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¹ A distinction between a capacity and the opportunity to exercise it is drawn, among others, by Clarke (2015), Franklin (2015, 2018), van Inwagen (1983), Vihvelin (2000, 2013), and Whittle (2010).

argument' to distinguish it from other versions of the Consequence argument. The label is apt because the argument tries to establish that deterministic agents lack the ability to do otherwise by pointing to the arguable lack of a relevant possible world in which they exercise that ability.

In what follows, I will focus on a recent defense of the No Possibility argument due to Christopher Franklin (2018: 72–78). Franklin calls his version of the argument the '*No Opportunity argument*'.² The No Opportunity argument is very powerful and, I will argue, captures what makes the No Possibility argument intuitively so compelling.

My goal is to show that the No Opportunity argument fails. I will argue that the argument puts implausibly strong requirement on the ability to do otherwise. If its premises were true, then things would be obstacles to doing otherwise that have nothing to do with determinism and that we do not think are obstacles. So, the argument overgeneralizes.

An important question is whether my criticism of Franklin's No Opportunity argument, which is an Extension version of the Consequence argument, also applies to other Consequence arguments, in particular Transfer versions (see Campbell 2017 for the distinction between Extension and Transfer versions). Whether (or to what extent) it does depends on an unsettled controversy. According to van Inwagen (1994), all versions of the Consequence argument are ultimately grounded in the same transfer rule. A refutation of the No Opportunity argument would then challenge the Consequence argument itself. Fischer and Ravizza (1996), by contrast, argue that Extension and Transfer versions are distinct arguments. In that case a refutation of the former argument would leave the latter still standing. (I am indebted to two anonymous referees for helping me clarify this dialectic.)

In §2, I motivate the guiding idea of the No Possibility argument. In §3 and §4, I present what I take to be the strongest version of the No Possibility argument, viz., Franklin's (2018) No Opportunity argument. In §5 and §6, I present two objections to the No Opportunity argument. In §7 and §8, I address possible worries about my criticism of the argument.

² Vihvelin (2000) discusses and ultimately rejects a similar argument that she also calls "No Opportunity Argument." In what follows, I will focus on Franklin's version because it is more general.

§2 Ability and Possibility

The key premise of the No Possibility argument is that a necessary condition for an agent to be able to do otherwise is that there is a possible world with the same laws and the same past as her actual world in which she does otherwise. Here are two recent statements of this idea:

According to incompatibilists [doing otherwise at t] requires that [...] there be a possible world, with the same laws and past up until t , at which I do other[wise]. (Whittle: 2010: 9)

An agent S can at t do X at t only if there exists a possible world with the same past relative to t and the same laws as in the actual world [...] in which S does X at t ." (Fischer 1994: 91)

Let us call this principle the '*Possibility principle*' because it links abilities to possible worlds.

Given the Possibility principle, incompatibilism about doing otherwise follows right away. Determinism entails that any two worlds with the same laws that are identical at any one time are identical at all times (see van Inwagen 1983 and Earman 1986). Hence, if the world is deterministic, then there is no world with the same laws and the same past in which anything is different, and so no world in which anybody acts differently. But why should anyone accept the Possibility principle?

The Possibility principle can be broken down into two parts: First, there is the idea of a connection between abilities and possible worlds: An agent S in world W can do otherwise at t only if there is a representative possible world in which S does otherwise at t . Second, there is the part that specifies which worlds count as representative: a representative world needs to have the same past and the same laws of nature as W . You could deny the first part of the principle by rejecting the connection between abilities and possible worlds. Or, you could accept this connection but deny that representative possible worlds need to have the same laws and the same past.

The first part of the principle is very plausible. To not make the Possibility principle trivial, we need to restrict the range of possible worlds. For example, I successfully jump three meters high in possible worlds where I have wings or where the Earth's gravitational force is much smaller. But success in these worlds does not indicate that I am able to jump that high in the actual world. After all, these worlds contain enabling conditions that make jumping much easier, and so they are not representative of my abilities in the actual world. For a merely possible world to serve as a test case for whether I have an ability in the actual

world, it needs to make exercising the ability at least as hard as the actual world. Specifically, every potential obstacle to exercising the ability (such as gravity and lack of wings) needs to still be there. Worlds that satisfy this condition are ‘representative’.³

The first part of the Possibility principle then says that a necessary condition for having an ability is that you successfully exercise it in at least one representative possible world. You may have an ability yet never exercise it in the actual world: you may never try or fail due to a fluke. However, if you do not even successfully exercise it in at least one possible world where exercising it is (at least) equally hard as in the actual world, then the best explanation of this failure seems that you simply lack the ability. I am, therefore, accepting the first part of the principle.⁴

The second part of the Possibility principle is more controversial. Which possible worlds count as representative? If we hold fixed absolutely everything about the actual world, we thereby assure that all potential obstacles to exercising the ability are still present. However, it then follows that nobody is able to do anything that they do not in fact do. For example, if we only look at possible worlds in which the actual fact that you do not jump three meters high at t is held fixed, then you, of course, also do not jump three meters high at t in any such possible world. It would then be trivial that doing otherwise is incompatible with determinism because doing otherwise would be incompatible with doing (see Vihvelin 2010). But if we hold fixed too little, we make it too easy to satisfy the Possibility principle. Success in a world whose circumstances make exercising an ability much easier may then falsely count as evidence that you also have the ability in the actual world (recall the jumping example from above). So, it is crucial that we hold fixed neither too little nor too much about the actual world.

The Possibility principle can be seen as the proposal that the right things to hold fixed need to include the laws of nature and the past. These facts, according to the Possibility principle, are like gravity and lack of wings. They are facts we need to hold fixed in order to

³ Both the notion of a ‘representative possible world’ and this way of motivating the Possibility principle follow Spencer (2017). Franklin (2018) and van Inwagen (1983) talk of ‘accessible possible worlds’ to mean essentially the same thing. A tight connection between abilities and possible worlds also follows from a prominent analysis of abilities (going back to Kratzer’s (1977) work on the semantics of “can”) according to which abilities are a restricted kind of possibility (see Lewis 1976).

⁴ Spencer (2017) raises alleged counterexamples to the Possibility principle. These cases, however, are highly contentious (Nguyen 2020 and Vihvelin ms). Some philosophers have also argued that the principle fails for time travelling agents, but in the following I will limit my discussion to agents like us, who are neither time travelers nor otherwise temporally unusual. My ultimate purpose is to argue against the No Possibility argument, so in granting this part of the Possibility principle, I am conceding something to proponents of the argument.

not make exercising an ability easier than in the actual world. But the incompatibilist then needs an argument for why the past and the laws have this status. Otherwise, compatibilists may simply argue that holding fixed the laws and the past is too restrictive and so puts unreasonably strong requirements on having an ability.⁵

§3 The No Opportunity Argument

A recent proposal due to Franklin (2018) is meant to show that there are principled grounds for holding fixed the past and the laws of nature when assessing agents' abilities. Franklin (2018: 72–75) takes his argument to show that while agents in a deterministic world can have the general capacity to do otherwise, they never have the opportunity to exercise this capacity. Since I am using the word 'ability' in a way that encompasses both of these aspects, I am rephrasing the argument in terms of abilities. This difference is merely terminological.

Here is Franklin's *No Opportunity argument*:

1. An agent S in a deterministic world W is able to do otherwise at time t only if there is a possible world W* in which S does otherwise at t, and, at the very least, everything except S's doing otherwise and any event that depends on his doing otherwise are the same as in W.
2. Given that W is deterministic, any world W* in which S does otherwise at t than he does in W will differ with respect to the laws of nature or the past.
3. If the past differs in W*, this difference will not be identical to or dependent on S's doing otherwise at t.
4. If the laws of nature differ in W*, this difference will not be identical to or dependent on S's doing otherwise at t.
5. Therefore, there is no possible world W* in which S does otherwise at t, and, at the very least, everything except S's doing otherwise and any event that depends on S's doing otherwise are the same as in W.
6. Therefore, S is not able to do otherwise at t in W.

⁵ Given that the Possibility principle straightforwardly entails incompatibilism, compatibilists may also argue that assuming it simply begs the question. See Fischer and Pendergraft (2013) for a response to this objection as well as for a different argument for the Possibility principle from the one discussed below (see also 1994: 94–98).

The substantial assumptions in the argument are (1), (3) and (4). Premise (2) merely describes a consequence of determinism.

Premises (1), (3) and (4) jointly entail a version of the Possibility principle. (I say ‘a version’ because Franklin restricts the principle to deterministic worlds since his goal is to show that no agent in any deterministic world is able to do otherwise. But this is inessential since premise (1) loses none of its plausibility if we omit the word ‘deterministic’. I will get back to this point below.) Premise (1) establishes a connection between abilities and possible worlds: an agent in a deterministic world W can do otherwise at t only if there is a world W^* in which she does otherwise at t and that is otherwise exactly like W at least in all respects that do not depend on S ’s doing otherwise. Premises (3) and (4) then say that neither the laws nor the past in W^* depend on the agent’s doing otherwise at t . It then follows that for S in W to be able to do otherwise at t there needs to be a possible world that has the same past and laws of nature as W in which the agent does otherwise at t . This claim is, of course, exactly what the Possibility principle demands. Premise (2) then adds that determinism rules out the existence of such a world, and so it follows that no agent in a deterministic world can do otherwise.

A lot hinges on the word ‘*depends*’ in the key premises (1), (3), and (4). Franklin clarifies the notion as follows:

I will use the notion of *dependence* to capture the variety of different generative relationships events can stand in to our actions, such as causal, constitutive, or otherwise. The idea of dependence here is similar to the notions invoked in the following claims: “An action is wrong *in virtue of* God’s forbidding it” or “The set whose only member is Socrates *depends* on the existence of Socrates” or “All possible objects are *grounded in* actual objects.” (Franklin 2018: 69–70; italics in the original)

This passage suggests that Franklin uses ‘depends’ to capture explanatory relations, such as causation or grounding, that indicate that one fact obtains because of other facts.

In the following, I use ‘*E-dependence*’ as a term for such explanatory relations. Dependence in this sense contrasts with other kinds of dependence that need not be explanatory. For example, you might think that if my chair had different properties, then at least some of its parts also would have different properties. But you might still deny that the chair’s parts have their properties because of the properties of the whole chair. In fact, most people would think that explanation goes in the other direction: the parts explain the whole. Similarly, some philosophers argue that in worlds with deterministic laws the past

counterfactually depends on the future. But you may still deny that in such worlds the past has occurred because of the future (cf. Dorr 2016: 264). These examples are controversial, and we will get back to them. The important point for now is that Franklin uses the term ‘dependence’ to mean something stronger than mere counterfactual dependence or supervenience, viz., a kind of dependence that is genuinely explanatory. I use ‘E-dependence’ to indicate dependence in this sense.

The No Opportunity argument is interesting for several reasons. First, premise (1) provides a principled account of what we should hold fixed when using other possible world as evidence for ability claims. The only allowed deviations from the actual world are the agent’s doing otherwise itself and facts that obtain, in the world in question, because of the agent’s doing otherwise (i.e., E-depend on it).

I will ultimately argue that premise (1) is too strong. But on the face of it this way of delineating what we should hold fixed is very plausible. Suppose we want to know whether an agent has the ability to get past an obstacle, say a wall, and reach a destination. A world where the agent reaches her destination and where the wall is absent does not show that she is able to reach her destination in the actual world where the wall is present. After all, the wall might be the very thing that makes her unable to reach her destination. But consider a world in which the agent reaches her destination by smashing through the wall. In this world it is also easier for the agent to reach her destination than in a world in which the wall is intact—but it is easier *because of* the agent’s action. And so this world tells us that the wall is not an unsurmountable obstacle and so that the agent can reach her destination in the actual world despite the wall’s presence. So, on the face of it, it is very plausible to hold fixed everything, except for things that E-depend on the agent’s doing otherwise.

Second, the No Opportunity argument has important advantages over other versions of the Consequence argument. Franklin (2018: 73) argues that “perhaps the main virtue of the No Opportunity Argument is that (3) and (4) are weaker than the principles about the past and laws that incompatibilists usually invoke.” Lewis (1981) famously argues that the Consequence argument can be blocked by accepting the following thesis about abilities:

Weak Thesis. We are able to do things such that if we did them, the laws or the past would be different.

Lewis (1981: 293) holds that endorsing the Weak Thesis is not a great cost for compatibilists because it is consistent with denying that we have certain stronger abilities (cf. Lehrer 1980:

197-199). According to Lewis, the Weak Thesis is compatible both with denying that we are ever able to cause the past to be different and with denying that we can ever do something that either itself is part of a law-violating sequence of events or causes such a sequence. And our lack of these stronger abilities is enough to explain why we, for example, cannot cause our past riches or build a spaceship that moves faster than the speed of light (see also Fischer 1994: 67–71). There then seems to be nothing problematic about accepting the Weak Thesis as long as one simultaneously denies that we have these stronger abilities. So, a standard compatibilist response to the Consequence argument is to accept the Weak Thesis.

Franklin argues that the No Opportunity argument is immune to this response. If we accept (3) and (4), and so admit that neither the past nor the laws of nature E-depend on what we do, then the Weak Thesis conflicts with (1). After all, (1) says that we can do otherwise only if there is a possible world in which we do otherwise and that is like the actual world in all respect except for us doing otherwise and events that E-depend on it. The Weak Thesis, however, says that we can do something such that if we did it, the laws or the past would be different. Yet, if (3) and (4) are true, then in a world in which we exercise that ability neither the past nor the laws E-depend on what we do. So, we have a contradiction. In sum, the No Opportunity argument has important advantages over other influential arguments for incompatibilism and requires separate discussion.

§4 Laws and the Past

In the following, I will call proponents of the No Opportunity argument “incompatibilists” and philosophers who reject it “compatibilists.” I have argued above that premise (1) is at least initially plausible. But what about (3) and (4)? Franklin (2018: 73) argues that premises (3) and (4) “are so weak that they cannot plausibly be denied” and that “[c]onsequently, compatibilists must reject (1).” (ibid.: 74) But while I agree that compatibilists should target (1), I also think that Franklin overstates the plausibility of (3) and (4). Moreover, looking at the possible grounds for rejecting them will illustrate an important point about the dialectic.

Premise (4) states the natural idea that if something is a law, then its truth is not explained by our actions. Nonetheless, certain theories of laws raise doubts about (4). Humeans hold that the world fundamentally consists only of the so-called ‘Humean mosaic’, i.e., the complete distribution of perfectly natural, intrinsic properties and the spatiotemporal relations between them (see Lewis 1983). This view is Humean because it entails that there are no fundamental modal properties. Humean reductionists about laws argue, in addition, that laws of nature reduce to the Humean mosaic. For example, according to David Lewis’s

(1973, 1983) influential best systems analysis, laws of nature correspond to contingent regularities in the simplest and most informative systematizations of the Humean mosaic. Though Lewis does not put it this way, the relation between laws of nature and the Humean mosaic can be naturally understood in terms of grounding: the laws are grounded in the Humean mosaic (see Hall 2015).

According to Humean reductionism so understood, laws are grounded in the Humean mosaic as a whole, and our actions are part of the Humean mosaic. Hence, there are reasons for thinking that some laws are partly grounded in our actions. The denial of (4) thus follows naturally from Humeanism about laws.⁶ Nonetheless, (4) is pretheoretically plausible and true given most alternative theories of laws. So I will grant premise (4) in the following discussion.

Premise (3) says that in a world in which we do otherwise and the past is different, it is not the case that the past is different because of our doing otherwise. It seems to be motivated by the time asymmetry of causation: we think that our actions do not cause past events. However, some philosophers argue that the time symmetry of the fundamental dynamical laws of physics calls into question our common-sense idea of the direction of causation:

“[T]he direction in which we see causal influence as running is not part of the fundamental, invariant, mind-independent fabric of reality.” (Ismael 2016: 260)

“[T]here are numerous respectable senses in which the past can be influenced.” (Kutach 2011: 247)

“[T]he difference between our capacity to influence the future and our capacity to influence the past is apparently a matter of degree.” (Albert 2015: 46)

These philosophers argue that there is a robust sense in which the past exists because of the future. We might interpret this stance as a rejection of (3). Admittedly, it is unclear whether what these philosophers mean by “influence” qualifies as E-dependence in Franklin’s sense. And, of course, this take on causation is controversial. So, I will also grant (3).

However, I want to note a point about the dialectic. The main support for (3) and (4) comes from common-sense. Maudlin (2012: 127), a main proponent of the view that

⁶ Some philosophers have argued that Humean reductionism about laws similarly motivates the rejection of a corresponding premise in the Consequence argument. See Beebe and Mele (2002) and Loew and Hüttemann (2022) for discussion.

causation goes exclusively from past-to-future, regards as the main reason for it that it is part of our common-sense view of the world. Similarly, the view that our actions do not make a difference to the laws is typically motivated by common-sense reflections on the concept of a law of nature (see, e.g., van Inwagen 1983: 61–62). Consequently, defenders of the No Opportunity argument should take our common-sense ideas seriously, else they lose the strongest support for (3) and (4). This point will become relevant shortly.

§5 The Problem of Non-fundamentality

In the remainder of the paper, I will argue against premise (1) of the No Opportunity argument. I will present two cases that show that it places implausibly strong requirements on doing otherwise. For the first case, consider the following proposition:

Non-fundamentality. The actions of agents like us nomologically supervene on more fundamental events.

Non-fundamentality is extremely plausible. It is very natural to think that actions, such as decisions or arm raisings, supervene (at least nomologically) on more fundamental events, such as neuron firings or instantiations of microphysical properties. Hence, our actions cannot be different without there also being a difference in these more fundamental events, at least not in any world with the same laws of nature as our world.

But Non-fundamentality leads to trouble if combined with premises (1) and (4) of the No Opportunity argument: Suppose in deterministic world W my action A at t supervenes on a microphysical state M . Hence, in any world W^* with the same laws in which I do otherwise at t , M will not occur. Instead, a different microphysical state M^* on which my alternative action supervenes will occur at t . But then (1) and (4) jointly entail that I can only do otherwise if this microphysical realization of my alternative action, M^* , is either identical to or E-depends on my doing otherwise in W^* . (Premise (4) is needed because it assures that W^* has the same laws as W .)

But it is implausible that M^* is identical to or E-depends on my doing otherwise in W^* . It is widely held that multiple realizable higher-level events, such as actions, are not identical to the more fundamental events on which they supervene. So, my doing otherwise is not identical to its lower-level supervenience base. Moreover, the supervenience base does not E-depends on my doing otherwise. My action does not cause its microphysical supervenience base since causation relates events that are wholly distinct and causes typically

precede their effects in time (Lewis 2004: 78). By contrast, our actions and their microphysical supervenience bases are simultaneous and tightly related. Finally, my doing otherwise does not seem to ground its supervenience base because we standardly assume that lower-level events explain higher-level events rather than vice versa. So, (1) together with (4) entails that agents in deterministic worlds cannot do otherwise for the mere fact that their actions nomologically supervene on more fundamental events.

The case shows that the No Opportunity argument has implausible consequences. It entails that the fact that my actions nomologically supervene on more fundamental events prevents me from doing otherwise. This is an absurd consequence because nobody would pretheoretically think that such supervenience is an obstacle to doing otherwise. The implausible consequence follows from premises (1) and (4) of the argument. And since, as Franklin acknowledges, (1) is the most controversial premise, we should reject (1).

The case also shows that the No Opportunity argument cannot serve its intended purpose, viz., to support libertarianism about free will. Franklin restricts premise (1) to deterministic worlds: it only tells us what is required for an agent in a deterministic world to be able to do otherwise. However, the principle generalizes to indeterministic worlds. After all, the standards for being able to do otherwise should be the same in all worlds (though, of course, they might be easier to meet in some worlds than in others). Yet, if nomological supervenience on more fundamental events already is an obstacle to doing otherwise, then agents also cannot do otherwise in indeterministic worlds with laws similar to ours. There is then an obstacle to doing otherwise that has nothing to do with determinism.

What can incompatibilists say in response? They have two options for blocking the implausible result. The first response is to insist that the supervenience base of our actions E-depend on our actions after all even though the relation does not fit the paradigmatic instances of E-dependence. For example, they could posit a special kind of instantaneous downward causation by which our actions cause their lower-level supervenience bases. Non-fundamentality would then no longer entail, together with (1) and (4), that we cannot do otherwise because in a world in which we act differently the difference in the supervenience base would E-depend on us doing otherwise.

But this response has two problems: First, there are no independent reasons for thinking that our actions explain their lower-level supervenience base. And, second, this response is dialectically ineffective. If incompatibilists get to posit novel, controversial explanatory relations, then compatibilist may do likewise. As I argued in §4, there are some grounds for rejecting (3) or (4) though doing so goes against our common-sense beliefs. Yet,

if incompatibilists get to posit unfamiliar explanatory relations, compatibilists may likewise reject (3) or (4) by positing, for example, that in a deterministic world in which we do otherwise our actions explain differences in the past (thus rejecting (3)).

The second option incompatibilists have is to argue that an action's supervenience base is somehow part of doing otherwise. Premise (1), after all, specifies that in a world W^* in which the agent does otherwise “everything except S's doing otherwise and any event that depends on his doing otherwise are” has to be the same. So maybe one could argue that an agent's doing otherwise includes not just the action itself but also its entire lower-level supervenience base. Premise (1) would then permit a difference in the supervenience base even if it does not E-depend on the agent's action.

But this response has the same problems as the previous one. It is implausible that the lower-level supervenience base is identical to our action of doing otherwise. In claiming such an identity, incompatibilists would take a strong stance on a controversial issue in the philosophy of mind.⁷ But if there is no strict identity, then it seems we are making ad hoc exceptions to the original principle. The original idea was that a representative possible world needs to be the same as the actual world, except with respect to doing otherwise itself and events that E-depend on it. But now it seems we are also allowing differences that are neither strictly identical to nor E-depend on us doing otherwise.

Moreover, compatibilists may make an analogous move to avoid the argument. The just outlined response involves incompatibilists saying that representative possible worlds may differ from the actual world at any level on which the agent's doing otherwise supervenes, all the way down to the most fundamental level (if there is one)—even if these differences are not explained by the agent's action. Compatibilists can copy this move by saying that representative possible worlds may differ from the actual world at any time prior to the agent's doing otherwise, all the way back to the big bang—even if these differences are not explained by the agent's action. After all, why is an action's past history any less part of doing otherwise than its lower-level supervenience base? Determinism would then be compatible with an agent's doing otherwise. In sum, the possible responses to the problem lack independent motivation and can be adapted by critics to show that the argument fails to establish incompatibilism about free will.

⁷ Some philosophers argue that mental events are ‘token-identical’ to their lower-level supervenience bases. However, token identity in this sense is not strict identity but merely spatiotemporal coincidence. Mental events and physical events, despite occupying the same spacetime region, are still distinct because they have different modal properties. The same mental events could occur without being realized by these exact microphysical events (that is the upshot of the argument from multiple realizability).

§6 The Problem of Crowding out

I take Non-fundamentality to show that the No Opportunity argument fails (I will address possible worries in §7 and §8). But I will argue that the argument faces another problem. The problem arises because doing otherwise often is nomologically incompatible with wholly distinct actual events. The No Opportunity argument then entails that you can only do otherwise if doing so would explain the non-occurrence of these events. I will argue that this leads to implausible implications in certain hypothetical cases.

Let us consider an agent who decides not to raise her hand (*D1*) at time *t*. Could the agent have done otherwise and decided to raise her hand (*D2*) at *t*? I make the following stipulations about the case: First, decisions have spatial extensions (for example, because they are realized by brain states) and *D2* would have a larger spatial extension than *D1*. This might be because decisions to perform an action require more energy than decisions to refrain from an action, resulting in a slightly swollen brain. Second, I assume that the agent's brain is fully surrounded by cerebrospinal fluid (CSF), the fluid between brain and skull that cushions the brain. And third, I assume that the laws of this world do not allow the agent's brain and a sufficiently large portion of CSF to exist at the same place at the same time. That is, brains and CSF crowd each other out. This may follow from a general metaphysical prohibition against interpenetration by non-overlapping objects. But I am assuming that this prohibition holds at least given the laws of nature of this world.

The above stipulations entail that any nomologically possible world in which *D2* occurs differs from the agent's actual world in that no CSF is in the region occupied by *D2*. *D2* would take up a larger spatial region than is taken up by the actual decision, *D1*, and the agent's brain is fully surrounded by CSF. Moreover, the agent's brain and the CSF cannot exist at the same place at the same time. So, for *D2* to occur some portion of CSF must be absent from where it is in the actual world.

Premise (1) of the No Opportunity argument says that an agent *S* can only do otherwise if there is a possible world *W** in which *S* does otherwise and "at the very least, everything except *S*'s doing otherwise and any event that depends on *S*'s doing otherwise are the same as in *W*." (Franklin 2018: 72) As just seen, one difference between the actual world and any world with the same laws in which *D2* occurs is that some CSF is not in its actual location. This absence of CSF is not identical to *D2*. So, the No Opportunity argument entails that our agent can only do otherwise if the absence of CSF from the relevant region E-

depends on $D2$, i. e., is either grounded or caused by $D2$.⁸ I will argue that we can interpret the scenario such that this is not the case.

It is implausible that in a world in which $D2$ occurs the absence of CSF is grounded in $D2$. For one thing, there are better candidates for its grounds. Presumably, the absence of CSF from the relevant region is grounded in the fact that all portions of CSF that exist at the time in question are located elsewhere and that there are no other portions. For the other thing, it is unclear whether the relation between $D2$ and the absence of CSF has the right modal profile to count as grounding. Grounding is standardly understood to involve metaphysical necessity (Schaffer 2016: 58). Yet, the principle that two non-overlapping objects cannot be at the same place at the same time arguably is only nomologically necessary. What seems to prevent such interpenetration in worlds like ours are repulsive forces. But the laws governing such forces presumably are itself not metaphysically necessary. And so it seems that there can be metaphysically possible worlds where these forces are much weaker and thus do allow wholly distinct objects to be at the same place at the same time (Sider 2000; see also Gilmore 2018). $D2$'s presence then would not metaphysically necessitate the absence of CSF, and so the relation lacks sufficient modal strength to count as grounding.

This leaves causation. We can certainly interpret the scenario such that in a world in which the agent makes the alternative decision $D2$, $D2$ itself causes the CSF to be gone from the relevant region. In fact, this is the most plausible interpretation. But we can also imagine the scenario such that this is not the case. Assume that the actual world W is indeterministic. In W the agent has certain prior mental states (beliefs and desires) that indeterministically cause her to make decision $D1$. But the same mental states could have indeterministically caused $D2$ instead.

We can then assume that in the world where the agent decides otherwise $D2$'s occurrence does *not* cause the absence of CSF. Instead, what happens is that the prior mental states that indeterministically cause $D2$ also directly cause the absence of CSF from the

⁸ A complication is that the absence of air molecules is not an event but an absence. Premise (1) of the No Opportunity argument is phrased such that the only permissible differences from the actual world are *events* that either are identical to or E-depend on one's doing otherwise. However, we can interpret the premise more liberally such that it applies to differences of any ontological category, including absences. This interpretation is in the spirit of the No Opportunity argument, which is that doing otherwise presupposes a world that is exactly like the actual world except for difference that are identical to or explained by my doing otherwise. After all, it is plausible that absences also can stand in explanatory relations (see Bernstein 2015: 210). My objection that the No Opportunity is too restrictive becomes stronger if I can show that it arises even given this liberal interpretation of the argument's key premise.

region in which *D2* occurs. These prior mental states thus both pave the way for *D2*'s occurrence (by causing any CSF to be gone from the region where *D2* occurs) and also cause *D2* to occur in this region. Finally, I stipulate that it even is nomologically impossible for *D2* to cause the absence of CSF from the relevant region. This prohibition ensures that there is not even a nomologically possible world where *D2* causes the absence of CSF. The world we are imagining is very strange. The agent's prior mental states directly causing the absence of CSF seems to require some weird kind of telepathy. But I maintain that the case is consistent and that it teaches us something important about the No Opportunity argument.

The case is such that (i) the agent's alternative decision *D2* is nomologically incompatible with some actual event, viz., the presence of CSF in the region where *D2* would occur; and (ii) in any nomologically possible world where *D2* occurs, the absence of this incompatible event would not be explained by *D2* itself but would be explained by some earlier event that is a precondition of *D2*'s occurrence. Any nomologically possible world in which the agent makes decision *D2* instead of *D1* is such that no CSF is in the region in which *D2* occurs. Yet, by stipulation, this difference from the actual world is neither grounded nor caused by *D2*. So, the No Opportunity argument entails that our agent *cannot* do otherwise and make decision *D2*. This verdict is intuitively wrong.

None of the stipulated conditions, intuitively, would prevent our agent from doing otherwise. *D2*'s occurrence is nomologically incompatible with the presence of CSF in the relevant region, and *D2* itself cannot overcome this obstacle (since it would neither cause nor ground its absence). But it is still the case that nothing stands in the way of *D2*'s occurrence. After all, the same factors that would bring *D2* into existence would remove this obstacle. The non-deterministic process that causes *D2* to occur also simultaneously causes the absence of CSF from the relevant region.

D2 requires for its occurrence the cooperation of a non-deterministic causal process. For *D2* to occur, the earlier mental states that actually indeterministically cause *D1* need to cause *D2*. But few philosophers would think that this fact poses an obstacle to doing otherwise. In fact, many libertarians maintain that the very fact that in indeterministic worlds the same prior states could have caused different decisions enables rather than hinders the ability to do otherwise (see Franklin 2018: 165–68 and Kane 1996: ch. 8). But if requiring a prior causal process to have a different outcome is not an obstacle to doing otherwise, then the presence of CSF should also not be an obstacle. As just mentioned, the same indeterministic process that causes *D2* also causes the absence of CSF. Nonetheless, the No Opportunity argument counts the presence of CSF as a decisive obstacle to *D2*'s occurrence.

The No Opportunity argument is meant to provide a general requirement for doing otherwise. As such merely hypothetical agents in worlds with strange laws should be as much a test case for the requirement as actual agents. And, as I have argued, the present case shows that some facts are not obstacles to doing otherwise even though they are neither identical to nor E-depend on doing otherwise. Hence, the No Opportunity argument's standards for doing otherwise are too demanding.

§7 The Place of Indeterminism

In the remaining two sections, I want to close two loopholes in my argument that Non-fundamentality and Crowding out are counterexamples to the No Opportunity argument. The first loophole arises from an assumption about what it means for an agent to do otherwise. I have assumed that doing otherwise is wholly constituted of non-actual events. This assumption is very natural. Suppose in W you do not decide to raise your hand at t . It is then natural to think that doing otherwise would simply consist of at t deciding to raise your hand, an event that does not occur in the actual world W .

However, there is at least one important theory of doing otherwise that denies that doing otherwise is wholly constituted by non-actual events. Here is what I have in mind: Consider Robert Kane's (1996, 1999) influential version of libertarianism, which he has developed over a number of publications.⁹ According to Robert Kane, basic free actions are indeterministically caused by a special kind of prior action that he calls an 'effort of will'. Kane (1996: 126) gives the following example of a basic free action where the agent could have done otherwise: Suppose indeterminism is true and Ann is on her way to an important meeting when she witnesses a man being mugged. Ann knows that there are moral reasons to help the man, but she also has reasons for wanting to arrive at the meeting on time. According to Kane's story, Ann then forms two competing efforts of will: she tries to decide to help the man *and* she tries to decide to rush to the meeting. As it happens, her effort to decide to go to the meeting causes her to go to the meeting. But Kane assumes that, given indeterminism, the laws and the past would also have been compatible with her other effort of will causing her to instead help the man. So, Ann was able to do otherwise.

Kane's account of free will seems tailor-made for the No Opportunity argument. Let W be the world where Ann's effort to decide to rush to her meeting indeterministically causes her to rush to the meeting. Kane's account then allows for a world W^* with the same laws

⁹ My presentation of Kane's theory follows Franklin (2018).

and the same past but in which, instead, Ann's effort to decide to help the man causes her to help the man. The crucial factor is that in this world W^* , where Ann does otherwise, the initial stage of her doing otherwise (i.e., her effort of will to help the man) is identical to an actual event. After all, she already forms such an effort of will in the actual world. The world W^* where Ann does otherwise is simply one where the chances play out differently such that her effort of will to try to help the man (rather than her competing effort to get to the meeting on time) indeterministically causes her to help the man. Since the same effort of will occurs in W , it does not require a different supervenience base nor does it crowd out any simultaneous actual events. And all other differences from W are then causally explained by this effort of will.¹⁰ So, if doing otherwise works like Kane envisions, the No Opportunity argument avoids the problems of non-Fundamentality and Crowding out.

However, adopting a Kane-style account of free will would make the No Opportunity argument dialectically ineffective. Kane's account presupposes a very particular metaphysics of free actions that all compatibilists and even many libertarians reject. It supports the No Opportunity argument by placing the following two requirements on basic free actions: (i) every basic free action is indeterministically caused by a prior action, viz., an effort of will; and (ii) for every basic free action, in addition to the effort of will that actually causes it, there is a competing effort of will that could have indeterministically caused an alternative action.

But there is little pre-theoretic reason for thinking that (i) and (ii) are necessary conditions for basic free actions. We do not think that basic free actions invariable need to be caused by a prior action (viz., an effort of will) rather than, say, the agent's reasons. As Franklin (2018: 101) points out: "When reflecting on the phenomenology of directly free choices, it seems that efforts of will are completely absent." And it is even more implausible that acting freely requires the agent to form not one but two, conflicting efforts of will (ibid.: 102–103).

Kane motivates (i) and (ii) by arguing that they help his account solve the 'problem of luck' (ibid.: 94–101). The problem of luck, however, is only arises for libertarians about free will. Hence, this way of motivating Kane's account appeals only to philosophers who are already drawn toward libertarians and so are already committed to incompatibilism. But then there is no reason why Kane's account should be granted as a premise in the No Opportunity

¹⁰ I am assuming, as does Franklin (2018: 143), that indeterministic causes can explain, and so that indeterministic causation counts as as E-dependence.

argument, which, after all, is meant to convince people of the truth of incompatibilism in the first place.

In fact, even many libertarians reject (i) and (ii). Let us take Franklin's (2018: 101–108) own preferred version of libertarianism as an example, which he calls “minimal event-causal libertarianism.” According to Franklin, in a basic free action you have a reason *R1* to make a decision *D1* and a reason *R2* to make an incompatible decision *D2*. It is indeterminate whether *R1* causes you to make decision *D1* or whether, instead, *R2* causes you to make decision *D2*. Suppose in the actual world the former happens. A doing-otherwise-world is then one where *R2* causes you to make decision *D2* instead. So, neither (i) nor (ii) are necessary for free will according to Franklin.

The problems of Non-fundamentality and Crowding out then still arise for libertarians like Franklin because the reasons (*R1* and *R2*) are not part of your action, and so your alternative action, *D2*, differs from your actual action, *D1*, even at the initial moment. Since *D2* does not occur in the actual world, its occurrence in the doing-otherwise-world presupposes a different supervenience base and may crowd out actual events happening at the time. However, none of these differences from the actual world plausibly are identical to or E-depend on *D2*. So, while adopting Kane's account would allow incompatibilists to sidestep my criticism of the No Opportunity argument, the account presupposes a contentious understanding of what doing otherwise requires that compatibilists have no reason to accept. (Proponents of Kane's account, however, may claim it as an additional virtue of the account that it supports the No Opportunity argument.)

§8 Abilities and Time

A second potential loophole concerns the timing of actions and abilities. In stating premise (1), Franklin mentions only a single time-index *t*. However, abilities plausibly have two time-indices. We often distinguish between the time at which an ability is possessed and the time at which it would be manifested if successfully exercised (though see van Inwagen 1983: 72, fn 12). For example, I have in the morning the ability to be in Paris in the evening. The time at which I possess the ability is in the morning. For example, I no longer have it at lunch because the flight would take too long. But the time at which the ability would be manifest, if I successfully exercised it, is in the evening, the time at which I would arrive in Paris.

Does distinguishing the two time-indices affect the No Opportunity argument? Let us look at two different ways of rephrasing premise (1) with the distinction in mind:

(1)* An agent S in a deterministic world W is at time $t1$ able to do otherwise at time $t2$ only if there is a possible world W^* in which **the agent does something at $t1$** that causes S to do otherwise at $t2$, and, at the very least, everything except for the action at $t1$ and any event that depends on it are the same as in W .

(1)** An agent S in a deterministic world W is at time $t1$ able to do otherwise at time $t2$ only if there is a possible world W^* in which **some action-initiating event happens at $t1$** that causes S to do otherwise at $t2$, and, at the very least, everything except for the action-initiating event at $t1$ and any event that depends on it are the same as in W .

The difference between the two statements is that according to (1)* but not (1)** the event at $t1$ that initiates the agent's doing otherwise at $t2$ needs to be an action.

Rephrasing (1) as (1)* is of no help to the incompatibilists. (1)* still leads to the problems with non-fundamentality and crowding out unless the action that leads to the agent doing otherwise in W^* is an actual event. But that, as argued in the previous section, is only plausible given a very specific libertarian theory, such as Kane (1999).

Rephrasing (1) as (1)** seems more promising because it allows even libertarian theories that locate indeterminism prior to the agent's action to avoid my criticism of the No Opportunity argument. Take Franklin's own theory again: you have at time $t1$ both reason $R1$ for raising your hand, and reason $R2$ for leaving your hand down. And, due to an indeterministic process, $R1$ causes you to leave your hand down at $t2$. There is then a possible world with the same laws and the same past before $t1$ at which $R2$ causes you to decide to raise your hand. And all differences between this world and the actual world will be causally explained by $R2$. So, it seems that all incompatibilists have to do is to endorse (1)**.

But (1)** does not have the same intuitive plausibility as (1). (1) is supported by the idea that for you to be able to do otherwise, there needs to be a possible world where everything is the same as in the actual world, except for your doing otherwise and facts explained by it. But the same motivation does not apply to (1)**, which allows that things are otherwise that are not explained by your doing otherwise. Think about the Franklin scenario in the above paragraph. In the possible world where you do otherwise, the chances play out differently such that $R2$ now causes you to raise your hand. But this difference between the doing-otherwise-world and the actual world (viz., that your reasons indeterministically cause one action rather than another) is not explained by your doing otherwise. The fact that $R2$

causes you to raise your hand (rather than that *R1* causes you to leave your hand down) is not explained by you doing otherwise. In fact, explanation runs in the opposite direction.

The problem then is (again) that once we allow differences that are not explained by the agent's doing otherwise, the door is open for the compatibilist to also appeal to such differences. The compatibilist can then claim that you can do otherwise because there is a world where the past is different all the way back to the big bang in which you do otherwise. This difference to the past may not be explained by your doing otherwise, but the fact that in the indeterministic world described above *R2* causes you to raise your hand is also not explained by you doing otherwise. So, being careful about the time-indices of actions is of no help to defenders of the Opportunity argument.

In sum, the No Opportunity argument should be rejected because it puts unreasonably strong requirements on the ability to do otherwise. If its premises were true, then agents in a deterministic world could not do otherwise for reasons that have nothing to do with determinism. Moreover, the only available moves for avoiding this consequence are either ad hoc or could be adapted by compatibilist to reject one of the premises of the No Opportunity argument.

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