

A Rationalist Defence of Determinism

by

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Abstract: Largely due to the popular allegation that contemporary science has uncovered indeterminism in the deepest known levels of physical reality, the debate as to whether humans have moral freedom, the sort of freedom on which moral responsibility depends, has put aside to some extent the traditional worry over whether determinism is true. As I argue in this article, however, there are powerful proofs for both chronological determinism and necessitarianism, forms of determinism that pose the most penetrative threat to human moral freedom. My ultimate hope is to show that, despite the robust case against human moral freedom that can be made without even relying on them, chronological determinism and necessitarianism should be regarded with renewed urgency.

Keywords: determinism, necessitarianism, PSR, moral freedom, free will, moral responsibility

1. Introductory Remarks

THE CLASSIC DOCTRINE according to which humans lack moral freedom, the sort of freedom required for moral responsibility, is Hard Determinism (HD), which in particular claims that certain forms of determinism incompatible with human moral freedom are true. The burden of proof seems to fall on HD, rejecting as it does widespread intuitions. Most of us cannot help but believe, after all, that at least sometimes we act freely, that at least sometimes what we do is *genuinely* up to us – up to us, that is, by not being entirely a function of factors beyond our ultimate control. Most of us cannot help but believe, relatedly, that at least sometimes we can be morally responsible, that at least sometimes we can be *genuinely* deserving of praise or blame – deserving of praise or blame, that is, for the sake of *justice* rather than merely for the sake of pragmatic consequences (such as to protect society or to shape future behaviour). HD, however, rejects both of these cherished beliefs.

So here are two arguments for HD, corresponding to the two most invasive and comprehensive forms of determinism: chronological determinism (CD), typically just called “determinism”, and global determinism, typically called “necessitarianism” (N).

HCD Argument

HCD-1. CD is true.

HCD-2. If CD is true, then humans lack moral freedom.
 Therefore, humans lack moral freedom.

HN Argument

HN-1. N is true.
 HN-2. If N is true, then humans lack moral freedom.
 Therefore, humans lack moral freedom.

Compatibilists and incompatibilists nowadays tend to agree that such arguments fail to undermine human moral freedom. The reason has to do with their first premises. Especially considering the widespread allegation that quantum mechanics has shown the microworld to be indeterministic, it has become natural to regard determinism in its standard form (CD), and determinism in its most global form (N), as untroubling relics of unscientific intuition (see Kane, 2002, pp. 7–9, 27–32). As I argue in this article, however, there are powerful proofs for both CD and N. After laying out my assumptions (section 2), reasoning through my proofs (sections 3 and 4), and responding to objections (section 5), my hope is to show that, despite the robust case against human moral freedom that can be made without even relying on them (see section 5.2), CD and N should be regarded with renewed urgency (see section 6).

2. Points of Clarification

Before exploring the rationales for premise HCD-1 (section 3) and premise HN-1 (section 4), let me clarify my terminology and background assumptions.

First, I use the term “cause” in the broad sense of that which explains why something is the case. I speak, in effect, in the tradition of the great rationalists of the seventeenth century who use the terms “cause”, “explanation” and “reason” interchangeably, and have no problem saying that A entailing B, or A logically implying B, or A providing the full reason or adequate explanation for B, means that A sufficiently causes B. The *cause* of person x being assassinated, for example, need not refer merely to *physical events* (person y pulled the trigger), but also to the motives and thoughts of person y – y’s *reasons* for doing what he did (see Davidson, 1963).

Second, and keeping in mind that I use the terms “being” and “thing” and “entity” and the like in a sense broad enough to encompass every reality (and so even *events* and *properties* and *possibilities*, if they have reality), there are three and only three options when it comes to something, A, obtaining. (1) A is *other-caused*, that is, A is caused by *something nonidentical* to A, that is, A is excreted (whether in time or not) out of some other being (and so exists *ab alio*, from an

other). (2) A is *self-caused*, that is, A is caused *by A itself*, that is, A is excreted (whether in time or not) out of its very own being (and so exists *a se*, from itself). (3) A is *uncaused*, that is, A is caused neither by its own being nor by some other being but rather *by nothing*, that is, A is excreted (whether in time or not) out of nonbeing (and so exists *ex nihilo*, from nothing – from nothing, it is crucial to understand to avoid a common mistake, in a way that does not mean that it is self-caused: sufficient for itself).

Since we can talk about something either in part or in whole, we have six main starting arrangements of these three options. On the assumption that o and t are *essential constituents* of A and that A is *nothing but* o and t, here they are. (1) o is self-caused and t is uncaused, in which case A itself is *uncaused*. (2) o is self-caused and t is other-caused, in which case A itself is *other-caused*. (3) o is uncaused and t is other-caused, in which case A itself is *uncaused*. (4) o is self-caused and t is self-caused, in which case A itself is *self-caused*. (5) o is other-caused and t is other-caused, in which case A itself is *other-caused*. (6) o is uncaused and t is uncaused, in which case A itself is *uncaused*.

Third, the uncaused category is necessarily empty, in which case any arrangement among the six just listed is impossible if it has an uncaused aspect. In section 5.1 I develop a nuanced defence of the principle of which this claim is a corollary: the Principle of Sufficient Reason (PSR), the principle according to which there is a sufficient explanation for why whatever obtains obtains such that all things are either (1) explained by themselves (*self-caused*, *causa sui*) or (2) explained by an other (*other-caused*, *causa aliena*) (see point 2 above). Consider the central argument, however. Lest it collapse into one of the other two categories, to deny that the uncaused category is empty is to say the absurd: that something, x, has reality even though reality – *reality all-things-considered* (and so including x itself) – does not ultimately suffice for x to have reality in the first place (whether the phrase “in the first place” is understood in a temporal sense or not). *Being*, however, cannot be engendered by *nonbeing*. Something cannot be generated from power-bereft metaphysical nothing – from metaphysical nothing, remember, in a way that does not mean that it is generated from *itself*. *Ex nihilo*, that is to say, *nihil fit*: from nothing – which does not have any powers or states or dispositions or laws or potencies or fields or information or implications or energy fluctuations or even lacks (if lacks have being) – nothing comes, nothing is emitted.

Fourth, when it comes to that which is self-caused, that is, that which has in itself the resources for a full explanation of why it is (such that it serves as the whence of its own existence), there are three main starting options. The first two, which especially in the wake of the scientific revolution and its narrowing of the term “cause” we tend to regard as the only two, designate forms of existential bootstrapping where something *engenders itself despite not existing before it is*

engendered – forms of existential bootstrapping that no doubt are egregious absurdities. The third, on the contrary, not only is comparatively anodyne and by no means contradictory in any overt way, but also is manifested in reality (at least according to various philosophers throughout the centuries).

According to the first option as to what is meant by something being self-caused, that which is self-caused is that which exists before it exists in order to cause itself to exist. The first sense of self-causation is absurd since the thing in question is, in effect, existentially and explanatorily *prior* to itself. To evade the boldfaced contradiction of saying that something exists before it exists, one would have to say that the cause and the effect here are nonidentical. But then we are no longer dealing with *self-causation*. One may insist, on the contrary, that we are still dealing with *self-causation* even though cause and effect here are nonidentical. After all, (1) sufficient causation is transitive (see point 6 below) and (2) the cause, A, sufficiently causes the effect, B, and B sufficiently causes A, in which case *A sufficiently causes A*. The problem is that an effect that is *nonidentical* to its sufficient cause cannot be the sufficient cause of that cause. Sufficient causation, that is to say, is *irreflexive when there are genuine steps*. To say that sufficient causation could be *reflexive even while involving genuine steps* is to say that A could sufficiently cause itself by way of sufficiently causing something *nonidentical* to itself, something to which it *should* be identical if it *really is the sufficient cause of A* and if A, *through it, really is the sufficient cause of itself* (see Segal, 2015).¹

According to the second option as to what is meant by something being self-caused, that which is self-caused is that which causes itself to exist at the very same point in time that it comes to exist in the first place. The second sense of self-causation, aside from being unintuitive and superfluous (since the very

1 One may wonder whether the following undermines my claim that an effect that is *nonidentical* to its sufficient cause cannot be the prerequisite sufficient cause of that cause, that is, my claim that sufficient causation is *irreflexive when there are genuine steps*. Imagine two playing cards standing on end but angled to support one another in an upside-down-v position. Since card A being in its position is a cause of card B being in its position, and since card B being in its position is a cause of card A being in its position, it follows by the transitivity of causation that we have a case where cause and effect are identical: card A being in its position is a cause of card A being in its position (see Bernstein, 2005, p. 11). Here is my response. First, realize that card A being in its position is not the *sufficient cause* of card B being in its position. Card A *plus other factors* is the sufficient cause of card B being in its position. Aside from gravitational forces and whatever else, one of the other factors is *card B being in its position*. What we really have, then, is state 1 – namely, card A being in its position plus extra factors (such as *card B being in its position*) – sufficiently causing what amounts to *one and the same thing* as state 1: state 2 – namely, card B being in its position plus extra factors (such as *card A being in its position*). The card example, therefore, is not a case where an effect that is *nonidentical* to its sufficient cause is the sufficient cause of that cause. Instead, we simply have the state in question – call it “state 1” or call it “state 2” (it does not matter since they are the same) – being sufficiently caused by the past, which presumably involves someone setting the cards up.

resources used to pop the thing up at some instant pop up at the very same instant in which the thing has already popped up), is absurd as well upon scrutiny. Consider the first main reason why. Before the thing in question exists either it has the power to bring itself into existence or it does not. If before it exists it has the power to bring itself into existence, then – since actually having the power to do something requires existing – we are confronted with the same absurdity of the first option: the thing exists before it exists. If before it exists it does *not* have the power to bring itself into existence, then we are going to wonder what gave it the power. The power could have come only from itself or from nothing or from some being nonidentical to it (see point 2 above). But the from-itself option would just put the question off one step and the from-nothing option is impossible since nothing comes from nothing (in a way that does not mean that it comes from itself) (see point 3 above). The power in question, therefore, must come from some being nonidentical to the being in question. But then the being in question is *other*-caused rather than *self*-caused. Consider now the second main reason why the second sense of self-causation is absurd. Since what suffices for x guarantees x (see point 5 below), A being the sufficient condition for itself to be at all, which it would be were it self-caused, would make A always already in existence: a necessary-permanent fixture of reality (as Plato describes in several dialogues: see *Laws* 896a1–b3 and *Phaedrus* 245c1ff). In this case, then, it would make no sense to say that it “pops up in time” in the first place. More precisely, and anticipating the third sense of self-causation, it would make no sense to say that it “pops up in time” in the first place at least when the phrase “pops up in time” is regarded as incompatible with being a necessary-permanent fixture of reality.²

2 It may seem that self-causation in time does happen in some (determinism-friendly) sense, as several scholars point out (see LeBuffe, 2018, p. 40; Youpa, 2020, pp. 129–131). In preserving myself from one moment to another, in being there one second at least to contribute to bringing myself about in the next, am I not causing myself from moment to moment across the span of my life? Such “perseverance” or “existential inertia”, however, does not amount to self-causation, upon scrutiny. Throughout the sequence of world states across M 's lifespan, throughout the chain of entirieties of reality at each moment in which M is present, either M is one and the same or M is not. If M is one and the same throughout the sequence, then M is other-caused: for reasons explained in great detail in this article, M is caused, in particular, by the entirety of reality prior to when M first came on the scene. Even if M stays the same throughout the sequence in the dynamism-friendly sense in which a Leibnizian monad stays the same (ever unfolding what was nested inside it from the start), M – and so the whole unfolding – is other-caused. Now, if M is not one and the same throughout the sequence (but rather, for the sake of illustration, is different from one moment to the next), then the first “ M ” on the scene – M_1 – is other-caused (caused by the entirety of reality prior to when M_1 came on the scene) and the second “ M ” on the scene – M_2 – is other-caused (caused by the entirety of reality prior to when M_2 came on the scene) and so on for all the “ M s” down the line.

According to the third option as to what is meant by something being self-caused, that which is self-caused is that which is necessary in virtue of existing by its very definition. The third sense of self-causation, which we might describe as *necessary-eternal* self-causation, amounts to being *causa sui* in the way that God is for Descartes, Spinoza and – on careful interpretation, at least according to Sartre and Heidegger – the classical theists (see Spinoza, 1985, pp. 38–39, 408, 412, 439; Descartes, 1985, p. 310; 1997, pp. 175–176, 213; 2008, p. 34; Cottingham, 1988, pp. 94–95; Schmaltz, 2011; Lee, 2006; Melamed, 2021; Hopkins, 1968, p. 34; Heidegger, 2002, p. 72; Puntel and White, 2012, pp. 78–79, 240). For something to be self-caused in the third sense, that is to say, is for it to be the non-passive and immanent and complete and ultimate *archē* of itself in the sense of *having an essence that* – rather than just *happening* to be instantiated – *all by itself guarantees that it is instantiated*. For something to be self-caused in the third sense, in other words, is for it to be a *such* (sense, character, quality, content) that is intrinsically a *this* in the sense of *having an essence that cannot truly be conceived except as existing* – having an essence that cannot truly be conceived except as existing, however, not merely in virtue of the fact that the being with that essence *just so happens* always already to exist, but rather because that essence *inherently involves existence*. For something to be self-caused in the third sense, to put it one final way, is for it to be explanatorily on *even-footing with itself* in the sense of *existing* – not for no reason whatsoever, but rather – *by the necessity of its own nature*.

The problem with the other two notions of self-causation is that, as Spinoza puts it, “no thing … has in itself a cause enabling it … to make itself (if it does not exist)” (Spinoza, 1985, 147 I/110/13-17). But self-causation in the Spinoza-friendly third sense, according to which the very nature of that which is self-caused guarantees that it cannot fail to exist, does not amount to the manifest contradiction of something having the power to beget itself *even when it does not exist*. Since it honours the fact that nothing can be explanatorily prior to itself, and since it honours the fact that what is self-caused must be a necessary-permanent fixture of reality, and since it honours the fact that nothing has in itself the power to make itself *when it does not exist*, the third option avoids what makes the other two perversions never to be countenanced.

Is the third sense of self-causation a viable notion? There are several things to say here since a lot goes into something being “viable”. (1) For positive reasons – and so not merely because the other two are repugnant – the third sense of self-causation is, upon scrutiny at least, the *only* feasible interpretation of self-causation. Think about it. That which is self-caused exists due to nothing not up to it. Therefore, that which is self-caused must be, as the third option declares, that which exists by its very own nature (an *ens per se*, in the *absolute* sense, and

so an *ens necessarium*, in the absolute sense). (2) By no means is the third sense *empty*, despite the old Kantian worry. After all, there is a major difference between saying something *just so happens* to exist and saying that existence is *intrinsic* to its essence: that which exists by its essence is a *necessary* being that *always already exists*³ (3) To be sure, proving that a concept involves no *inconsistency* – a crucial measure of its viability – can be a tricky matter. But (a) the third sense of self-causation is not contradictory in any *blatant* way and (b) elsewhere I develop several proofs for the claim that the concept is instantiated (see section 4), as Descartes and Spinoza *explicitly* think it is and – since to be self-caused in this third sense is simply to exist in the *a-se* manner of God – as virtually every classical theist *implicitly* thinks it is (see section 5.1 below) (see Pohle, 1911, p. 167; Di Bella, 2005, p. 77; Summerell, 2002; Elders, 1990, p. 153). Consider one quick case, though.

Take reality as a whole. Since there is no reality that is not real, nothing outside of reality is real. Clearly, then, nothing outside of reality explains reality as a whole. At least something, in effect, does not have an outside explanation. That something that does not have an outside explanation is either uncaused or self-caused (see point 2 above). But something cannot be uncaused (see point 3 above). Therefore, that something is self-caused.

Fifth, what is sufficient for o is what guarantees o, such that o obtains whenever what is sufficient for o obtains. After all, what is sufficient for o is what fully explains why o does rather than does not obtain and what fully explains why o does rather than does not obtain is what guarantees o. Look at it this way. To deny that what is sufficient for o is what guarantees o is to deny the following principle: a difference in an effect implies at least some difference in the sufficient cause. To deny such a principle would be to deny the principle of which it is a corollary: the PSR. While the PSR does allow that a sufficient cause *actually produces mutually exclusive results* (cat alive in one universe and cat dead in another), it cannot allow that *both* results are objectively possible (all things considered) and yet only *one* happens in the end (all things considered). For that would mean that the deciding factor for why one happened as opposed to the other would be objectively random: something would be coming from nothing (in a sense that does not mean that it comes from itself), which is impossible (see point 3 above).

3 Yes, the list of what you look for in a romantic partner – *rich, athletic, outgoing* – would typically be exactly the same whether you included *existing* in it or not. I say “typically” because if you included *existing* in the sense that you want your candidate partner to *exist by her very essence*, the list would be *different*. Including existence *in that sense* would mean that you want not just a rich, athletic and outgoing person (and so one, of course, who exists), but a rich, athletic and outgoing person who *always already exists*!

To avoid confusion about the claim that what is sufficient for o guarantees o , consider the following points. (1) The *sufficient condition* for what occurs is not to be confused with the *difference-maker* for what occurs. Despite how people sometimes speak, the sufficient condition for the match lighting is not the match being struck. Besides the match being struck there are other conditions that need to obtain: match being dry, strike-surface being gritty, fan not blowing, oxygen being in the room, or whatever. (2) Some people may think that even though there is a sufficient condition for me pressing the shift key on the keyboard, it was not *guaranteed* that I would press *the specific one I did*: the one on the right. Such a scenario is no counterexample to the claim that what is sufficient for o guarantees o . To be sure, there was a sufficient condition for pressing the shift key *in general*, that is, any shift key. In this case, it was guaranteed that *some* shift key would be pressed. But there was also more specifically a sufficient condition for clicking the shift key on the right instead of the one on the left. The sufficient condition guaranteeing that specific action presumably involves the factors for pressing the shift key in general and also the factors that made the difference for my pressing the one that I did: it is my habit to hit the one on the right; the one on the right was closer to the other key I wanted to press while holding it down; and so on. (3) If q does not guarantee z , then q might do *some work* to explaining why z obtains. However, if q does not guarantee z , then q does not sufficiently explain why z obtains and so is merely a *partial cause*, an *insufficient condition*.

Sixth, *sufficient causation* is transitive. If x suffices for y such that y necessarily obtains whenever x obtains, and if y suffices for z such that z necessarily obtains whenever y obtains, then x suffices for z such that z necessarily obtains whenever x obtains. One might wonder about the following example, though. Imagine that (A) an annihilating asteroid is coming to earth, which in turn causes (B) me to use my one last genie wish to teleport somewhere safe, which in turn causes (C) me to survive. Surely it does not make sense to say, as we would be forced to say if causation is transitive, that an annihilating asteroid coming to earth causes me to survive! Understand, however, that the asteroid example merely undermines the transitivity of *insufficient causation*. Clearly, an annihilating asteroid coming to earth is not *sufficient* for me to use my genie wish. Many other factors, in addition to the asteroid coming, resulted in my using the wish: my wanting to live, my having a genie wish left, my being awake, my knowing about the asteroid, my having oxygen to breathe, or so on. That *sufficient causation* is transitive is unassailable.⁴

⁴ For more on the debate concerning the transitivity of causation, see Maslen (2004), Lewis (2004) and Paul (2004).

Seventh, and to quell one of the central reasons for rejecting the PSR (namely, the purported metaphysical possibility, as well as the purported scientific reality, of uncaused events *that pop up at one intermediate moment rather than another*), it seems that anything uncaused must be a *permanent* fixture of reality, in which case there cannot be uncaused events *that pop up at some intermediate moment* even if by some magic there *are* – in contrast to point 3 above – uncaused realities. For O to be uncaused is for O to obtain even though O lacks a sufficient condition. But what obtains regardless as to whether there are conditions sufficient for it to obtain, what has reality even if reality ultimately fails to suffice for it having reality, must *always already* obtain (as is understood by those who describe God as “uncaused”). Think about it. Surely nothing is stopping O from obtaining. O itself does not stop O from obtaining. If O itself stopped O from obtaining, which would mean that O is self-contradictory, then O could never obtain. But O does obtain. Something other than O does not stop O from obtaining. If something other than O stopped O from obtaining, then O would not obtain. But O does obtain. All things considered, then, O necessarily obtains; O is a permanent fixture of reality.

If it be said, in response, that other factors contributing to O obtaining needed to obtain in order for O to obtain (in which case O pops up *only when* those other factors obtain), then that would mean that O is merely partially uncaused and merely partially other-caused. To say that O is merely partially other-caused and merely partially uncaused is to say that there are factors nonidentical to O merely *inclining* O to obtain – that is, inclining but not ensuring that O obtains – and that *nothing* serves as the difference-making ensurer that O obtains. But either this means (1) that in light of these factors *there is nothing* that serves as the difference-maker for O obtaining, in which case we can simply say that O is fully caused by those factors (and so is *not* merely *partially* other-caused), or else it means, quite strangely, (2) that in light of these factors *nonbeing* serves as the difference-maker for O obtaining, in which case O is fully caused by those factors plus *something* denoted by “nonbeing” (and so is *not* merely *partially* other-caused).

If it be said, in response, that there were sufficient conditions preventing O from obtaining and then the *going away* of those conditions at some point in time allowed O to obtain at some point in time, I would say what Descartes and Spinoza and Leibniz would say: that the going away of those conditions – plus any other relevant factor – amounts to the sufficient condition for O obtaining, in which case O would have a sufficient condition and so not be coming from nothing.

3. Chronological Determinism (CD)

Now that I have clarified my terminology and background assumptions, let us explore the rationale for premise HCD-1, the claim that CD is true (see section 1). First, however, we must get clear on what exactly CD is, distinguishing it from other forms of determinism.

Determinism, in general, is the view that there are conditions jointly sufficient for anything that obtains in a specified domain, such that when those conditions obtain so do as well that for which they are jointly sufficient. Different forms of determinism differ regarding what these conditions are and what the domain is. According to CD, the form of determinism that contemporary metaphysicians typically have in mind in the debates concerning human moral freedom (see Kane, 2002, 38n7 and 28n11), the *past* provides the sufficient condition for whatever is the case in the domain of the future. CD holds, in other words, that the entirety of reality right now (we might picture a domino to represent that entirety) plus, if it makes a difference, the entirety of reality before right now (a series of dominos behind the domino of right now) entails the entirety of reality in the next moment (the domino that follows the domino of right now): what happens before or earlier settles, in effect, what happens after or later. CD, in short, is simply the view that the past guarantees the future.

CD, to be clear, is the view that the not-necessarily-physical past guarantees the not-necessarily-physical future, such that from any moment in time there is only one total way that things can play out from that moment on. What way is that? The way they do end up playing out. CD is the view, in other words, that the state of *everything* – and I mean *everything*: physical, spiritual, eternal, supernatural, or whatever might be real and relevant – at any given moment T entails the state of *everything* at every subsequent moment, fixes the *entirety* of reality at every point onwards. Since CD implies that from the past to the future there is a continuous thread (whether the thread has many branches or not: see point 5 in section 2), the best way to put it is as follows. CD is the view that the past guarantees that any future that *does* play out *does* play out (however many futures there may be)⁵ and that any future that does *not* play out does *not* play out.

5 Perhaps just as much as people fail to see that CD is compatible with the falsity of physicalism, people also fail to see that CD is compatible with many possible futures playing out. Imagine, to use a many-worlds interpretation of the Schrodinger's cat scenario, that there can be a situation where time T is a sort of *branch point*, a point where a cat in a closed box is both dead and alive, but where the alive cat belongs to one branch of the universe forking from T and the dead cat belongs to another branch of the universe forking from T. If what is going on in the entirety of everything at time T is sufficient for the opening of such branches, then that is consistent with CD. But although CD is compatible with a multiple-forking-branches situation where all branches actually occur, CD is not compatible with an objectively-possible-forking-branches situation where, for example, only one branch actually occurs. CD

Even as encompassing as it is, CD – the first premise of the HCD Argument – is an intuitive doctrine, as Proof A makes clear.

HCD-A-1.1 The entirety of reality at any given moment sufficiently causes the entirety of reality a split second into the future. (See Proof B for CD, especially premise HCD-B-1.2, for more on this seemingly trivial point.)

HCD-A-1.2 Sufficient causation is transitive. (See point 6 in section 2.)

Therefore, the entirety of reality at any given moment sufficiently causes the entirety of reality at every subsequent moment.⁶

Proof B is a more involved argument for CD.

HCD-B-1.1 There is a sufficient cause for why any future that does play out from the entirety of reality, the state of everything, at any given time T does play out.

Rationale: There is a sufficient cause for whatever is, a complete explanation for why what occurs occurs (see point 3 in section 2 and section 5.1). There is a sufficient cause, therefore, for why any *future* that does play out from the entirety of reality at any given time T does play out. (From here on, let us abbreviate “the entirety of reality at T” or “the state of everything at T” as simply “x”.)

HCD-B-1.2 If there is a sufficient cause for why any future that does play out from x does play out, then the sufficient cause is provided by x – or, if it bolsters my case (although I will not regularly repeat it), by the entire history of absolutely everything up to and including x.

Rationale: If the sufficient cause for why any future that does play out from x does play out is not provided by the past, which includes *absolutely everything* in reality in that past and so even everything atemporal or necessary or permanent (God or whatever else), then what else could be involved aside from what is already included in or explained by such a broad past? After all, backwards causation seems to be a nonstarter and even cases of

says that there is a sufficient reason for why the one played out as opposed to the other, in which case there were not *actually* many possible forking branches in the first place (only at best *counterfactually* many possible branches in the sense of “the subsequent conditions would have been different had the antecedent conditions been different”).

6 When I talk of “HCD-A-1.2”, for example, I am referring to the second premise in the A-defence of premise 1 of the HCD argument. So later, when I lay out my third proof for CD (Proof C), it should be clear what, say, “HCD-C-1.4” refers to: the fourth premise in the C-defence of premise one of the HCD argument.

concurrent causation – the ball at T (cause) and the pillow dent at T (effect) – are typically caused by what came before: someone putting the ball on the pillow. (For a thorough explanation as to why nothing else could be involved, see the discussion at the end of Proof B.)

HCD-B-1.3 If the sufficient cause is provided by x, then x guarantees that any future that does play out from x does play out.

Rationale: What is sufficient for something guarantees that something (see point 5 in section 2). So if x provides the sufficient cause for why any future that does play out from x does play out, then that just means that x guarantees that any future that does play out from x does play out.

HCD-B-1.4 If x guarantees that any future that does play out from x does play out, then CD is true.

Rationale: If x guarantees that any future that does play out from x does play out, then that means that the state of everything at *any* given moment guarantees the state of everything at every subsequent moment. After all, x is the state of everything at *any arbitrary* moment.

Therefore, CD is true.

The above rationale for HCD-B-1.2, the claim that there is a sufficient cause for why any future that does play out from x does play out only if the sufficient cause is provided by x, is by no means definitive. Before I shift to another proof for CD, then, we need to rule out any potential HCD-B-1.2-undermining candidates. What candidates might there be? The only hope, so at least one might think at first glance, is that the future in question, either in whole or in part, is one of the following: uncaused, self-caused, caused by something outside of time, or caused by some portion of the future in question. As I will show one by one, each fails to undermine HCD-B-1.2 for one reason or other.

The first three options obviously fail to undermine HCD-B-1.2. (1) The future in question, either in whole or in part, is not *uncaused* in such a way that violates HCD-B-1.2. After all, nothing is uncaused to begin with (see point 3 in section 2 as well as section 5.1). Besides, even if there were something uncaused, it would be a necessary-permanent fixture of reality (see point 7 in section 2) and so x would already “cut into” or “capture” it; it would already be included in, that is to say, the broad past operative here. (2) The future in question, either in whole or in part, is not *self-caused* in such a way that violates HCD-B-1.2. The only viable sense of self-causation – namely, being necessary in virtue of having an

essence that involves existence (see point 4 in section 2) – presumably does not apply here since we are talking about something causing itself merely at a *certain intermediate moment of time*. But even if the viable sense of self-causation does apply here, HCD-B-1.2 still stands. For then the future in question would be a necessary-permanent fixture of reality and so would already be included in the broad past operative here. (3) The future in question, either in whole or in part, is not caused by something outside of time in such a way that violates HCD-B-1.2. If it were caused by something outside of time, then it would be caused by something already included in the broad past operative here.

The fourth option – namely, that the future in question, either in whole or in part, is caused by some portion of the future in question – takes a bit more discussion. Upon scrutiny, however, it does turn out that the future in question, either in whole or in part, is not caused by some portion of the future in question in such a way that violates HCD-B-1.2. Since none of the other options (uncaused, self-caused, caused by something atemporal) work, to resist saying that the portion in question is included in or explained by the past, our only hope is to say – in what amounts to reapplying the fourth option – that the portion in question (call it “p”) is caused by *something else* (call it “s”) *in the future in question*. There are several problems with going down such a path.

If the portion in question, p, causes the *whole* future in question, then p obviously causes s, that which causes the portion in question. But then we have a situation where the effect of its own nonidentical cause is the very cause of that cause, a causal loop scenario in violation of the fact that causation is irreflexive when there are genuine steps (see point 4 in section 2).

If the portion in question, p, does not cause the whole future in question, then in the least we are off on an infinite causal regress. For then s, that which is supposed to cause p, is caused by *something else* in the future in question – something else that must be, of course, *in the future in question* (lest we fall back into one of the other dead-end options: uncaused, self-caused, caused by something atemporal). But even if we allow, as the causal regress at hand requires, that there are *actual infinites* (which is itself a contentious matter among mathematicians and philosophers),⁷ actually infinite *causal regresses* appear to be impossible. Consider, for example, the following Angel Paradox.

Imagine that at each prior cause there is a unique angel that will blow its horn if and only if no angel at any prior cause already blew its horn. Now, pick any one of these causes, Cn. A horn is blown at a cause prior to Cn and so not at Cn. For a horn would have been blown at a cause prior to Cn if a horn had not been blown at a cause even prior to that. In other words, an angel at *Cn-1*

7 For arguments against actual infinites, see Mückenheim (2020), Van Bendegem (2012) and Salanskis (2016).

— a cause prior to C_n — would have blown its horn if no angel at a cause prior to C_{n-1} already blew its horn. But now we land in contradiction. Since a horn is blown, a horn is blown at a specific cause. That cause, of course, can be described as C_n (C_n being, after all, any arbitrary moment). For reasons just explained, though, no horn is blown at C_n . So a horn is blown at C_n and yet no horn is blown at C_n . We land in such contradiction by supposing that the chain of causes recedes to infinity. The contradiction goes away if the chain has a first member. For in this case the angel at the first cause blows its horn and all the rest of them do not blow their horns.

For an additional reason why causal infinitism seems impossible, consider the Captain Howdy Paradox.

Imagine that during the witching hour Pazuzu does a palm dance to see if he is going to possess Regan MacNeil: he is inside Regan if and only if his palms are forward at the end of the series; he is not inside Regan if and only if his palms are backward at the end of the series. At 3am his right hand is level with his chin and his left hand is down at his waist, both hands *palm-forward*. At 3:30am he switches to a palm-back position. At 3:45am he switches to palm-forward. He continues switching at every halfway mark, flipping his hands instantaneously (as a deity could) such that the end of the dance cannot culminate in his palms being somewhere in-between being palm-forward or palm-backward. Now, since there is a later moment where palms are backward for each moment where palms are forward, it is absurd to say that he is inside Regan at the end. And since there is a later moment where palms are forward for each moment where palms are backward, it is also absurd to say that he is not inside Regan at the end. In the worst case, then, Pazuzu is somehow both inside Regan and not inside Regan at the same time and in the same respect: a contradiction. In the best case, the series simply does not decide the final state: whether Pazuzu is or is not inside Regan is not settled by progressing through the series. Even though the best case avoids contradiction, it still admits that there cannot be a regress of causes for an effect. Think about it. Either a final state never comes about or a final state does come about. If a final state never comes about, then that amounts to admitting that there cannot be infinite regress of causes for an effect. If a final state does come about, then that amounts to admitting that there cannot be an infinite regress of causes for an effect. For assuming the best-case scenario (namely, that a final state is not settled by the series), a final state comes about only if that final state is *uncaused* and so *not caused in any way by the series*.⁸

There are independent ways to establish the point as well. Consider p and s again. p , recall, is a portion of the future in question—a portion that is supposed to cause the future in question. s , recall, is also a portion of the future in question—a portion that is supposed to be nonidentical to p and that is supposed to cause p . Now, s is either (1) in the *past* relative to p , (2) in the *future* relative to p , or (3) in the *present* relative to p . Aside from the infinite regress worry that plagues each of these three options, there are additional problems specific to each. If s is in the *past* relative to p , then obviously that is no threat to HCD-B-1.2. HCD-B-1.2 is the claim, after all, that the past provides the sufficient cause for the future. If s is in the *future* relative to p , then we have a case of backwards causation. But since what causes something else must already have being to cause

⁸ For recent discussion on these sorts of paradoxes, see Koons (2014), Manchak and Roberts (2016) and Pruss (2018).

something else, it is absurd to say that what is yet to have being causes what already has being. If *s* is in the *present* relative to *p*, then we have in place a regress of *concurrent* causes. Such a regress, even independent of the above reasons against causal infinitism altogether, must have a prime member (for reasons well articulated by Aquinas and Scotus). Unlike a “horizontal” series where each intermediate cause does not rely directly on its predecessor being present for it to bring about its successor (in which case, to give an everyday illustration, the dye still turns the hair blue even if we now delete the hand that put it in the hair), here we are dealing with a “vertical” series where each intermediate cause relies directly on its predecessor being present for it to bring about its successor (in which case, to give an everyday illustration, the ring that suspends the punching bag no longer suspends the punching bag if we delete the rings – the suspended suspenders – above it). Since the cause of any effect in a *vertical* series is a cause of that effect only in virtue of its being concurrently caused by all the prior members, there must be a source of oomph if there is even to be a given effect – a source that has its power at least in the *relatively built-in* way of battery-powered items. But here is the key point. Since the vertical series in question cannot have any outside explanation (lest it collapse into one of the earlier categories), its source must be *completely nonderivative*, must have its power in an *absolutely built-in* way, and so must be – since nothing is uncaused – self-caused, having an essence that involves existence. But in having an essence that involves existence, that source would be a necessary-permanent fixture of reality and so would be already included in the broad past operative here.⁹

To rope several of the above points of discussion together, consider Proof C.

- HCD-C-1.1 Whatever unfolds from any arbitrary moment – 10,000 years ago from right this second, say – will have a sufficient cause for why it unfolds exactly as it does. (See point 3 of section 2 and section 5.1.)
- HCD-C-1.2 Since whatever unfolds from the moment in question has a sufficient cause for why it unfolds exactly as it does (see HCD-C-1.1), whatever unfolds from the moment in question is not uncaused.
- HCD-C-1.3 Since whatever unfolds from the moment in question is not uncaused (HCD-C-1.2), and since there is no option other than something being either self-caused, uncaused, or other-caused

⁹ Might there be ways out of such difficulties if we shift our A-theory talk of “past and future” to B-theory talk of “earlier and later”? Well, what is earlier and what is later is timeless and so already included in the broad past operative here if what is earlier does not amount to what is past and what is later does not amount to what is future.

(see point 2 in section 2), whatever unfolds from the moment in question is either *other-caused* or *self-caused*.

HCD-C-1.4 If whatever unfolds from the moment in question is *other-caused*, then CD is true.

Rationale: The only viable *other* to whatever unfolds from the moment in question is the entirety of what was going on *before* the moment in question, in which case whatever unfolds from the moment in question is guaranteed by what came before (see rationale for HCD-B-1.2). Since the moment in question is any arbitrary moment (see HCD-C-1.1), it follows that CD is true if whatever unfolds from the moment in question is other-caused.

HCD-C-1.5 If whatever unfolds from the moment in question is *self-caused*, then CD is true.

Rationale: If whatever unfolds from the moment in question is self-caused, then whatever unfolds from the moment in question exists by the necessity of its own nature (see point 4 in section 2). If whatever unfolds from the moment in question exists by the necessity of its own nature, then not only does whatever unfold from the moment in question unfold according to the necessity of its own nature and so deterministically (each state guaranteeing the next), but also – and most importantly – whatever unfolds from the moment in question is a necessary-permanent fixture of reality (see point 4 in section 2). If whatever unfolds from the moment in question is a necessary-permanent fixture of reality, then whatever unfolds from the moment in question is already included in the broad past operative here. Since the moment in question is any arbitrary moment (see HCD-C-1.1), it follows that CD is true if whatever unfolds from the moment in question is self-caused.

HCD-C-1.6 Even if – by some magical violation of premise HCD-C-1.2 – whatever unfolds from the moment in question is *uncaused*, then CD is true.

Rationale: If whatever unfolds from the moment in question is uncaused, then whatever unfolds from the moment in question is a necessary-permanent fixture of reality (see point 7 in section 2). If whatever unfolds from the moment in question is a necessary-permanent fixture of reality, then whatever unfolds from the moment in question is already included in the broad past operative here. Since the moment in question is any

arbitrary moment (HCD-C-1.1), it follows that CD is true if whatever unfolds from the moment in question is uncaused (unless one of the six CD-undermining claims below in Proof D – claims A through F – is true).

Therefore, CD is true.

To prepare for a final defence of CD, note that any one of the following claims would undermine CD.

- (A) At some intermediary moment in the historical chain there can be either self-caused happenings (events excreted out of themselves and yet are not always already in existence) or uncaused happenings (events excreted out of nonbeing and yet are not always already in existence).
- (B) What is sufficient for something need not guarantee that something.
- (C) There is a chain of moments greater than just two and yet sufficient causation need not be transitive.
- (D) Nothing brings anything about, in which case everything is uncaused.
- (E) There can be a genuinely future-caused (or later-caused) happening, that is, a happening caused by a future (or later) happening that is itself neither included in nor explained by the past (or the earlier).
- (F) Time is unreal even in the sense that there is no earlier than and later than, no before and after.

Since CD says that the future is fully excreted out of the past, CD is false if – as claim A says – at some intermediate moment in the historical chain either something pops up out of nothing rather than out of the past (in short, an *uncaused event*) or something pops up out of itself rather than out of the past (in short, a *self-caused event*). Since CD says that the past suffices for and thereby guarantees the future, CD is false if – as claim B says – what suffices for something does not guarantee that something. Since CD says the state of everything at any given moment sufficiently causes the state of everything at each subsequent moment, CD is false if – as claim C says – there is a chain of moments greater than just two and yet sufficient causation is not transitive. Since CD says that the past brings about the future, CD is false if – as claim D says – nothing brings anything about. Since CD says that the past sufficiently causes everything in the future, CD is false if – as claim E says – an event can be caused by a future event that is not itself included in or sufficiently caused by the past. Since CD says that the past (what comes before or earlier) guarantees the future (what comes after or later), CD is false if – as claim F says – there is neither past and future nor before and after.

To encapsulate these points, consider finally Proof D.

HCD-D-1.1 CD is false only if at least one of the following claims is true: A, B, C, D, E, F.

Rationale: Any supposed seventh way for CD to be false is presumably reducible to one of these six. (According to libertarianism, for instance, premise HCD-2 – the incompatibilist premise of the HD argument – is true and humans have moral freedom, in which case CD must be false. But incompatibilism being true plus humans having moral freedom does not amount to some *seventh* way for CD to be false. Claim A, after all, is the typical ground for the libertarian stance.)

HCD-D-1.2 Each claim – A, B, C, D, E, F – is false.

Rationale: Each of these claims is, first of all, extremely counter-intuitive. For why A is false, see points 3, 4 and 7 in section 2 as well as section 5.1. For why B is false, see point 5 in section 2. For why C is false, see point 6 in section 2. For why D is false, see point 3 in section 2 (in addition to the fact that I brought about this article and my parents brought about me). For why E is false, see the rationale for HCD-B-1.2. For why F is false, consider the following. That change occurs at least secures that there is before and after, earlier than and later than. And change definitely does occur: the tea cools, the boulder rolls, the lake evaporates, the dog dies. Even if you are in some brain-in-a-vat-matrix scenario, you are having one experience and then another. As you go through each step even of an argument designed to prove that change is an illusion, change is occurring. Indeed, if your argument succeeds in changing the minds of other people, then it cannot be sound (precisely because it succeeds in doing so).¹⁰

Therefore, CD is true.

The drawback of Proof D, of course, is that there might be unforeseen ways in which CD could be false, ways irreducible to the six listed. Going through the

10 One might argue that such changes happen all at once, as we would see from the standpoint of eternity. (Admittedly, that such changes happen all in an eternal instant seems reasonable if CD is true – especially if the buckstopping source of the chain itself exists by the necessity of its own nature, as I argue is the case in my forthcoming article “A Cosmo-Ontological Case for the God of Classical Theism”. After all, CD says that the earlier guarantees everything later and it seems quite natural to say that what is *strictly* guaranteed by x obtains *right when* x itself obtains.) But even if everything unfurls in an eternal instant, that is not incompatible with the eternal-*earlier* (what we call “the past”) guaranteeing the eternal-*later* (what we call “the future”).

argument, nevertheless, makes explicit the intuitive assumptions fuelling CD and might open up avenues to attack even the more substantial proofs on which I rest my case: Proof B and Proof C.

4. Necessitarianism (N)

Now that we have examined several proofs for premise HCD-1, let us explore the rationale for premise HN-1, the claim that N is true (see section 1). First, however, we must get clear on exactly what N is, distinguishing it from other forms of determinism.

Determinism, recall, is the view that there are conditions jointly sufficient for anything that is the case in a specified domain. According to N, an all-encompassing form of determinism that rules out the possibility of indeterminism at any level while not even relying on the reality of time, there are conditions jointly sufficient for anything that is the case – period, which is why it is appropriate to call it “*global* determinism”. According to N, in other words, there is a sufficient condition for whatever obtains (including that sufficient condition itself) and the sufficient condition for whatever obtains guarantees whatever obtains, in which case whatever obtains is necessary. Since either there is or there is not an *ultimate* sufficient condition for whatever is the case, there are two forms of N. According to conditional N (CN), which is rarely endorsed because of the infinite regress worries it invites, there is no *ultimate* sufficient condition even though there is a sufficient condition for whatever obtains (ad infinitum). According to absolute N (AN), which is N in its strong sense, there is an *ultimate* sufficient condition for whatever obtains.

Consider Proof A for AN – in particular, for the view that whatever is non-ultimate, that is, whatever fails to exist by the necessity of its own nature, is sufficiently caused by that which is ultimate (see points 2–4 in section 2). Consider, in other words, a proof for the view that there is an ultimate reality, a self-caused and so absolutely necessary reality, that provides the determining condition for itself and whatever else there may be.

- HN-A-1.1 The sufficient explanation as to why the totality of absolutely everything is the way that it is (as opposed to some other way) is provided either (1) by nothing, (2) by something beyond the totality, or (3) by something not beyond the totality. In other words, the totality of things is either uncaused, caused by something outside of it, or caused by something not outside of it (see points 1–3 in section 2).
- HN-A-1.2 The totality is caused by something not outside of it, which means either that the totality as a whole sufficiently explains the totality or that some part of the totality sufficiently explains the totality.

Rationale: Since nothing is uncaused and since there is nothing outside of the totality of absolutely everything (see point 3 in section 2), the first two options listed in HN-A-1.1 are ruled out. (And even if the first of these two were still in play, that is, even if the totality were uncaused, it would be a necessary being (for reasons described in point 7 in section 2). In this case, N in some form would follow anyway.)

HN-A-1.3 Some part of the totality sufficiently explains the totality.

Rationale: The totality *as a whole* does not sufficiently explain itself – sufficiently explain itself, that is, in a way incompatible with merely some part of the totality sufficiently explaining the totality. For the totality as a whole sufficiently explaining itself would mean that each being – including cups and cars – is the sufficient cause of itself, which is false (see point 4 in section 2). (And even if the totality as a whole explains itself, AN still follows. For whatever has reality, whether it be merely the basic simples of mereological nihilism or even composite things like cars and cups, would be self-caused in this case.)

HN-A-1.4 Nothing beyond the totality sufficiently explains the part that sufficiently explains the totality.

Rationale: Nothing is beyond the totality since the totality is the totality of *absolutely everything*.

HN-A-1.5 No other part within the totality explains that part, that part that sufficiently explains the totality, in which case that part is self-caused: it sufficiently explains itself.

Rationale: To say that the mere part that sufficiently explains the totality is itself sufficiently explained by some *other* mere part is to say the absurd: that the *nonidentical* effect of the sufficient cause is itself the sufficient cause of that cause (see point 4 in section 2). (Even if by some magic it is not absurd to say that the mere part that explains the totality is sufficiently caused by some other part to which it is not identical, then by the transitivity of sufficient causation the mere part in question would be self-caused anyway, which is precisely the point here.)

Therefore, the part that sufficiently causes the totality is self-caused, that is, the part that provides the determining condition for the totality provides the determining condition for itself.

Proof A is straightforward. Since the totality is sufficiently caused by something not outside of it, either the totality as a whole is self-caused or some part of

the totality that sufficiently explains the rest of the totality is self-caused. The totality cannot be self-caused as a whole because that would mean that each thing is self-caused, which is false (and would entail AN anyway even were it not false). Hence some part of the totality must exist by the necessity of its own nature. Since that part sufficiently explains the whole (in which case that part is the ultimate cause of everything else), the necessity of that part transfers to everything else and AN is true.

Consider finally some versions of Proof B for AN.

Version 1: Assume that R is the collection of *all* things not self-caused. Now, there must be a sufficient reason for R – a reason for each part of R and for why R obtains as opposed to some other collection. Suppose that S provides the sufficient reason for R. Either S is self-caused or S is not self-caused. To suppose that S is not self-caused entails a contradiction. After all, since S would be self-caused were it beyond R, the only hope for S not being self-caused is that S is either R itself or some part of R. But since S provides the sufficient reason for R, S provides the sufficient reason for itself no matter whether S is R itself or some part of R. That which provides the sufficient reason for itself, however, is that which is self-caused. The absolute necessity of S, which it has since it exists by the necessity of its own nature, transfers over to that which it sufficiently explains: R and everything that makes up R. (And even if by some magic there is no sufficient reason for R, N would still apparently follow for reasons described in point 7 in section 2.)

Version 2: To explain why the whole collection R obtains, it is not good enough even to explain why *all* the specific parts obtain *if that explanation merely refers to other members of that collection*. If the explanation for why each part obtains involves only other parts of R, further explanation is needed to explain why the whole of R obtains. Unless, say, the parts are each individually necessary in virtue of being self-caused or unless, say, just one part is self-caused and serves as the full explanation of the whole (neither of which is being granted here given the definition of R), we must appeal to something beyond those parts in order to explain the whole.¹¹ Since we must appeal to something beyond the parts of R in order to explain R, S cannot be one of the parts of R. So that leaves

11 The full explanation for the collection of five apples, for example, is not going to involve nothing more than the apples themselves (unless, say, each apple is self-caused or unless, say, one apple is the self-caused full explanation for the rest of the collection). Instead, the full explanation is going to appeal to what is outside the collection: *nonapple Jake* brought these three apples and *nonapple Maggie* brought the other two. Explaining why every other-caused item is there may very well suffice, in other words, for explaining the whole collection – *so long as the explanation involves more than just the items of the collection*. But further explanation is needed to explain a collection if – unlike in the apple scenario – the explanation for the existence of each other-dependent part involves *only other parts of that collection*.

only two options: S is outside of R, which means that S is self-caused (being that R is the collection of everything that is *not* self-caused), or S is R itself, which also means that S is self-caused (because S would be providing the full explanation for itself in providing the full explanation for R). As the full explanation for R, S's necessity (which is a function of it being self-caused) transfers to R and each member of the collection. (And even if by some magic there is no full explanation for R, N would still apparently follow for reasons described in point 7 in section 2.)

Version 3: Even if it is merely *metaphysically possible* that R has a sufficient explanation, which is a much more modest claim than that R *definitely has* a sufficient explanation, it follows from the reasoning in versions 1 and 2 of Proof B that it is at least metaphysically possible that there is a self-caused explanation, in which case there is a self-caused explanation for R at least in one “possible world”. But if there is a self-caused explanation for R at least in one “possible world”, then there is a self-caused explanation for R in every “possible world”. For what is self-caused is what exists by the necessity of its own nature and so is an absolutely necessary being. (And even if by some magic it is not metaphysically possible that R has a sufficient explanation, N would still apparently follow for reasons described in point 7 in section 2: R would be, in fact, the brute of brute necessities.)

5. Objections and Replies¹²

5.1 Objection #1: PSR is false and so CD and N are false

The central way to attack CD and N, so goes the typical thought, is to raise concerns, such as those that follow, about the principle that appears to be their

12 Some objections to CD and N are too trivial to consider, however widespread they may be. Some say, for example, that CD cannot be true because it would imply the following positions: we cannot make choices and are merely passive; there can be no novelty; there is no point trying to change things since we cannot influence the future (see Cosculluela, 1992). Consider the following quick responses. (1) We move *actively*, that is, because we want to and choose to, even if CD is true: a determined want is still a want and a determined choice is still a choice. (2) Different parts of the unfolding of nature can interact in such a way that novelty comes about even if CD is true. My walking to the blackboard is part of one causal chain in the grand causal chain and the student sticking out her foot as I pass is part of another causal chain in the grand causal chain. The tripping that results is not only itself rather novel (that never happened before), but the blow to the head provokes me to invent a new phone app. (3) There is a point in trying to change things even if CD is true. After all, my influence can be one of the factors in bringing about the change. CD does not say that our actions and choices are irrelevant to what becomes of us. CD is not the same as fatalism: the view that no matter what goes on – no matter what we do or think, no matter what influences enter into our lives – our futures are fixed. Our futures are fixed, according to CD, precisely *by* what goes on, in which case it does still make sense for us to strive, for example, for social change.

lifeblood: the PSR. First, proof for the PSR itself needs to be given. Second, the PSR is false anyway. Uncaused events, after all, are logically possible. We can imagine, for example, a potato popping up from nothing. Third, quantum mechanics holds that uncaused events happen (see Kane, 2002, p. 8; Davies, 2005, p. 7). Obviously, if things pop up in time without any objective sufficient explanation, if certain particles emerge from nonbeing (so-called “virtual particles”, for example), or if energy surges out of metaphysical nothingness, then the PSR is false. Here is how such a picture might look, in terms of two scientific examples.

- (1) Assume that the past up to and including the state of physical reality at T1 makes it such that there is merely a 75% probability that a certain particle will move exactly the way that it does a split-second later. In this case, the past up to and including the state of physical reality at T1 sets up the odds and objective randomness settles the matter.
- (2) Assume that we have two exactly similar entirieties of reality, both of which have a uranium atom in a certain condition at moment T. Because of the nature of the radioactive decay of uranium, it is possible for the atom to be there a split-second later in the one realm and yet not be there in the other realm without any sufficient reason for the difference.

Fourth, it is standard for philosophers to describe God as uncaused and it is currently fashionable for philosophers to buttress their theories with brute facts. Are we to believe that all these philosophers are so deeply misguided? Fifth, and for the very reason pointed out in section 4, saying that the uncaused category is necessarily empty leads straightaway to a vertiginous reality where everything is necessary (see McDaniel, 2019; Bennett, 1984, p. 115; Van Inwagen, 1983, pp. 202–204). Despite being virtually unavoidable even for advocates of N, everyday claims about how things could have gone – “you could have left earlier to avoid traffic” – make no sense in such a modally-collapsed reality.¹³ Since the PSR is less intuitive than the idea that things could have been otherwise, why not simply abandon the PSR to avoid the horror of N?

Here are some responses to the first part of the objection. (1) My proofs allow that there could be uncaused realities and so allow that the PSR could be false. For reasons mentioned in point 7 in section 2, it seems that z being *uncaused* entails that z is a *necessary-permanent* fixture of reality. But for reasons mentioned as side points in several of my proofs, allowing a necessary-permanent fixture of reality is compatible with CD and N. Indeed, even if there could be

¹³ I thank an anonymous referee for pointing out that modal talk seems to become nonsense if N is true.

something that pops up *in time* uncaused and is *not* always already in place, *CD* at least could still be true. After all, the past guaranteeing the future is compatible with there being a *first* moment (since that moment would not itself be a *future* in need of being caused by the past). So if the state of everything at the first moment is *uncaused*, then that is compatible with *CD* (since *CD* simply says that the past guarantees the *future*). (2) Proof for the *PSR* was supplied (see point 3 in section 2; see also Della Rocca, 2010; Pruss, 2006). To deny that everything has a sufficient explanation is to say the absurd: that being can come from nonbeing; that *x* can have reality even though reality – reality all-things-considered – is ultimately not enough for *x* to have reality. (3) In demanding that proof be given for the *PSR*, the opponent is demanding that a sufficient reason be given for the *PSR*. The opponent thereby seems to assume that for something to be the case – in this case, that the *PSR* is true – there must be a sufficient reason why it is the case. In short, the opponent seems to concede that the *PSR* is true. (4) In a similar self-undermining gesture, opponents of the *PSR* who say that its advocates fail to give a sufficient reason for why the *PSR* is true thereby hold advocates to a standard that the opponents themselves reject: the standard that the *PSR* is true. (5) Relatedly, those who oppose the *PSR* through *argumentation* attempt to give a sufficient reason why it is false, thereby seemingly endorsing it in opposing it. Any argument against the *PSR* tries to give a sufficient reason for rejecting the *PSR* and so seems to assume that for something to be the case – in this case, that the *PSR* is false – there must be a sufficient reason why it is the case. (6) The *PSR* is so basic that one can try to prove it only by appealing to evidence equally evident as or less evident than the *PSR*. (7) Explanations that rely on getting something from nothing are empty. For example, imagine that the punching bag being off the floor is explained by its chain being connected to a rod off the floor, but that there is no objective explanation – not just that we do not *know* the explanation – for why the rod itself is off the floor. Since the rod's being off the floor in the first place lacks a sufficient explanation, the explanation as to why the punching bag is off the floor – namely, that its chain is connected to that rod – is empty. (8) In addition to the fact that everyday things have explanations and behave in ways both intelligible and expected, to suppose that the *PSR* is false would undercut philosophy and science, which attempts to uncover the intelligibility of reality and which bears many fruits by supposing that the *PSR* is true.

Here are some responses to the second part of the objection. (1) When you imagine a potato popping up in the room, you are imagining a situation where you simply do not see the full cause. You are not imagining a potato coming from nothing. After all, you cannot even imagine *nothing* – nothing in the true sense: not empty space or a vacuum or blackness or potentialities or field forces or a sea of fluctuating energy, but rather absolute nonbeing. Even if imagining

nothing were *not* required for imagining something truly coming into existence out of nothing, imagining something coming into existence out of nothing would at least require doing what is beyond our reach: namely, imagining as absent every possible sort of cause for that thing – including, and this is the nail-in-the-coffin point, causes for that thing *that we could not even imagine* (Pruss, 2009, p. 48). (2) We would not assume that a potato popping up out of thin air is a case of the potato *coming into existence* in the first place. We would assume, instead, that it was *transported* somehow – say, by teleportation. (3) If there is any sense to saying that we can conceive of a potato popping into existence out of nothing, then we must mean that we can conceive of a potato popping into existence *without a cause*. But conceiving of a potato popping into existence abstracted from any cause is not the same as conceiving of it *as* literally uncaused, that is, *as having no cause*. (4) Besides, and especially in light of the fact that a true conception of something being uncaused is a conception of a permanent being (rather than something popping into existence at some intermediate moment) (see point 7 in section 2), we should question whose power to conceive is being appealed to here. A statement that is necessarily true might be conceived as false by Willy the Wino, but that does not mean that it is possible for that statement to be false. (5) Even if something coming into existence from nothing were truly conceivable (that is, within our ability to form a clear idea of), that might not guarantee that it is logically possible (that is, involving no contradiction). After all, there are reasons to think that conceivability does not imply logical possibility.¹⁴ (6) Even if by some magic something coming into existence from nothing were *logically* possible (possible according to logical abstraction), that perhaps would not make it *metaphysically* possible (possible according to reality itself, all things considered). After all, there are reasons to think that logical possibility does not imply metaphysical possibility.¹⁵ (7) Even if by some magic something coming into

14 Could there be a situation in which I am not the person I am? Obviously not. Such a situation would require me to be a person different than the person that I am even while I am the person that I am. There seem to be situations, however, where I can conceive that the person named by my name does not exist even while I conceive of myself as existing. Imagine, for instance, that after a blow to the head I think that the person named by my name is not me but someone else. Imagine, in fact, that I daydream about obliterating this person, because reports of his musical skill make me envious. Since I conceive of such a world where the person named by my name no longer exists whereas I go on living a satisfied life, here seems to be a case where I conceive myself existing without the person named by my name existing. Of course, the conceivable world where I exist while the person named by my name does not exist is not logically possible. One might say that conceivability, therefore, does not entail logical possibility.

15 There is some reason to think that not everything logically possible is metaphysically possible. For instance, assume that a unicorn never is actualized and assume also that N is true (such that only whatever is actualized is metaphysically possible). Even in such a world where a unicorn is, in effect, metaphysically impossible, a unicorn still seems to be a self-consistent concept and so logically possible.

existence from nothing were metaphysically possible, it is more reasonable that everything has a full cause than that there are things without a full cause anyway.

Here are some responses to the third part of the objection. (1) For reasons mentioned in point 7 in section 2, it seems that anything uncaused must be a permanent fixture of reality, in which case there cannot be uncaused events *that pop up at some intermediate moment* even if there *are* uncaused realities. The scientific cases purported to refute the PSR – namely, events fully excreted out of nothing at certain intermediate moments – are, therefore, absurd. (2) It is merely a pop – and downright uniformed – interpretation of quantum mechanics according to which there are uncaused events in the microworld. Electrons, for example, do not just pop into existence, despite how people sometimes speak. The electron in itself is a cloud everywhere inside the atom – a probability cloud, a wave-function, with a nature (a nature that tells us the likelihood of seeing the electron in a certain position were you to look). The wave-function simply collapses when it is observed. Nothing is popping into existence out of nothing. (3) The physicist's sense of nothing, anyway, is not the sense of nothing with which we are concerned in philosophy: nonbeing, which appears to be both logically and metaphysically impossible anyway.¹⁶ Some physicists say that a universe can bloom from a quantum vacuum. A quantum vacuum, however, *is* – and it is *something*, something quite *specific*: it is a quantum field at a low energy state. (4) As physicists readily admit, and to put it as Sean Carroll (2019) does, scientists do not understand what is going on in the quantum world any more than the average person understands what is going on in their smartphones. Just as the unpredictability of a random number generator is merely a matter of the complexity of its algorithm, microworld unpredictability seems to be just a matter of the complexity of what is going on (rather than a matter of genuine randomness, the randomness of something literally coming from nothing). (5) In line with Hoefer's (2016, section 4.4) claim that “quantum mechanics is one of the best prospects for a genuinely deterministic theory in modern times”, the central interpretations of quantum mechanics are all compatible with the PSR.¹⁷ On the Copenhagen interpretation, the presence of an observer is one of the variables that, in concert with all the other relevant variables, provides the sufficient cause of the quantum event. On the Everett interpretation, different possible outcomes of quantum scenarios all happen (cat alive in one universe, cat dead in another)

¹⁶ For the physicist's sense of nothing (nothing as a quantum vacuum at a low energy state), see Krauss (2012). Nonbeing itself seems to be logically impossible: by definition, it is not; nothing is nothing. To say that nonbeing is metaphysically possible is to say that nonbeing is possible according to reality itself, which seems absurd since reality itself – being itself – is the diametrical opposite of nonbeing.

¹⁷ For a discussion concerning the compatibility of the PSR with quantum mechanics, see Pruss (2006, pp. 160–170), Ortiz and Kreinovich (2013) and Carroll (2019).

but are sufficiently caused by what is going on. On the hidden variable interpretation, all the variables relevant to bringing about the quantum event may not *seem* to add up to a sufficient cause of the quantum event, but that is just because we are not aware of *all* the variables (see Marlow, 2016; Hoefer, 2016, section 4.4). Contrary to what the pop interpretation holds, therefore, what is going on in reality *is* enough to bring about all quantum happenings that actually do happen: reality all by itself suffices for the particle moving exactly how it does move (contrary to the first objection-example); reality all by itself guarantees that the atom is decayed at a given time if it is decayed, and reality all by itself guarantees that the atom is not decayed at a given time if it is not decayed (contrary to the second objection-example).

There are further responses to add to the third part of the objection. (6) Causes may be hard to discover, and may involve great complexity, but it seems strange for scientists to assert that in some cases there is *no cause whatsoever*. It could be said that scientists do precisely that in the case of the Big Bang. But even if that were true, which it is not since a quantum vacuum (with its fields and energy fluctuations) is not literally nonbeing, it would seem more in line with the anti-dogmatic spirit of science to conclude that we *do not know* the full explanation (rather than that there *definitely is* no full explanation). The currently *unexplained* need not be the absolutely *inexplicable* – inexplicable in the sense of having been emitted from nonbeing. (7) There is no way that beings coming from nothing – nonbeing flares, if you will – can ever be demonstrated experimentally, for obvious reasons (see Caruso, 2019, pp. 196–197). (8) We would be hard-pressed to find, especially in light of the previous point, any scientist who (a) understands the being-from-nonbeing implication of something lacking a sufficient cause and yet who (b) says that a certain event lacks a sufficient cause. As when someone says that the universe comes from nothing in the sense of coming from a quantum vacuum, any scientist who speaks of an event lacking a sufficient cause is – so at least should be the default interpretation as a matter of charity – not speaking in the strict context of the philosophy classroom. (9) What is the greater miracle anyway: that a certain event E lacks a sufficient cause or that the scientists who claim that E lacks a sufficient cause are simply not aware of the sufficient cause? Especially since scientists are finite and fallible, the greater miracle – and so the one to be rejected – is that E lacks a sufficient cause.

Here are some responses to the fourth part of the objection.

First, there is no substantial discrepancy, upon reflection, between the common description of God as uncaused and my claim that the uncaused category is necessarily empty. We must be careful, so the great rationalists tell us, to distinguish between something being self-caused, that is, being *brute* in the *virtuous* sense of existing by the necessity of its own nature, and something being uncaused, that

is, being *brute* in the *vicious* sense of having reality despite reality ultimately failing to be enough for it to have reality (see points 2 and 3 above in section 2). Unless one slurs over such a difference, or unless one assumes that cause must come prior to effect such that self-causation is a nonstarter absurdity, or unless one takes the claim that “everything has a *cause*” to be nothing more than the claim that “everything is *other-caused*”, no one *strictly speaking* is going to call God either “uncaused” or “other-caused” since both options mean that the very being of God is received, if you will, from *non-God* (see point 2 in section 2). Even that which *always already is* we are not going to call “God”, strictly speaking, if it *just so happens* that it always already is. Instead, and as Descartes and Spinoza make clear, one is going to call God “*self-caused*”: that which is the adequate immanent condition of itself, that which is the non-explanatorily-prior determining principle for *what* and *that* it is, in the sense of having an essence that involves existence – having an essence that involves existence, but not merely in the sense that the being with that essence just so happens to exist (Descartes, 1985, p. 310; 1997, pp. 175–176, 213; 2008, p. 34; Spinoza, 1985, pp. 38–39, 408, 412, 439).

To be sure, Aquinas (and almost every theologian in his wake) sees things through a lens according to which it is inappropriate to call God “*self-caused*” (see Aquinas, 1975, I/3/iv; 1964, I/2/iii). But these thinkers have in mind the two repugnant senses of self-causation described in point 4 in section 2 and they construe God’s being *uncaused* in the way that the great rationalists, who rightly cannot countenance anything lacking a sufficient reason, construe God’s being *self-caused*: namely, God’s *not being other-caused* and so, for reasons described in points 2–4 in section 2, God’s existing eternally by the necessity of God’s own nature. In effect, the disagreement between Aquinas (and his followers), on the one hand, and Descartes (and his followers), on the other, is largely verbal. For reasons that should be clear by now, however, I find the Cartesian way of speaking more precise. After all, talk of God being *causa sui – causa sui* in the third sense laid out in point 4 in section 2 – is, as Jerome makes clear in his commentary on Ephesians 3:15, a way to highlight God’s *aseity* while honouring the deep principle that nothing comes from nothing and the deep intuition that God, in particular, cannot be *thrown* into this, like this – even thrown into this, like this, *from eternity* – in a way *not up to him*.

Second, however fashionable it may be to pull brute-fact cards, any view that relies on something having being *ex nihilo* – having being *ex nihilo*, remember, in a sense that does not mean that it has being from itself – is a nonstarter absurdity. But aside from that, there are various reasons why the prevalence of brute-fact-card pulling in contemporary philosophy does not count against the PSR as much as it might seem to

The notion of bruteness is, first of all, ambiguous, as I suggested above. On the one hand, there is bruteness in the virtuous sense: the PSR-friendly sense of being sufficiently self-explained (self-caused). On the other hand, there is bruteness in the vicious sense: the PSR-unfriendly sense of having objectively no explanation (uncaused). The difference between the two senses of bruteness is important. One does not just get to pull the *virtuous* brute-fact card. Indeed, it does not even seem right to call it a “card”. Unlike in the case of pulling the *vicious* brute-fact card, pulling the virtuous brute-fact card has to be warranted by *positive evidence* (positive evidence for something existing by the necessity of its own nature) and does not entail the manifest repugnancy of saying that something obtains even though reality ultimately fails to suffice for it obtaining.

Why bring all this up? Well, some of those said to be pulling brute-fact cards may not be pulling *vicious* brute-fact cards. It is common to find theists faced with the objection that they pull a brute-fact card at God. It is common, in turn, for opponents to claim that pulling a brute-fact card at, say, the Big Bang is no worse than pulling a brute-fact card at God. “If we must stop the chain of explanation somewhere”, so goes the reasoning, “why not stop it in a place that pre-empts the need for God?” What the objector does not realize is that the theist is – or at least should be – pulling a *virtuous* brute-fact card, one that does not involve a commitment to getting something from nothing. So aside from just the normalization of brute-fact-card pulling, the failure to disambiguate between these two senses of bruteness, together with it being “common knowledge” – one of the *ta legomena* in our culture – that the PSR is false if there are brute facts (and so nothing we have to interrogate further), makes it seem that there are more philosophers out there rejecting the PSR than actually are (or that actually would, upon scrutiny).

Even if, second of all, the numbers are not so high as one would think in light of the above ambiguity, it would be foolish to deny the pervasiveness in contemporary philosophy of pulling brute-fact cards in the vicious sense. But something else that should be kept in mind is the *language* philosophers use. Rarely if ever will someone who pulls a vicious brute-fact card say to themselves or others: “I am pulling a getting-being-from-nonbeing card”. At best they might say “I am pulling a *free-lunch* card” or “such and such is true merely by *flat*” or so on. Just as euphemisms concerning the dying process can cloak what is really involved in the dying process, talk of “brute facts” is euphemistic enough to cloak what is really entailed by pulling a vicious brute-fact card. Especially when repeated in articles and at conferences in good conscience (and as if no bigger deal among philosophers than steroid use is among bodybuilders), talk of “brute facts” and “free lunches” sounds much more harmless than PSR-unfriendly talk of something coming from nothing. Indeed, talk of “brute facts” and “free lunches” might

be confusable – especially for philosophers just starting to bud – for PSR-friendly talk of what is merely beyond our current ability to explain. So aside from just the normalization of brute-fact-card pulling, the euphemistic and vague language of “brute fact”, together with it being “common knowledge” – one of the *ta legomena* in our culture – that the PSR is false if there are brute facts (and so nothing we have to interrogate further), might be blinding people to what is actually at stake in rejecting the PSR and making it seem as if there are more philosophers out there rejecting the PSR than actually are (or that actually would, upon scrutiny).

Finally, here are my responses to the fifth part of the objection

First, even if the PSR entails N, which I have argued it does, endorsing a view that rocks our identities and spells modal collapse is better than accepting what seems an absolute nonstarter: getting something from nothing. The principle that things could have been otherwise is intuitive, no doubt. Indeed, many might find it more intuitive than the PSR *at first glance*. It is hard to fathom, however, how anyone could find it more intuitive than the PSR once they penetrate the euphemistic veil with which the denial of the PSR is often cloaked and once they grasp what denying the PSR amounts to: that being can be excreted out of nonbeing. (This is a matter for experimental philosophy, of course. For whatever it might be worth, however, everyone I poll either finds the PSR more intuitive or finds the two principles at least equally intuitive.)

Second, talk about how things could have been otherwise still *makes sense* even if N is true. Saying “I could have worn a green shirt instead of a red shirt today” means, so the advocate of N is happy to allow, that I would have worn green had conditions been different in a certain way. To be sure, it is impossible (at least in some sense) for those conditions to have been different in that certain way. But that does not mean it is nonsense to talk about what would have been *if* – if, of course, *per impossibile* (at least in some sense) – those conditions were different in that certain way. That is perhaps all that needs to be said. One might wonder, however, why I use the language of “impossible *at least in some sense*”? Imagine, to lay out a picture that is compatible with the PSR and even with AN (see point 5 in section 2), that the “possible worlds” we talk about in metaphysics are all “out there”, concrete and independent of one another (each its own “windowless” monad, so to say). It is possible, in such a plenitudinous reality of various maximally-inclusive concrete worlds, for conditions to be different in our world, W1, *at least in the sense that there is some other world, W2, where they are different*. For reasons stated at the outset, advocates of N need not endorse a reality of concrete alternative universes to explain how N’s truth fails to render meaningless our talk about how things could have been otherwise. It is important to point out, however, that endorsing such a reality allows advocates of N to

honour, on the one hand, their position that *what is possible is merely what obtains all things considered* and, on the other hand, the deep intuition – often regarded as incompatible with N – that *more is possible than what ends up obtaining in our universe, W1*.

Third, one might even argue that the PSR need not entail N (see Lin, 2012). Perhaps there is an ultimate sufficient condition for absolutely everything, but that sufficient condition for everything does not *guarantee* everything. To me it does seem absurd to say that what is sufficient for x fails to guarantee x. Indeed, I think that such a principle is entailed by the PSR (see point 5 in section 2). I simply mention this only to make clear, in opposition to the objection at hand, that one may be able to keep the PSR and still avoid N. Of course, one might pivot at this point and thereby attack the principle that what is sufficient for x guarantees x, which I rely on in my various proofs. Such an avenue of attack is equally doomed in my eyes. But in the worst case perhaps all I need to say is that CD can be described merely as the view that the past provides the sufficient condition for the future and that AN can be described merely as the view that there is a self-caused reality that provides the sufficient condition for absolutely everything. Even worded in these ways, without relying on the principle that what is sufficient for x guarantees x, these views pose worries for human moral freedom

Fourth, and as I mentioned already in this section as well as in side notes to my proofs for AN in section 4, there are grounds to say that N follows in a back-door way even if there are uncaused realities and so even if the PSR is false.¹⁸

5.2 Objection #2: Humans Are Morally Responsible and so CD and N Are False

Statement o, “humans are morally responsible”, is more intuitive than statement r, “either CD or N is true”. Since these statements are incompatible with each other, and since what is more intuitive has a greater claim to truth, we are entitled to replace premises HCD-1 and HN-1 with a new premise: humans are morally responsible. As a result, we can perform a Moorean shift on the original HD arguments. That is to say, the original HD arguments against moral freedom can be transformed into the following argument against both CD and N.

- (1) Humans are morally responsible (and so are morally free).

¹⁸ One might wonder whether the PSR itself has a sufficient reason. I will say this for now. As the truth that reality cannot come from nonreality, the PSR is an automatic implication of reality itself. As the fact that being cannot come from nonbeing, the PSR is a corollary, if you will, of being itself. As I argue in my forthcoming article, “A Cosmo-Ontological Case for the God of Classical Theism”, being itself, the being of all possible beings, is self-caused (at least in the sense that some being that serves as the sufficient condition for absolutely everything is self-caused).

(2) If either CD or N is true, then humans are not morally free (and so are not morally responsible).

Therefore, CD and N are both false.

There is, moreover, independent support for statement o. (1) To be morally responsible for our actions is to be deserving of praise and blame for our actions. We praise and blame all the time. The propensity to praise and blame is, indeed, so deeply ingrained that involuntary feelings of deep displeasure wash over us for having performed certain actions. (2) The rejection of moral responsibility, a rejection of the basis for social order and purposeful living, would require drastic changes to our self-image and social practices: no more prizes or prisons or so on – in effect, no more of the strongest motivations (reward and punishment) for vain creatures like us.

Several responses can be made to this objection.

The Moorean shift itself fails. (1) Such a shift will not work for someone – someone like myself – who finds r to be more intuitive than o. For on the assumption that the more intuitive statement has the greater claim to truth, r would be true and either the HCD argument or the HN argument (inclusively) would result. (2) Even if o and r are equally intuitive, in which case neither statement would have a greater claim to truth in virtue of its intuitiveness, it would still be illicit – according to the very rules for making the shift – to make the shift. (3) How can the one who makes the shift be justified in claiming that humans are morally responsible when, for all he or she knows, either CD or N is true? However much the above two premises are intuitive (and perhaps even cultural universals; see Sarkissian et al., 2010 as well as Nahmias et al., 2005; Pronin and Kugler, 2010; Monroe and Malle, 2010), the shifter needs to attack the proofs for CD and N.

What about the independent support for the claim that humans have moral freedom?

First, the practice of praising and blaming is, obviously, compatible with people not really being morally responsible. Just because I blame you for graffitiing my garage door does not mean that you really deserve blame. Just because I feel pangs of guilt over kicking the puppy, that does not mean that the action was ultimately up to me. To be sure, the propensity to praise and blame may very well be ingrained in us as the result of selective pressures over aeons; it may very well increase the likelihood of our continuance as a species, useful as it is for promoting, deterring, protecting, and so for surviving. But even if by some magic the propensity is so deeply ingrained that it could never be given up through cultural training or advanced scientific technologies, that does not mean that people really are genuinely deserving of praise or blame.

Second, even if drastic changes would result if we rejected moral responsibility, that does not mean that there *is* moral responsibility. Drastic changes might not even be required anyway. To be sure, some rejectors of moral responsibility suggest that the practice of praising and blaming would have to stop altogether as a matter of justice.¹⁹ Most rejectors hold, however, that the practice of praising and blaming is still appropriate even if people are not morally responsible. How so? We could praise and blame not because people *genuinely deserve* it, but merely for *pragmatic* ends: rehabilitation, education, deterrence, quarantine. I could praise my child for doing well on his homework not because he really deserves it, but to inspire him to continue such behaviour. Society could detain Tom, the child rapist, not because he is morally responsible but because, like a carrier of a contagious deadly disease, he poses a threat to society.²⁰ Systems of social control in a reality where no one is morally responsible do not have to be much different than they are currently. Such systems can even be better – more humane, fair, effective – if their developers are wise.

Third, the rejection of moral freedom and responsibility might not be so bleak (see Pereboom, 2003, chs. 5–7; Caruso, 2019, pp. 204–213).

The rejection of moral responsibility, first of all, might be beneficial, replacing a punitive world order with a wise world order. Families waste away in resentment over the fact that their child was murdered. An understanding that the killer was not morally responsible, that he is the way he is and did what he did merely as a matter of “luck” (at least relative to him), could very well decrease the bitterness. With the edge taken off our resentment and lust for revenge, and with the resultant increase in calm and forgiveness, society might be motivated to follow the footsteps of Norway, which has one of the lowest recidivism rates in the world, and focus less on retribution and more on rehabilitation. In general, realizing that we are not morally responsible presumably would increase our resilience to life’s hardships, lessen our grave tendency to take ourselves and others so humourlessly, and drive home the importance of preventative measures – early education, intervention and restoration – to ensure the best, most rational, future.

Much stays the same, second of all, even if we lack moral freedom. Our lives can still be filled with novelty and oriented around fulfilling aspirations. We can still be active agents, *choosing* to bring about changes *we want*. We can still have hope just as much as we can still have pleasure. We can still find value in things. Think about it. We value and devalue people for their looks even when those

¹⁹ Nietzsche, an advocate of HD, voices leanings towards this option (1908, section 107). Indeed, Nietzsche talks about cleansing the world of the concepts of guilt and punishment as well as the notion of moral freedom on which they are based (1997, part 6 section 7).

²⁰ For more on the fairness of attributing to people moral properties (such as praiseworthiness) in cases of moral luck, see Hartman (2019).

looks are understood to be inborn. Indeed, people often feel self-important for what they recognize to be a matter of luck: facial symmetry, certain talents, height, or so on. And consider this. Our folk psychology runs so deep in us that we get mad at our laptops when they malfunction even though laptops are not agents in ultimate control of themselves. We get mad at the dresser leg when we smash our toe into it. We get mad at our spouses for their nighttime dreams. Are not many people in the professional positions that they are in, or have the moral characters that they have, because of what they inherited as a given? Many of these people, even if they come to know how much their situation is due to luck, do not walk around upset. It is reasonable to conclude, then, that even the easily-triggered citizens of the twenty-first-century United States have the psychological resources to accept, without much trauma, nothing being ultimately up to them. Leave it to a human, the adaptable creature par excellence, to normalize even the worst situations, especially over generations. It took only a few months, for instance, for us to conform to a Cancel Culture where mere accusation is good enough for guilt.

There are still lesser senses of freedom for which we could strive, third of all, even if we lack moral freedom. We could still increase the range of our abilities – increasing the range of our bodily flexibility, for example, through certain yogic practices. There would still be the freedom that comes from putting yourself through intense disciplinary training (such as the freedom to improvise on the ukulele after hours practicing scales and chord progressions). There would still be the freedom of becoming more indifferent to troubling matters, overcoming certain habits, reigning over certain instincts.

The main response to objection 3, however, is to attack the first premise of the Moorean shift directly. One way would be to restate either the HCD argument or the HN argument against human moral freedom. The burden is on those who oppose HCD and HN to show which premises of the two arguments are false. But for reasons that we have considered extensively (see sections 3 and 4), there is good reason to accept premise HCD-1 and premise HN-1. There are also compelling reasons to accept premise HCD-2 and premise HN-2 (see section 6). Indeed, the opponent who makes the Moorean shift obviously accepts HCD-2 and HN-2.

Another way to attack the first premise directly would be to show that humans lack moral freedom and responsibility *regardless as to whether CD or N is true*. Here is one attempt.

- (1) S does action A freely only if S himself is the self-caused source of A – by which it is meant: of *at least some aspect of A*.

Rationale: A—or, again for the sake of the argument, at least *some* aspect of A—must have its *buckstopping*, that is, nonderivative, source in S if S does A freely. Otherwise we would be saying something absurd: that S does A freely even though A is *entirely* a function of factors not ultimately up to S. Now, a buckstopping source is either uncaused or self-caused. Otherwise (that is, were it other-caused) it would not be a *buckstopping* source. Since nothing is uncaused, and since what is uncaused – being not up to us – contributes nothing to secure human moral freedom (a mere droplet of not-up-to-me-ness cannot change a not-up-to-me soup into an up-to-me soup), A must have its buckstopping but *not-uncursed* source in S if S does A freely. Understand what this means: either (a) S himself is the self-caused source of A if S does A freely or (b) some mere portion of S is the self-caused source of A if S does A freely. (After all, since a not-uncursed source of action is a source of action that is caused either by itself or by something else, and since a buckstopping source of action is a source of action that is not caused by something else, a buckstopping but not-uncursed source of action is a self-caused source of action.) Option-b, however, is out. For if merely *some portion* of S is the self-caused source of A, then how can *S himself* be doing A freely when A flows from something that caused itself to be in S and so is something that is completely not up to S? S himself is not doing A freely if A flows from something utterly alien to S any more than you are doing freely what someone else is doing to their child right now in another galaxy. Therefore, S himself is the self-caused source of A if S does A freely.

(2) It is not the case that S is the self-caused source of A.

Rationale: That which is self-caused could refer only to that which exists by the necessity of its own nature (see point 4 in section 2). The problem is that humans, even insofar as they are eternal souls caused by God, are not self-caused in that sense. Since S himself was born from parents, or at least a divine parent, S is not self-caused (although see section 6).

Therefore, S does not do A freely.

Here is another attempt to show that humans lack moral responsibility *regardless as to whether CD or N is true*.

(1) If you are morally responsible for action O, then you must have contributed to giving rise to O and you must be morally responsible for at least *some* portion – call it “Z” – of what you contributed.

- (2) If you are morally responsible for this *Z*, then you must have contributed to giving rise to *Z* and you must be morally responsible for at least *some* portion – call it “*Y*” – of what you contributed.
- (3) Since at no point are you self-caused, this chain will go on in an indefinite amount of steps until some point is reached, at best your fertilization, where you are clearly not morally responsible for the portion of what you contributed in question at that point.

Therefore, you are not morally responsible for *O* – *O* being a function of factors entirely beyond what is ultimately up to you (see Istvan, 2011, 2017).²¹

The argument is as powerful as it is straightforward. All it demands is that the agent be morally responsible for an infinitesimally small factor contributing to the action (see Istvan, 2011, pp. 405–406; Garnett, 2013, pp. 395–396; Hartman, 2018, section 3). But even that extremely low standard cannot be met by beings like us, impotent to be self-caused. If the argument set the bar any lower, it would absurdly allow that an agent can be morally responsible for an action even when the agent fails to be morally responsible for *any* factor – even the merest insignificant sliver – contributing to the action; it would absurdly allow that people can be morally responsible for actions that are completely a function of factors not ultimately up to them.

6. Concluding Remarks

Adding to the case against the conviction that we can be the buckstopping shapers of our path through life and that our actions are not always entirely a function of factors ultimately beyond our control, I have argued that there are secure grounds for thinking that both CD (premise 1 of the HCD argument) and N (premise 1 of the HN argument) are true. In the end, it should be clear that, in addition to the robust case against human moral freedom that can be made even on the concession that CD and N are false, persuasive arguments for HD – and so for the impossibility of human moral freedom and responsibility – can be constructed around each of these forms of determinism. After all, that I do not do freely what is guaranteed by the remote past before I was born (the basic idea behind premise HCD-2) and

21 The basic idea of this argument is old. We find it in Nietzsche and, most famously in the contemporary period, in Clarence Darrow and Galen Strawson. For recent work on these sorts of arguments, see Waller (2011, pp. 19–42), Kershner (2015), Kment (2017) and Mickelson (2019). For recent responses to these sorts of arguments, see Robson (2017) and Chevarie-Cossette (2019). For a thoroughgoing discussion of the impossibility of moral responsibility, see Kershner (2018) and Caruso (2018). For an argument to the effect that our not being able to believe that we are not morally responsible (even despite Strawson’s argument) actually corroborates Strawson’s claim that we are not morally responsible, see Streumer (2017, pp. 191–196).

that I do not do freely what is necessitated by factors utterly independent of me (the basic idea behind premise HN-2) is well-supported.

Let us close, in fact, with a quick argument for HCD-2 and HN-2, an argument that does not rely on the much-attacked principle of alternative possibilities (and so is immune to Frankfurt-style counterexamples).

HCD-2.1 If CD or N is true, then our actions – indeed, our personalities, choices, thoughts, and feelings even – are guaranteed by what we have no *actual* – as opposed to merely *counterfactual* – control over.

Rationale: We have no actual control over conditions that precede our very existence. But our actions are guaranteed by a past that precedes our very existence if CD is true. And our actions are guaranteed by a chain of necessitation – whether receding back endlessly (in the case of CN) or stopping at a self-caused wellspring (in the case of AN) – that precedes our very existence if N is true.

HCD-2.2 If our actions are guaranteed by what we have no actual control over, then we have no actual control over whether we perform our actions.

Rationale: If p occurs and we have no actual control over whether p occurs, and if p's occurrence guarantees q's occurrence and we have no actual control over whether p's occurrence guarantees q's occurrence, then q occurs and we have no actual control over whether q occurs. For example, if my not lifting the pen right now is guaranteed by what I have no actual control over, then I have no actual control over whether I lift the pen right now.²²

22 Compatibilism typically responds, to put the debate merely in the language of CD here, that even if it is guaranteed from the remote past that I do *not* lift the pen at time T1, it might still be that I have control over whether I lift the pen at T1. How so? Compatibilism has two main strategies. (1) Even if my not lifting the pen at T1 has been guaranteed by the remote past over which I have no control, I still have control over whether I lift the pen at T1 – so long as I *would have* lifted the pen *had I tried*. (2) Even if my not lifting the pen at T1 has been guaranteed by the remote past over which I have no control, I still have control over whether I lift the pen at T1 – so long as by not lifting the pen I am doing what I *want* to do and no one is *coercing* me (say, through hypnosis) not to lift the pen. Defenders of HCD-2.2 will respond as follows. First, if CD is true and S's not lifting the pen is guaranteed by the remote past (such that it has been guaranteed that S does not try to do otherwise than what he does), then S does not have *actual* control over whether he lifts the pen (however much *counterfactual* control he may have). Second, if everything that happens is guaranteed by the remote past prior to the birth of S, then not only S's action but also the *desire* to do the action itself is guaranteed by the remote past prior to the birth of S. In this case, even though S is doing what he desires, the action resulting from this compelled desire is still unfree. The coercion by the remote past, moreover, is more unescapable than any hypnosis or gunpoint threat! Actions resulting from being controlled by an alien force (as in hypnotism by a divine hypnotist) are actions that S does not do freely. But actions guaranteed by the past are relevantly similar to, and at least as compelled as, actions resulting from being controlled by an alien force. (The same points apply, of course, when we put the debate in the language of N.)

HCD-2.3 If we have no actual control over whether we perform our actions, then our actions are not free.

Rationale: S does action A freely only if S has – at least *the merest sliver of* – actual control over whether A happens.

Therefore, if CD or N is true, then our actions are not free.

Faced with such a powerful case for HD, there is only one flicker of hope for preserving human moral freedom. The only hope, in my view, is to reject premise HCD-2 and premise HN-2, but not in the typical compatibilist way of saying what I think is a dead end: that we can be morally free to shape our lives even if our lives and absolutely everything about us – our bodies, our personalities, our choices – are completely a function of factors not ultimately up to us. We are morally free even assuming that CD and N are true *if it is also the case that we are self-caused* – self-caused in the one and only sense in which something can be self-caused: existing by the necessity of its own nature (see point 4 in section 2). There may be something to this idea, absurd as it sounds. Elsewhere, but on similar grounds to what we see in Proof A of section 4, I defend the claim that there exists a self-caused being that serves as the ultimate wellspring of itself and all other things. Since all other things (including us) are, so I argue, mere affections, modes, manners of being of this being, there is a sense in which all other things (including us) *are* this being. *Qua* this being rather than *qua* mere determinate modes of this being, each of us is morally free: not everything we do is entirely a function of factors that fail to be ultimately up to us – indeed, *everything* we do is entirely a function of factors ultimately up to us.

The point is largely moot, of course. After all, the moral-freedom literature is concerned with whether humans *insofar as they are humans* are morally free – whether, to put it in my language, humans *insofar as they are modes of the one self-caused wellspring of absolutely everything* are morally free. And according to the grand wave of moral-freedom-denying literature of which this article is but one part, merely *as modes* of this one being humans categorically *lack* moral freedom (however much lesser sorts of freedom they do enjoy). I say “*largely* moot” instead of “*entirely* moot”, however, because there is solace and empowerment to be gathered from recognizing one’s oneness with the one and only absolutely free thing there is, as Spinoza is always ready to remind us.

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