Probabilism: An Open Future Solution to the Actualism/Possibilism Debate

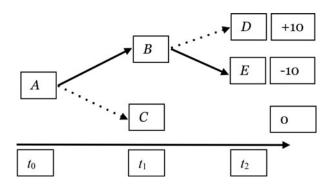
ABSTRACT: The actualism/possibilism debate in ethics is traditionally formulated in terms of whether true counterfactuals of freedom about the future (true subjunctive conditionals concerning what someone would freely do in the future if they were in certain circumstances) even partly determine an agent's present moral obligations. But the very assumption that there are true counterfactuals of freedom about the future conflicts with the idea that freedom requires a metaphysically open future. We develop probabilism as a solution to the actualism/possibilism debate, a solution that accommodates an open future requirement for freedom. We argue that probabilism resolves the conflicting intuitions that arise between actualists and possibilists and maintains certain distinct advantages over actualism and possibilism.

KEYWORDS: actualism, possibilism, free will, determinism, open future, counterfactuals of freedom

Introduction

Do facts about what you would freely do in the future if you were in certain circumstances make a difference to your present moral obligations? Actualists say yes. Possibilists say no. Let us consider a particular case in order to illustrate this disagreement (this actualist/possibilist case is structurally analogous to the Professor Procrastinate case as discussed, e.g., in Goldman [1978: 185–86] and Jackson and Pargetter [1986: 235]):

Doctor 1: At t_0 Stella is tasked with administering two shots to Bob. The best outcome that Stella can, at t_0 , bring about from t_1-t_2 requires administering the first shot at t_1 and then administering the second shot at t_2 . In this outcome, Bob is cured from his illness. The worst outcome that Stella can, at t_0 , bring about from t_1-t_2 requires administering the first shot at t_1 and then not administering the second shot at t_2 . In this outcome, Bob is harmed from the first shot. The third outcome that Stella can, at t_0 , bring about from t_1-t_2 , which is neither the best nor the worst, requires administering no shot at either t_1 or t_2 . In this outcome, Bob remains ill but at least is not harmed from the first shot. As a matter of fact, it is true at t_0 that Stella would freely not administer the second shot if she were to administer the first shot. Here is a model of Stella's predicament:



The circumstances that Stella is in at t_o , dubbed *A*, involve Stella's deliberating about what to do. Here are the possible basic actions (defined as any action that an agent performs not in virtue of performing some other action) at t_1 that are available to Stella at t_o :

B = Decide to administer the first shotC = Decide not to administer either shot at any time

Here are the possible basic actions at t_2 that are available to Stella at t_1 if Stella administers the first shot at t_1 :

D = Decide to administer the second shot E = Decide not to administer the second shot

All arrows point to what Stella *can* do at the respective times, but only the arrows with the solid lines indicate what Stella *would* subsequently freely do if she were in certain prior circumstances. The numbers, +10, -10, and 0 represent the total net deontic value of the act-sets *<B*, *D>*, *<B*, *E>*, and *<C>* respectively.

Now, here is the tricky philosophical question. Should Stella administer the first shot? More precisely, does Stella have a t_0 -obligation to $\langle B \rangle$ at t_1 , or does she have a t_0 -obligation to $\langle C \rangle$ at t_1 ? Possibilists maintain that Stella has a t_0 -obligation to $\langle B \rangle$ at t_1 because doing so is part of the best series of acts she can perform over the course of her life. By contrast, roughly speaking, actualists say that Stella has a t_0 -obligation to $\langle C \rangle$ at t_1 because $\langle C \rangle$ would result in an outcome that is better than the outcome of $\langle B \rangle$.

Possibilism considers $\langle B, D \rangle$ to be obligatory for Stella at t_0 because $\langle B, D \rangle$ is the best act-set that, at t_0 , Stella can perform *over time* in the sense that, at t_0 , Stella can $\langle B \rangle$ at t_1 , and if Stella were to $\langle B \rangle$ at t_1 , then at t_1 Stella can $\langle D \rangle$ at t_2 even if $\langle D \rangle$ is not what she would freely do at t_2 . While actualists agree that Stella can perform the act-set $\langle B, D \rangle$ from $t_1 - t_2$, many actualists maintain that in order for an act-set to be obligatory for an agent, it must not only be the case that the agent can perform that act-set, but it also must be the case that the act-set in question is securable for that agent (Jackson and Pargetter's [1986] contextualist version of actualism is an

exception to this claim; for more on their view, see Timmerman and Cohen [2020]). The act-set $\langle B, D \rangle$ is securable for Stella at time t_0 if at t_0 Stella can form an intention such that if she were to form that intention, then she would $\langle B, D \rangle$ (cf. Sobel 1976: 199; Goldman 1976: 473). However, since it is true that at t_0 no matter what Stella intends to do from $t_1 - t_2$, she would $\langle E \rangle$ at t_2 if she were to $\langle B \rangle$ at t_1 , $\langle B, D \rangle$ is not securable for her at t_0 , and so at $t_0 \langle B, D \rangle$ is not obligatory for Stella. Actualism and possibilism may be defined more precisely as follows (In order to avoid assuming impartial consequentialism, the definitions of actualism and possibilism may be understood as picking out deontic value rather than intrinsic value.):

Actualism: At *t* an agent *S* has an obligation to φ at t^* ($t < t^*$) iff φ -ing at t^* is an act-set that *S* can perform (and that is securable for S) at *t* and what would happen if *S* were to φ at t^* is better than what would happen if *S* were to perform any other act-set that, at *t*, *S* can perform at t^* .¹

Possibilism: At *t* an agent *S* has an obligation to φ at t^* iff at *t S* can φ at t^* ($t < t^*$), and φ -ing at t^* is part of the best act-set that at *t S* can perform from t^* until the last time she can perform an act.

The actualist thinks that what you would *actually* do in the future makes a difference to what you are presently obligated to do in the future, whereas the possibilist denies this. The possibilist thinks that you are obligated to do the best that is *possible* for you to do over time, regardless of what you would *actually* do in the future.

Notice that while neither definition explicitly employs a notion of free will, both presuppose that obligatory acts are performed freely. At least, these definitions do insofar as they presuppose that, for any obligatory act, there is a numerically distinct act that the agent can also perform. This presupposition can be seen by attending to the role of 'better' and 'best' in the definitions of actualism and possibilism, respectively. According to actualism, in order for an act to be obligatory, the outcome of that act must be better than the outcome of any (nonsupererogatory) numerically distinct act that the agent can perform. According to possibilism, in order for an act to be obligatory, it must be a member of the best act-set that can be performed over the course of the agent's life and thus better than every numerically distinct act-set that the agent can perform over the course of their life. Not only do these definitions have this implication concerning obligations and free will, but actualist/possibilist cases always stipulate that there is more than one act-set that the agent can perform.

While actualists and possibilists assume that the acts performed in actualist/ possibilist cases are performed freely, they rarely, if ever, evaluate their position in

¹ Earlier forms of actualism did not build in a control condition. Versions of actualism without a control condition violate the principle of normative inheritance (Portmore 2019: 113–49) and generate conflicting obligations without saying which obligation takes priority (Cohen and Timmerman 2016: 11–12; Kiesewetter 2015: 929–34, and Portmore 2011: 181–83). Subsequent versions of actualism build in a control condition and focus on maximal act-sets to avoid this problem. See Goldman (1978: 202), Carlson (1995: 121–23), Bykvist (2002: 61–64), and Jackson (2014). Douglas Portmore's (2011) and Jacob Ross's (2012) securitist views also count as versions of actualism.

relation to a specific theory of free will. Perhaps this is because they have assumed that answers to questions in the free will debate do not bear upon the plausibility of views in the actualism/possibilism debate. We wish to show that this assumption is false. At a broad level, we aim to show that the metaphysics of free will has implications for the plausibility of views in the actualism/possibilism debate.

Though subject to several serious objections, each view seems to be getting at something importantly true. Yet, the intuitive judgments behind each view are presumed to be irreconcilable since the views themselves are inconsistent with each other. We will argue that these apparently conflicting intuitions are, in fact, reconcilable to a significant extent once we accept that freedom, the basis of moral obligations, requires a metaphysically open future and that, as a result, there cannot be true propositions about either what we will freely do or what we would freely do in the future if we were in certain circumstances.

The apparently conflicting intuitions can be resolved once we deny that there can be true propositions about what we will or would freely do and instead tend to the probability between o and I that some free action will or would occur. As we will show, one can prime actualist and possibilist judgments with certain cases that vary in terms of, loosely speaking, stakes and risks. We will argue that if the nature of free action is such that there can only be a probability between o and I that you will (or would) freely perform an action, then such probabilities factor into the stakes and risks in a principled way that generates the intuitively correct verdicts in a wide array of cases. By contrast, actualism is only able to accommodate intuitive judgments in actualist-priming cases, and possibilism is only able to accommodate intuitive judgments in possibilist-priming cases.

According to counterfactual determinism as we shall understand the term, there are true counterfactuals of freedom about the future, that is, true subjunctive conditionals concerning what an agent would freely do in the future if they were in certain circumstances. (Some may wish to understand counterfactual determinism as the view that there are true counterfactuals regarding what someone would do, but the counterfactual does not specify whether the action is free [cf. Bykvist 2003: 30; Portmore 2011: 56]. One is at liberty to use a different name for the position that there are true counterfactuals of freedom about the future.) In the actualist/possibilist (A/P) debate, almost everyone takes it for granted that counterfactual determinism is true. (Greenspan [1978] is an exception to the rule though she raises different issues than the ones we raise here.) It is also typically implicitly assumed that the sorts of actions at issue in the A/P debate involve free actions and, more specifically, the kind of freedom that involves the ability to do otherwise. Implicitly assumed or not, this is the kind of freedom to which those in the A/P debate rationally commit themselves when they make the following sort of stipulation. Consider *Doctor* 1. Although it is true at t_{o} that Stella will, in fact, $\langle B \rangle$ at t_1 , Stella can at $t_0 \langle C \rangle$ at t_1 instead. Thus, Stella has the ability to do otherwise.

Although actualists and possibilists alike seem to accept counterfactual determinism, at least for the sake of argument, actualists affirm and possibilists deny that true counterfactuals of freedom about the future can even partly determine an agent's present moral obligations. For instance, actualists affirm and

possibilists deny that Stella's t_0 -obligation to do something at t_1 even partly depends upon the following counterfactual of freedom that is true at t_0 :

(I) If Stella were to freely $\langle B \rangle$ at t_1 , then she would freely $\langle E \rangle$ at t_2 .

In contrast to standard versions of actualism and possibilism, an open future requirement for freedom rejects the underlying assumption that there can be true propositions about either what we will freely do or what we would freely do in the future if we were in certain circumstances. Instead, there can be true propositions about objective probabilities between o and I concerning what someone will freely do or would freely do in the future if they were in certain circumstances. We first provide an original argument that provides independent reason to accept these claims. We then argue that probabilism, a view that accommodates an open future requirement for freedom, is able to account (to a significant extent) for the apparently conflicting intuitions between actualists and possibilists while simultaneously avoiding the usual objections that plague both views.

The rest of this article is structured as follows. In the next section, we will illustrate how conflicting intuitions between actualists and possibilists can be elicited with slight structural variations to *Doctor 1*. In section 2, we will motivate the position that freedom requires an open future and that, as a result, there cannot be either true counterfactuals of freedom about the future or true propositions about what we will freely do. Once this motivation has been provided, we then develop a new view, probabilism, that embraces an open future requirement for freedom. Finally, in section 3 we argue that probabilism resolves the apparently conflicting intuitions that arise between actualists and possibilists.

1. Conflicting Intuitions

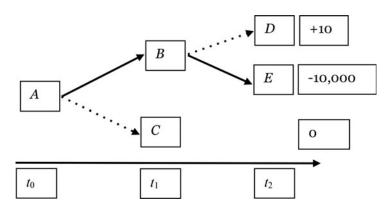
1.1 Objections to Possibilism and Actualism

Both actualism and possibilism are subject to serious objections. On the one hand, possibilism generates for Stella a t_0 -obligation to $\langle B \rangle$ at t_1 that, if acted upon, would result in the worst possible outcome (see Timmerman and Cohen [2016 and 2020] for a discussion of these objections). It seems problematic for morality to prescribe an action that is guaranteed to result in the worst possible outcome. On the other hand, actualism allows Stella to avoid incurring a t_0 -obligation to $\langle B, D \rangle$ from t_1-t_2 simply in virtue of being disposed to act wrongly, and it prescribes the bad behavior of not administering either shot even though, actualists agree, Stella can administer both shots. It seems equally problematic for morality to let agents avoid incurring obligations to do good things that they can do simply because they are disposed to perform wrong acts.

1.2 Priming What Appear to be Conflicting Judgments

Although both views are subject to these serious objections, each view also seems to be tracking an important truth. As we will see, both actualist and possibilist judgments can be primed with an A/P scenario that has a certain structure. Actualist judgments can be primed when the difference in value between the best outcome and the second-best outcome is negligible, while the difference in value between the second-best outcome and the worst outcome is significant. To illustrate, consider a revised version of *Doctor 1*:

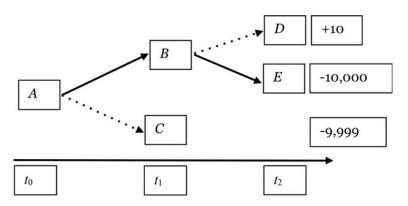
Doctor 2: Everything is the same as *Doctor 1*, except that Bob dies if Stella administers only the first shot. The total net deontic values of the acts available to Stella are as follows:



This case primes the intuition that Stella has a t_0 -obligation to <C> at t_1 , and this is precisely what actualism says.

On the other hand, possibilist judgments can be primed when the difference in value between the best outcome and the second-best outcome is significant, while the difference in value between the second-best outcome and the worst outcome is negligible. To illustrate, consider the following case:

Doctor 3: Everything is the same as *Doctor 2*, except that Bob's illness will kill him tomorrow if he is not either cured today or killed today from the first shot. The total net deontic values of the acts available to Stella are as follows:



In this variation, we can prime the intuition that Stella has a t_0 -obligation to $\langle B \rangle$ at t_1 , and this is precisely what possibilism says.

Actualism and possibilism cannot accommodate the intuitively correct verdicts in both variations of this case (Immerman [2020]). However, as we will later argue, probabilism can accommodate such verdicts in part by denying that there are true counterfactuals of freedom about the future.² Before presenting that argument, we will first argue that freedom, understood in terms of an ability to do otherwise, requires a metaphysically open future and that, as a result, there cannot be either true counterfactuals of freedom about the future or true propositions about what we will freely do.

2. Freedom Requires an Open Future

2.1 Freedom, Settling, and the Open Future

According to Helen Steward (2012: 24-42), freedom involves settling a question that is not settled until the relevant free action is performed. This question can be settled only once, and this form of settling requires an open future. For example, if it is up to Jones whether to *x* in 2025, then the question 'Does Jones *x* in 2025?' is not settled until 2025 becomes present. If Jones *x*-s in 2025, then the answer to this question becomes 'yes', and if Jones refrains from *x*-ing in 2025, then the answer becomes 'no'. Moreover, the future must be open in order for this question not to be settled prior to 2025. Steward's (2012: 13) concept of an open future appears to be equivalent to indeterminism: the future is open just in case there is more than one physically possible future from the perspective of the present. Determinism, by contrast, precludes our ability to settle a question that is not yet settled because the question of what we will do in the future is already settled by the past and the laws if determinism is true.

Steward's version of agential settling seems to suggest that a question is settled if and only if that question has an answer. However, the possibility of questions not having answers appears to conflict with classical logic and, specifically, with bivalence or the law of excluded middle according to which for any proposition p, either p is (determinately) true or p is (determinately) false, but not both. If we accept classical logic, then the proposition 'Jones x-s in 2025' must already be true or false prior to 2025, in which case the question 'Does Jones x in 2025?' has an answer prior to 2025 even if determinism is false.

To avoid this worry, we suggest a revision to Steward's concept of agential settling in order to accommodate classical logic. In order for a question to be settled, that question must have an answer, and, importantly, that answer cannot change over time. This revision draws on a conception of the open future according to which there are at least some events such that it is false that they will occur, and it is

² Under the assumption that counterfactual determinism is true, we think that the most plausible view in the A/ P debate is some version of hybridism, according to which, very roughly, there are *two* 'oughts' that need to be taken into account: one 'ought' that tracks possibilist intuitions and one 'ought' that tracks actualist/securitist intuitions (Timmerman and Cohen 2016). By rejecting the assumption of counterfactual determinism, probabilism employs only one 'ought' that plays both the directive/action-guiding role and the inculpatory role (cf. Portmore 2019: 50, fn. 3). A version of hybridism could also be accepted in conjunction with an open future view, where the probabilist ought would fulfill the directive/action-guiding role.

false that they will not occur. Moreover, tenseless propositions that are future contingents (propositions about the future that are not entailed by propositions about the past and the laws) are all false, but they can become true once they are no longer about the future. (A more precise definition of a future contingent is: a proposition with a contingent truth-value about the future that is not entailed by propositions about the laws, the intrinsic past, and the intrinsic present. Notice that propositions about the future such as 'There is a 30% objective probability that Jones will freely x at time t', if true, are entailed by propositions about the indeterministic laws and the intrinsic present (and the intrinsic past). Accordingly, while this kind of proposition is about the future, it is not a future contingent.) For example, in the right kind of open future, both of the tenseless propositions, 'Jones x-s in 2025' and 'Jones does not x in 2025', are future contingents and are false prior to 2025. The former proposition becomes true in 2025 if Jones x-s in 2025, and the latter proposition becomes true in 2025 if Jones refrains from x-ing throughout 2025. Both tenseless future contingents are false prior to 2025 because each proposition falsely asserts something. The tenseless future contingent, 'Jones x-s in 2025', asserts that either there is a unique actual timeline extending to 2025 and that unique actual timeline features Jones' x-ing, or Jones x-s in all physically possible timelines extending to 2025. However, in the right kind of open future, there is no unique actual timeline extending to 2025, and in some physically possible futures extending to 2025, Jones x-s, and in other physically possible futures extending to 2025, Jones does not x. Similar remarks apply to the tenseless future contingent, 'Jones does not x in 2025' (Todd 2016; Cohen, forthcoming; cf. Rhoda 2011: 75). This approach does not conflict with classical logic because the negation of 'Jones x-s in 2025' is 'it is not the case that Jones x-s in 2025' rather than 'Jones does not x in 2025'. Unlike the latter proposition, the former proposition, 'it is not the case that Jones x-s in 2025', does not say either that there is a unique actual future among multiple physically possible futures or that Jones does not x in all physically possible futures. Similarly, the negation of 'Jones does not x in 2025' is 'it is not the case that Jones does not x in 2025' rather than 'Jones x-s in 2025'.

According to our revised account of agential settling, then, in the right kind of open future, the question 'Does Jones x in 2025?' has an answer prior to 2025, and that answer is 'no' if what we mean by 'no' is the affirmation of the following two true propositions: 'it is not the case that Jones x-s in 2025' and 'it is not the case that Jones does not x in 2025'. By contrast, the tenseless future contingents, 'Jones x-s in 2025' and 'Jones does not x in 2025', are both false prior to 2025.

While the question 'Does Jones x in 2025?' has an answer prior to 2025, this question is not settled prior to 2025 because, prior to 2025, the answer to this question can change over time. It changes from 'no' to 'yes' if Jones, in fact, x-s in 2025, at which point the tenseless proposition, 'Jones x-s in 2025', becomes true and is no longer a future contingent. If, on the other hand, Jones refrains from x-ing throughout 2025, then the answer to this question remains 'no', albeit for a different reason. If Jones does not x in 2025, then what we now (in 2025) mean by 'no' is the assertion of the now true proposition, 'Jones does not x in 2025'. Once either tenseless proposition becomes true in 2025, these tenseless propositions are no longer

about the future (and thus are no longer future contingents), and their truth-values can no longer change over time. Similarly, once either proposition becomes true, the answer to this question can no longer change over time, and thus this question is settled. Consequently, if we accept that freedom requires settling a question that is not yet settled (and can be settled only once), then freedom requires an open future according to which there cannot be true propositions about what we will freely do. We also claim that there cannot be true counterfactuals of freedom concerning what we would freely do in the future if we were in certain circumstances. In order to establish this claim, we need to take a closer look at counterfactuals. But before we do so, let us consider in more detail what an open future requires.

In order for the future to be metaphysically open, determinism must be false. After all, if determinism is true, then there is an answer to the question of what we will do in the future, and that answer cannot change over time. For example, the truth-value of 'Jones x-s in 2025' cannot change over time from false to true in a deterministic universe. The same holds for eternalism. According to eternalism, the past, present, and future exist. If the future exists, then the question, 'Does Jones x-s in 2025?', already has an answer, and that answer cannot change over time. Thus, if either determinism or eternalism is true (or if both are true), then the question of what we will do in the future is already settled. In order for us to have free will, then, indeterminism must be true, and either presentism or the growing block theory must be true. Only under these metaphysical circumstances are we able to settle a question that is not settled until the relevant free action is performed. Let us move on to the case against true counterfactuals of freedom about the future.

2.2 Counterfactuals of Freedom About the Future

According to the standard Stalnaker-Lewis possible worlds semantics for counterfactuals, the following counterfactual, 'if x were the case, then y would be the case', is nonvacuously true in world w just in case the set s of all worlds that are most similar to w in which the antecedent is true are also worlds in which the consequent is true. The closeness of worlds is a function of their overall similarity to each other, and many follow Lewis's (1979: 472) ranked system of weights approach to the notion of overall similarity. According to the widely adopted strong centering assumption, no world is more similar to a world w than w is to itself, and no world is as similar to w as w is to itself (Lewis 1973: 13-15). Moreover, conjunction conditionalization follows from strong centering: the aforementioned counterfactual is true in a world w in which both the antecedent and the consequent are true (Pollock 1976: 42-43; Stalnaker 1968; Lewis 1986). (Not everyone accepts the strong centering assumption; see, e.g., Menzies and List [2010]. We adopt the strong centering assumption here, but we do not believe that our arguments for an open future requirement for freedom in section 2.3 rely on the strong centering assumption. But if they do rely on this assumption, we would be happy to adopt strong centering in that context as well.)

According to this approach to counterfactuals, it follows that if there are facts about what someone will freely do, then there are true counterfactuals of freedom about the future. For instance, in *Doctor 1*, the truth of the following

counterfactual at t_0 follows from the supposition that it is true at t_0 both that Stella is in circumstance A at t_0 and that Stella will freely $\langle B \rangle$ at t_1 :

(II) If Stella were in circumstance A at t_{o} , then Stella would freely $\langle B \rangle$ at t_{1} .

Conversely, it follows from the truth of (II) at t_o and the supposition that Stella is in circumstance A at t_o that it is true at t_o that Stella will freely $\langle B \rangle$ at t_I . However, according to our open future requirement for freedom, there cannot be true propositions (tensed or tenseless) about what we freely do in the future, and so, similarly, there cannot be true counterfactuals of freedom concerning what we would freely do in the future if we were in certain circumstances.

Here is a further, independent reason to think that there cannot be true counterfactuals of freedom about the future. We can distinguish between two kinds of purportedly true counterfactuals of freedom about the future, viz. those that are brutely true (lacking a truth-maker) and those that possess truth-makers. There is a view in the philosophy of religion, Molinism, that says that there are brute, contingently true counterfactuals of freedom about the future whose truth-value is explanatorily prior to the existence of the world (Plantinga 1974; Merricks 2007: 146-51). Moreover, the action in the consequent of such a counterfactual is supposed to be indeterministically caused (or not caused and not determined) because the truth of such counterfactuals is supposed to be compatible with libertarianism. One of the most common objections to Molinism, an objection that we find quite plausible, is that there is indeed nothing to ground the truth of such counterfactuals, and every contingent truth requires a truth-maker (Adams 1977). Consequently, Molinism should be rejected. Some presentists maintain that truths about the past presently lack truth-makers but once *had* truth-makers. Such a presentist can reject the principle that every contingent truth requires a truth-maker and instead endorse Griffith's (2022) one-time grounding principle about true propositions about the past: for any true proposition p about the past and any time t: if p is made true at t_1 , then p is true at t_{I} and at every time t_{n} after t_{I} . This principle along with the principle that truths about the past preserve their truth-value over time simply in virtue of the nature of their truth (viz. being about the past) allows us to preserve a close connection between truth and being (Griffith 2022). Thus, even if we adopt this approach to truth-making, it is still reasonable to rule out brutely true Molinist counterfactuals of freedom about the future that completely float free of being. It is also disputed whether Molinism is compatible with the standard semantics for counterfactuals (see Mares and Perszyk [2011] for a defense of this compatibility).

To be sure, if eternalism is true and freedom is compatible with eternalism, then there are, or can be, true counterfactuals of freedom about the future because the future exists, and thus there are, or can be, truth-makers for at least some presently true counterfactuals of freedom about the future as well as for presently true propositions about what we will freely do. However, for the reasons previously explained, eternalism is incompatible with settling a question that is not yet settled. If eternalism is true, then all questions about the future are already settled, and hence eternalism is incompatible with freedom.

Suppose, then, that eternalism is false and consider purportedly true counterfactuals of freedom about the future that have truth-makers. If such counterfactuals are not even partly true in virtue of an existent future, then they are presumably true at least partly in virtue of a proposition about certain deterministic laws of nature. For example, if in Doctor 1, (II) is supposedly true at t_{o} and eternalism is false, then the circumstances that Stella is in at t_{I} must be deterministic. Stella's $\langle B$ -ing \rangle at $t_{\rm T}$ must be causally determined by earlier events in order for there to be a truth-maker for the truth of (II) at t_{o} . Otherwise, if Stella's $\langle B - ing \rangle$ at t_{I} is indeterministically caused by prior events at t_{0} , then the circumstances at t_{o} , along with the (indeterministic) laws of nature, do not necessitate Stella's $\langle B$ -ing> at t_1 . Consequently, at t_0 , there would not be any truth-makers for the truth of (II) at t_{0} . However, if the circumstances that Stella is in at t_1 are deterministic, then the question, 'Does Stella at t_1 ?', is already settled at t_{0} , and thus Stella's action at t_{1} in Doctor 1 is, in fact, not free, contrary to what the consequent of (II) says. Therefore, (II) still cannot be true at t_{\circ} even if determinism is true.

We conclude that counterfactuals of freedom about the future cannot be either brutely true or non-brutely true. Instead, counterfactuals of freedom about the future are false at least until they are no longer about the future. For example, consider the following two counterfactuals of freedom that are false at t_5 : 'If Jones were in circumstance *c* at t_5 , then Jones would freely *x* at t_6 ', 'If Jones were in circumstance *c* at t_5 , then Jones would freely not *x* at t_6 '. If Jones is in circumstance *c* at t_5 and then freely *x*-s at t_6 , then the former counterfactual becomes true at t_6 , at which point neither counterfactual is about the future—similarly, with respect to Jones freely not *x*-ing at t_6 , and the latter counterfactual becoming true at t_6 .

We now proceed to investigate the relationship between the consequence argument and the position that freedom requires a metaphysically open future.

2.3 The Consequence Argument and the Open Future

There are structurally similar arguments to the consequence argument that aim to establish that freedom is incompatible with true propositions about what we will freely do and with true counterfactuals of freedom about the future, respectively. Given this structural similarity, there is some reason to think that all these arguments stand or fall together. Therefore, those persuaded by the consequence argument have some reason to similarly embrace these other arguments. To see this, consider the following version of the consequence argument.³

 P_t = a proposition that describes the complete state of the world at some time *t* in the remote past

L = a proposition that describes the conjunction of the laws of nature

³ The 'N p' locution as well as the accompanying transfer* principle are borrowed from O'Connor (2000: 5–15). This transfer principle is supposed to be immune from a variety of counterexamples to van Inwagen's (1983) original transfer principle. Similar improved locutions and transfer principles are discussed by Finch and Warfield (1998), Huemer (2000), and van Inwagen (2000).

p = any true proposition

N $\mathbf{p} = p$ is true and no one can act in such a way that it might be the case that not-p

Transfer*: { $N p, N (p \rightarrow q)$ } entails N q

The consequence argument

(1) $N(P_t & C)$ Premise(2) $N((P_t & L) \rightarrow p)$ Consequence of determinism(3) Np1, 2 Transfer*

Here is the basic idea behind this argument. Suppose that there are truths that are not up to me such as truths about the past and the deterministic laws of nature. Given such truths, it is also true that I will x tomorrow, in which case my future x-ing is not free. Generalizing from (3), this argument is meant to establish that nothing is up to us if determinism is true. We can construct a similar argument for the conclusion that there cannot be true propositions about what we will freely do. This argument relies on both the necessity of the present, the view that nothing we presently do is presently up to us, and the assumption that a complete description of a time includes all true propositions at that time. Here is that argument:

 P_t = a proposition that describes the complete state of the world at some time *t* p = any true tenseless proposition about what someone freely does in the future N p = p is true and no one can act in such a way that it might be the case that not-*p*

The 'no true propositions about what we will freely do' argument

(4) $N P_t$ (5) $N (P_t \rightarrow p)$ (6) N p4, 5 Transfer*

Here is the basic idea behind this argument. Suppose for the sake of argument that it is true that Jones freely *x-s* tomorrow. In that case, it is already settled as to whether Jones will *x* tomorrow. But if this is already settled, then Jones's future *x*-ing is not free, and this contradicts our original assumption. Therefore, there cannot be true propositions concerning what someone freely does in the future. Here is a more precise articulation of this argument. Suppose for the purposes of a *reductio* that in *Doctor 1* it is true at t_0 that Stella freely *<B-s>* at t_1 . Suppose ' P_t ' describes the complete state of the world at t_0 , and that 'p' describes Stella's freely performing ** at t_1 . At t_0 , premise (4) is true if we accept the necessity of the present, the view that nothing we are presently doing is presently up to us.

Steward's (2012) concept of agential settling seems to support the necessity of the present given that all presently true propositions about the present are answers to settled questions about what the present is like. To see this, consider the fact that at t_0 Stella is deliberating about what to do, and it is true at t_0 that 'Stella deliberates at t_0 about what to do'. It appears that the question, 'Does Stella deliberate at t_0 about what to do? ', has an answer at t_0 , 'yes', and that answer cannot change over time. Thus, this question is settled at t_0 , and thus what Stella is doing at t_0 is not up to Stella at t_0 . If anything is up to Stella at t_0 , it is her immediate future actions, $\langle B \rangle$ and $\langle C \rangle$ at t_1 (see Loss [2009], Hasker [2011], and Finch [2013] for a defense of the necessity of the present).

Regarding premise (5), $P_t \rightarrow p'$ is also true at t_o given that a complete description of a time (not just a complete *physical* description of a time) includes all true propositions at that time. And given the necessity of the present, it is not up to Stella (or anyone else) at t_o whether $P_t \rightarrow p'$ might be false at t_o . Thus, premise (5) is true at t_o , and thus the conclusion, (6), is true at t_o as well: it is not up to anyone, including Stella, whether p might be false. But now we have contradicted ourselves because we assumed all along that 'p' refers to Stella *freely* <*B*-ing> at t_1 . The culprit in this contradiction is our original assumption that there can be true propositions (tensed or tenseless) about what we freely do in the future. If 'p' describes what we do in the future and 'p' is presently true, then what we do in the future is not free.

Finally, a structurally similar argument can be constructed for the conclusion that there cannot be true counterfactuals of freedom about the future (cf. Perszyk 2003; Cohen 2015).

cf = a counterfactual of freedom about the future a = the antecedent of cf p = the consequent of cf N p = p is true, and no one can act in such a way that it might be the case that not-p

The 'no true counterfactuals of freedom about the future' argument

(7)
$$N (a \Leftrightarrow cf)$$

(8) $N ((a \Leftrightarrow cf) \rightarrow p)$
(9) $N p$
7, 8 Transfer*

Here is the basic idea behind this argument. Suppose it is true that Jones would freely x tomorrow if Jones were in certain prior circumstances, and it is true that Jones is in those prior circumstances. In that case, it is already settled as to whether Jones will x tomorrow. But if this is already settled, then Jones's future x-ing is not free, and this contradicts our original assumption. Therefore, there cannot be true propositions concerning what someone would freely do in the future if they were in certain prior circumstances. Here is a more precise articulation of this argument. Recall what (II) says:

(II) If Stella were in circumstances A at t_0 , then Stella would freely $\langle B \rangle$ at t_1 .

Suppose for the purposes of a *reductio* that (II) is true at t_{\circ} and suppose that 'cf' refers to (II) and that 'p' describes Stella's freely <B-ing> at t_{\perp} .

Given the necessity of the present, it is not up to Stella (or anyone else) at t_{\circ} whether (II) might be false at t_{\circ} . Similarly, given the necessity of the present, it is not up to Stella (or anyone else) at t_{\circ} whether the antecedent of (II) might be false at t_{\circ} , and so, given the principle of closure under conjunction introduction, premise (7) is true at t_{\circ} .

Consider premise (8). The proposition ' (a and cf) $\rightarrow p$ ' is also stipulated to be true at t_o , and given the necessity of the present, it is not up to Stella (or anyone else) at t_o whether this proposition might be false, and hence premise (8) is true at t_o , in which case premise (9) is also true at t_o . But we assumed all along that 'p', in this case the consequent of (II), refers to a free action and that (II) refers to a counterfactual of *freedom* about the future, in which case we have contradicted ourselves by concluding that at t_o it is not up to anyone, even Stella, whether 'p' might be false. The culprit in this contradiction is our original assumption that there can be true counterfactuals of freedom about the future, and consequently there cannot be true counterfactuals of freedom about the future. If a true proposition describes what we would do in the future if we were in certain circumstances, then what we would do in the future is not free.

We have argued that freedom requires a metaphysically open future, the kind of open future according to which there cannot be true propositions about either what we will freely do or what we would freely do in the future if we were in certain circumstances. We now proceed to clarify and defend a view that respects this open future requirement for freedom.

2.4 Probabilism

In addition to promoting an open future requirement for freedom, some libertarians deny that future possible free actions have a determinate, objective probability (between o and 1) of occurring.⁴ By contrast, we wish to consider a libertarian position that allows for such objective probabilities, and this in turn will allow us to employ the familiar concept of expected deontic value. Rather than embracing actualism or possibilism, a proponent of an open future requirement for freedom can embrace the following position instead:

Probabilism:

• Counterfactual determinism is false, and there are no true propositions about what someone freely does in the future.

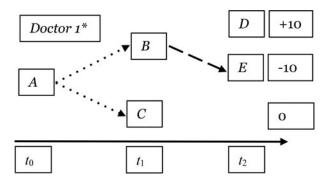
⁴ Buchack (2013) denies that free acts have objective probabilities in her defense of libertarianism against van Inwagen's (2000) rollback argument. Vicens (2016) also denies that free actions have objective probabilities. See O'Connor (2016) and Furlong (2017) for a defense of the idea that libertarians should accept the existence of such objective probabilities (between 0 and 1).

- Freedom requires a metaphysically open future.
- Freedom is compatible with the existence of objective probabilities between 0 and 1 concerning what someone will freely do or would freely do in the future if they were in certain circumstances.
- For any time t, at t an agent S has an obligation to perform an act φ at t* (t < t*) iff S can, at t, φ at t*, and φ is tied for the earliest performable basic free act for S at t, and, at t, S's φ-ing at t* has a higher expected net deontic value than the net deontic value of any other basic free act that, at t, S can perform at t*.⁵

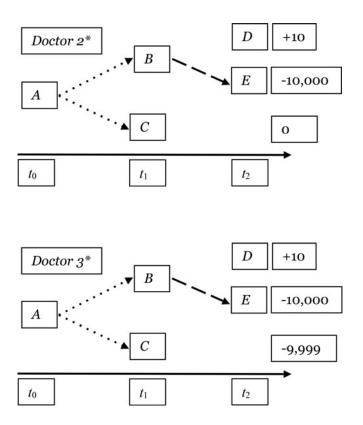
Notice that while probabilism explicitly denies that there are true counterfactuals of freedom about the future, actualism and possibilism are, by definition, neutral with respect to such counterfactuals. Specifically, actualism presupposes that if there are such truths, then they at least partly determine an agent's obligations, whereas possibilism holds that even if there are such truths, they do not even partly determine an agent's obligations. Now that probabilism has been articulated and clarified, we will show how adopting probabilism can help resolve the A/P debate.

3. How Probabilism Resolves the A/P Debate

Since all three cases, *Doctor* 1-3, assume that there are true counterfactuals of freedom about the future, the probabilist would consider all of them to be metaphysically impossible, and therefore these cases pose no problem for probabilism. But the probabilist has much more to say about the intuitions being primed in these cases. To see this, let us consider cases that, unlike *Doctor* 1-3, do *not* presume that there are true counterfactuals of freedom about the future, and let us also suppose that the future is metaphysically open in such a way that all of the following tenseless propositions are false at t_0 : 'Stella $\langle B$ -s> at t_1 ', 'Stella does not $\langle B \rangle$ at t_1 ', 'Stella $\langle C$ -s> at t_1 ', and 'Stella does not $\langle C \rangle$ at t_1 '. Call these cases *Doctor* $1 \neq -3 \neq$, respectively.



⁵ The act of φ -ing at t^* is the earliest performable basic free act for *S* at *t* only if φ -ing at t^* does not require performing some numerically distinct basic free act either at t^* or at some time between times *t* and t^* .



Before we consider these amended cases, it will be helpful to consider the role that 'ought implies can' (OIC) plays in the debate. Actualism, possibilism, and probabilism presuppose in their definitions that the range of actions agents can be obligated to perform is restricted to those actions that they *can* perform. Roughly, possibilists believe that you are obligated to do the best you can do over the course of your life, while actualists believe that the acts that you can be obligated to perform are further restricted by certain true counterfactuals of freedom. Not only must an obligatory act be performable, but that act must also be securable. In a nutshell, actualists think that you are obligated to perform the best securable act, whereas possibilists think that you are obligated to perform the best act-set across your entire life. These considerations about OIC are worth highlighting because Doctor $1^{*}-3^{*}$ make stipulations about an agent's inability to perform an action. Specifically, these three cases stipulate that there is no time at which Stella can $\langle D \rangle$ at t_2 . In that case, given their commitment to OIC, actualists, possibilists, and probabilists all agree that Stella does not have an obligation to $\langle D \rangle$ at t_2 in any of these three cases. Instead, actualists, possibilists, and probabilists say that Stella has an obligation to $\langle C \rangle$ at t_1 in all three cases. With these clarifications in place, let us now inspect these amended cases more closely.

Recall that the arrows with the solid lines in *Doctor* 1-3 represent purportedly true counterfactuals of freedom about the future, while the arrows in

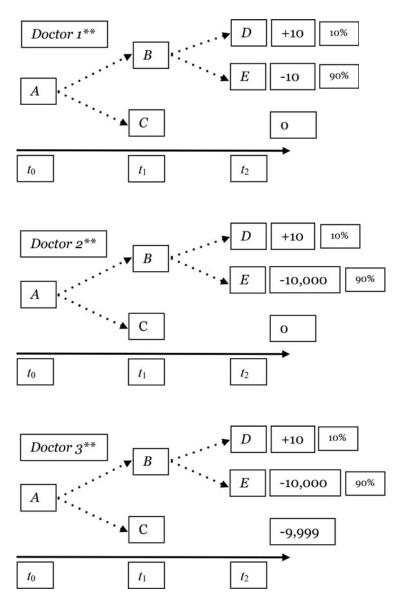
Doctor $1^{*}-3^{*}$ with the long dashes indicate what Stella would do if she were in certain circumstances, but they do not presuppose that such actions are free. In fact, in these cases, if Stella were to $\langle B \rangle$ at t_1 , then the only thing she can do at t_2 is $\langle E \rangle$. In all three scenarios, the probabilist maintains that Stella has a t_0 -obligation $\langle C \rangle$ to at t_1 and that Stella lacks a t_1 -obligation to do anything at t_2 . It should be clear that probabilism generates the correct verdict in each of these cases because in each case probabilism says that Stella is obligated to bring about the best outcome that she can bring about.

Since probabilism's verdict in *Doctor* 1* and *Doctor* 3* is similar to actualism's verdict in *Doctor 1* and *Doctor* 3, one may think that the objections to actualism in these cases apply to probabilism as well. That is, one might object to probabilism on the grounds that it allows Stella to avoid incurring a t_{0} -obligation to $\langle B, D \rangle$ from t_{1} t_2 simply in virtue of being disposed to act wrongly. But probabilism does no such thing. First of all, probabilism says that only basic acts can be obligatory (or at least nonderivatively obligatory), and $\langle B, D \rangle$ is not a basic act. But we can sidestep this issue because probabilism can allow for non-singleton act-sets to be derivatively obligatory. Even so, probabilists maintain that both at t_0 and t_1 Stella cannot $\langle D \rangle$ at t_2 , and thus she cannot $\langle B, D \rangle$, whereas actualists take it for granted that in Doctor 1 Stella can at t_1 <D> at t_2 , and so they are committed to the position that Stella can $\langle B, D \rangle$. Actualism is problematic because it says that, in Doctor I-3, Stella can $\langle B, D \rangle$ and yet is not obligated to do so because she would not $\langle D \rangle$ at t_2 if she were to $\langle B \rangle$ at t_1 . Probabilism says that in Doctor I^*-3^* Stella is not obligated to $\langle B, D \rangle$ because she cannot perform this act-set, and OIC is true.

If Stella is not a Davidsonian 'swamp person' (Davidson 1987) and is derivatively responsible for her moral dispositions at t_0 in virtue of those dispositions being shaped by prior free actions for which she is directly responsible, then perhaps we should say that she is also derivatively responsible for the fact that she would $\langle E \rangle$ at t_2 if she were to $\langle B \rangle$ at t_1 (cf. Widerker 2006: 173; Timmerman and Swenson 2019). But even so, probabilism says that Stella would still not incur an obligation to $\langle B \rangle$ at t_1 , and this is the intuitively correct result. After all, OIC does not appear to be invalidated when one is responsible for the fact that one cannot perform some action such as $\langle D \rangle$.

Next, one might object to probabilism on the grounds that it prescribes the bad behavior of not administering either shot to Bob (i.e., $\langle C \rangle$) even though Stella is tasked with administering both shots. Unlike the actualist, the probabilist can point out that no matter what Stella does among the things that at t_0 she can do at t_1 , it is not the case that at t_1 Stella can $\langle D \rangle$ at t_2 , and OIC is true. Thus, although not administering either shot is bad in the sense that it is worse than $\langle B, D \rangle$, Stella simply *cannot* $\langle B, D \rangle$ from t_1-t_2 , and so $\langle B, D \rangle$ is not obligatory for Stella.

Probabilism thus avoids the aforementioned problems that plague actualism in these cases. Does it also avoid the problem that plagues possibilism? Yes, but in order to see how the objection to possibilism might apply to probabilism, we need to consider three more cases that invoke objective probabilities between 0 and 1. We do this using another variation of *Doctor* 1-3:



The percentages represent the objective probability that the relevant action would occur at t_2 if Stella were to $\langle B \rangle$ at t_1 .

Recall that possibilism rendered the intuitively incorrect verdict in *Doctor* 2, prescribing that Stella $\langle B \rangle$ at $t_{\rm I}$ even though it would result in the worst possible outcome and even though Stella could have brought about a significantly better

outcome by instead $\langle C\text{-ing} \rangle$ at t_1 . Actualism, on the other hand, rendered the intuitively incorrect verdict in *Doctor* 3, prescribing that Stella $\langle C \rangle$ at t_1 even though that is guaranteed to result in a disastrous outcome and even though Stella has the ability to bring about a significantly better outcome by performing $\langle B \rangle$ at t_1 instead.

Probabilism avoids both problems in the analogue cases *Doctor* 2^{**} and *Doctor* 3^{**} . Probabilism maintains that Stella has a t_0 -obligation to <C> at t_1 in both *Doctor* 1^{**} and *Doctor* 2^{**} and that Stella has a t_0 -obligation to at t_1 in *Doctor* 3^{**} precisely because these respective acts have the highest expected net deontic value among the possible acts that at t_0 Stella can perform at t_1 . The expected net deontic value of an act is calculated by multiplying the net deontic value of each outcome by the probability that that outcome would occur and then adding these values.

Probabilism takes the negligible difference in value between Stella's best and second-best options (and the significant difference in value between the second-best and the worst options) in *Doctor* 2^{**} into account in its prescriptions. In *Doctor* 2^{**} , the expected net deontic value of <C> is 0. The expected net deontic value of is as follows: (.1)(+10) + (.9)(-10,000) = -8,999. In this case, is simply too risky.

Probabilism likewise takes the significant difference in value between Stella's best and second-best options (and the negligible difference in value between the second-best and the worst options) in *Doctor* 3^{**} into account in its prescriptions. The expected net deontic value of <C> is -9,999. The expected net deontic value of is -8,999. In this case, is a risk worth taking.

What then about the objection to possibilism? Notice that probabilism's verdict in Doctor 3^{**} about Stella's t_0 -obligation is the same as possibilism's verdict about Doctor 1-3: Stella has a t_0 -obligation to $\langle B \rangle$ at t_1 . One may wonder whether the aforementioned objection to possibilism applies in this case. The answer is that it does not because probabilism does not generate a t_0 -obligation to at t_T that, if acted upon, would result in the worst possible outcome. It does, of course, generate a t_{o} -obligation for Stella to $\langle B \rangle$ at t_{i} , and acting on this prescription might result in the worst possible outcome (see Lewis [1987] and Pollock [1976] for an articulation of might counterfactuals). But this is not a problem because, in this case, the risk is worth taking precisely because $\langle B \rangle$ at $t_{\rm T}$ has a higher expected net deontic value than the value of the alternative option of <C-ing> at t_{I} . In Doctor 3, possibilists say that Stella is obligated to perform an act that is guaranteed to result in the worst possible outcome, and therefore this act is simply not a risk worth taking, as, in a sense, it is no risk at all. It is simply a guaranteed disaster. The same is not true in Doctor 3**, as the potential payoff is high enough to justify the risk. Probabilism can prescribe taking risks only in cases in which the potential payoff is sufficiently high to make the risk worth taking. Both possibilism and actualism fail on that front. Notice that we have not considered the objective probability between 0 and 1 concerning what, at t_0 , Stella will do (or would do) at t_{I} to be relevant to her t_{0} -obligation to do something at t_{I} . These probabilities may make a difference to the degree to which Stella is responsible for her action at t_1 . For example, suppose that in *Doctor* $1^{**}-3^{**}$ it is true at t_0 that

there is an objective probability of .8 that Stella will $\langle B \rangle$ at $t_{\rm I}$ and that, as a matter of fact, Stella $\langle B \rangle$ at $t_{\rm I}$. In that case, Stella may be less responsible for $\langle B \rangle$ -ing> than she would be if it were true instead at $t_{\rm o}$ that there is a probability of .3 that Stella will $\langle B \rangle$ at $t_{\rm I}$ because, in the former kind of case, it is in some sense easier for Stella to $\langle B \rangle$; (cf. Swenson [2022]).

4. Conclusion

We have done a few related things in this article. We first illustrated how counterfactual determinism is assumed in the A/P debate, and we showed that this assumption is not as innocuous as it is often thought to be. We then demonstrated how both actualist and possibilist judgments can be primed in slight structural variations of standard A/P cases. Though these judgments are generally presumed to be in tension with one another because they support contradictory views, we argued that an alternative view, probabilism, can accommodate the apparently conflicting intuitions between actualists and possibilists to a significant extent. Specifically, we provided independent motivation for rejecting counterfactual determinism and for denying that there can be true propositions about what we will freely do. We then articulated probabilism and showed both how and why it generates the intuitively correct verdicts in the above cases while also managing to avoid the objections that plague actualism and possibilism. These considerations should jointly provide substantive, albeit defeasible, evidence in favor of probabilism. Probabilism has been heretofore overlooked in the literature though it is a view that at the very least is worth taking seriously.⁶

> YISHAI COHEN UNIVERSITY OF SOUTHERN MAINE yishai.cohen@maine.edu

TRAVIS TIMMERMAN SETON HALL UNIVERSITY travis.timmerman@shu.edu

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