Introduction

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This Introduction has three sections, on "logical fatalism", "theological fatalism", and the problem of future contingents, respectively.

1. Logical Fatalism

The logical fatalist argues – in a particular sort of way – that no one has free will, understood as the ability to do otherwise than what one actually does. Though there are perhaps various ways of arguing that ought to make one a "logical fatalist", there is one particular recurring *pattern* of argument that we shall explicitly focus on in this Introduction (and that also recurs in many of the essays in this book). This is, we think, the *best* argument that moves from time, truth, and logic to the conclusion that no one has free will.¹ We find it helpful to separate two aspects of the fatalist's overall argument that no one is free. First, the fatalist argues – in a particular way – that "prior truths" specifying what we will do in the future are incompatible with our having free will. According to this argument, if it was true already, 1000 years ago (say), that you would

¹ This raises a difficult question: what is it that makes one a "logical fatalist"? There is, unfortunately, no generally agreed upon definition of this term. Minimally, the logical fatalist argues that necessarily, no human being has free will. But not just *any* way of arguing that necessarily, no one has free will makes one a logical fatalist. We (tentatively) suggest that what makes one a fatalist is that one argues that, necessarily, no one has free will *without* explicitly invoking any thesis about *causation* or causal determinism. There is, of course, a venerable argument – sometimes discussed in the essays of this book (especially in the essays of Perry and Mackie) – that causal determinism is incompatible with free will. But proponents of this argument are not now generally taken to be supporting the cause of "fatalism" or "the fatalist" – even in combination with an argument that determinism is *true* (or even necessarily true). The logical fatalist thinks we can show that no one has free will with more minimal resources.

purchase this book, then you could not have done otherwise than purchase the book. Second, the fatalist claims that, as a matter of logic, or as a matter of common sense, or as a matter of something else, we will have to say that for anything that happens, it always was the case that it would happen. If it is happening, this implies that there was indeed a "prior truth" specifying that it was going to. The fatalist concludes that we are never able to do otherwise than what we in fact do.²

At the most general level, responses to the logical fatalist divide according to whether one rejects the fatalist's argument for the *incompatibility* of "prior truths" and free will, or instead the argument that there are (or were) such truths in the first place. Broadly, denials of the argument for "prior truths" are most commonly associated with the thesis of the "open future", which we shall define as the thesis that future contingent propositions – roughly, propositions saying of undetermined events that they will happen – systematically fail to be true. (We discuss these positions in more detail in Section 3.) Our focus in the remainder of this section instead concerns by far the most popular way of responding to the fatalist: denying her argument for incompatibilism. According to this response, the mere fact that it was true 1000 years ago that you would purchase this book does not, in itself, tell us that you could not have done otherwise than purchase it. At the outset, however, it is important to note that not all who endorse the fatalist's argument for incompatibilism need themselves be fatalists. For one might endorse the fatalist's argument for incompatibilism about prior truths and free will, but *not* the fatalist's argument (or any other) for prior truths. Indeed, some have taken the strength of the fatalist's

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² Not everyone is comfortable with talking about "prior truths" in this way; some deny that it makes sense to talk about what *was* true *at a time* in the first place. See, for instance, van Inwagen's essay in this volume – and see Merricks's essay for a reply. With Merricks, we believe that the basic argument at issue here can be reformulated without employing the notion of truth at a time. However, for simplicity, we will continue talking about "prior truths" in the indicated way.

argument for incompatibilism to be strong reason to *deny* that there were the relevant prior truths – thereby preserving free will.

1.1. The Logical Fatalist's Argument for Incompatibilism

You purchased this book. (Thanks!) Could you have refrained from doing so? If it was true 1000 years ago that would purchase it, apparently not. For consider the following argument:

- (1) You had no choice about: it was true 1000 years ago that you would purchase the book at *t*.
- (2) Necessarily, if it was true 1000 years ago that you would purchase the book at *t*, then you purchase the book at *t*. So,
- (3) You had no choice about: purchasing the book at t.

This is the fatalist's argument for incompatibilism, which we shall simply call "the incompatibilist's argument". (More particularly, it is a token of an argument *schema* – a method of argumentation that we could apply to any candidate free human action – but we set this point aside.) The central idea here is simple. You have no choice about what necessarily follows from what you have no choice about. But since you had no choice about what was true 1000 years ago, before you were ever even born, you had no choice about what necessarily follows from what was true 1000 years ago, namely, that you purchase this book.

Or we could put the point this way. By the time you were purchasing the book, it was too late to prevent its having been the case 1000 years ago that you would purchase it. In particular, it was 1000 years too late for that. But what necessarily follows from what is too late to prevent is similarly too late to prevent. Consequently, you had no power to prevent your purchase of this book.

Premise (2) of the argument embodies the commonplace idea that it cannot both be the case that it was true 1000 years ago that you would purchase the book, and yet you don't in fact purchase it. So premise (2) seems indisputable.³ There are, then, two crucial points of interest concerning the argument: premise (1), and the "transfer principle" licensing the move from (1) and (2) to (3) – the principle that says that you have no choice about what necessarily follows from what you have no choice about. A denial of the transfer principle would maintain that the mere fact that q is entailed by a proposition one has no choice about does not *in itself* give us good reason to deny that one has no choice about q.⁴ And, indeed, some have called the transfer principle into question. However, the principle does seem plausible, and few are inclined to reject it.⁵

Our focus instead is on the most popular way of disputing the incompatibilist's argument: rejecting premise (1). Why believe premise (1)? Clearly, the thought here has something to do with the nature of the past and the nature of what we could plausibly have a

³ Understood in a certain way, Geachianism (discussed in Todd's essay in this volume) denies this thesis. Since Geachianism is such an extreme minority (even if interesting and neglected) view, we shall set this view aside.

⁴ Note: here one needs to be careful concerning the modal implications of a rejection of the transfer principle. It is tempting to say that someone who rejects this principle maintains that *it is possible that* though *S* does not have a choice about *p*, and though *p* obtains and entails *q*, *S does* have a choice about whether *q* obtains. Such a "rejection" would, of course, automatically commit one to the thesis that free will is possible. But this is too quick: one who rejects the transfer principle could think that free will is impossible, but for reasons independent of the validity of the transfer principle. A more cautious way of putting a rejection of the transfer principle is thus the following: the *mere fact* that *S* does not have a choice about *p* and *p* entails *q* does not *by itself* give us *good reason* to conclude that *S* has no choice about *q*. That is, *arguments* employing the transfer principle are (to the extent that they do so) bad arguments, even if the conclusions of those arguments are true, and, indeed, even if those arguments are sound (in the sense that it is impossible that the premises of the arguments be true while the conclusions are false).

⁵ For discussion of the transfer principle, see the essays from Perry, Mackie, and Zagzebski in this volume. See also Kapitan 1996.

choice about. That is, the incompatibilist recommends that we accept premise (1) on the basis that it is an instance of a more general thesis concerning our lack of power over the past; this is the thesis of the fixity of the past. You could have no choice about what was fashionable (or wasn't) 1000 years ago. You could have no choice about who was king (or not) 1000 years ago. (Or so it seems.) So why think you could have a choice about what was true 1000 years ago? If something was true 1000 years ago, how could one now prevent its having been true 1000 years ago? Isn't it simply too late to prevent its having been true? More generally, isn't it simply too late to prevent anything's having been...anything? We prevent things from becoming things – people from becoming new business partners, say, or propositions from becoming true. But we don't prevent people from having been business partners, or proposition's having been true.

It is often alleged that the incompatibilist's argument is simply a non-starter or just obviously defective.⁶ We think this is a mistake. There is something puzzling about a denial of the transfer principle. And there is also something puzzling about a denial of premise (1). Rejections of premise (1) therefore consist in ways of making (or trying to make) what can seem so puzzling about a rejection of (1) less puzzling.

There are, again, various ways of denying premise (1). What is common to all such ways is that they each employ, in their own particular way, the notion of *dependence*. Those who deny premise (1) will (in general) emphasize the following sort of point: what was true 1000 years ago concerning what you do at *t* depends on what you do at *t*. Since what was true 1000 years ago concerning what you do at *t* depends on what you do at *t*, this points to the possibility that you, even now, have a choice about what was true 1000 years ago. Look at it this way. Suppose that,

⁶ No doubt some fatalistic arguments *are* obviously defective. It is common, for instance, for certain fatalistic arguments to be dismissed on grounds that they employ a modal fallacy, e.g. that they confuse the "necessity of the consequent" and the "necessity of the consequence". But no such confusion is present in the argument considered here. Merricks has a short discussion of some obviously defective such arguments on pg. XX. See also van Inwagen on pg. XX.

prior to considering the fatalist's argument, it seems that there is no problem in saying that what you do at t is fully up to you. That is, no one is coercing you, you aren't under some strange spell or hypnosis, no one has implanted a chip in your brain that controls what you do, and so on. Thus, it seems unproblematic, so far, to assume that what you do at t is up to you. Shouldn't we go on to say, then, that anything that *depends* on what you do at t is similarly up to you? If it initially seems "OK" to say that what you do is up to you, then just by "adding in" something that *depends* on what you do, we shouldn't deny that what you do is up to you. Rather, it should similarly seem "OK" to say that you have a choice about whatever it is that depends on what you do.

This, we think, is the core strategy employed by those who seek to deny premise (1). However, whereas this sort of strategy is, we believe, *implicit* in a great many discussions of the fatalist's argument, the precise sort of dependence at issue – and the role it is meant to play – has not always been given the detailed attention it would seem to deserve. Recently, however, the notion of "dependence" has begun to receive greater attention, both within the debates concerning fatalistic arguments and in metaphysics more generally. What does it mean to say that what was true 1000 years ago concerning what happens today *depends on* what happens today? Depends in what sense? What is the nature of this sort of dependence? What sort of picture of time does it presuppose? What does it presuppose concerning the relationship between truth and "the world"? These sorts of questions have begun to be more explicitly treated within the literature on fatalistic arguments.⁷ Here we aim to continue this development by putting the notion of dependence front and center (in the place it arguably deserves).

We suggest (and now aim to develop the idea) that different ways of denying premise (1) involve differences regarding dependence. Again, *all* denials of premise (1) will maintain (as a

⁷ In addition to the articles in this book, see, for example, McCall 2011 and Westphal 2011. For a reply to these papers, see Fischer and Tognazzini 2014.

(The rationale for the scare quotes will become evident in what follows.) But, as we will see, such truths might depend on "what you do" in different ways – some being stronger than others. For instance, there is *counterfactual* dependence, the dependence at issue in *entailment*, and more besides. The question of what sort of dependence is the *relevant* sort of dependence has, as we will see, important ramifications for the fatalist's argument. Call the relevant sort of dependence "dependence with a capital 'd'": Dependence. More particularly, let us say that Dependence is such that those things that do *not* Depend on what you do are outside the range of things you might have a choice about. And it is such that those things that *do* Depend on what you do are inside that range – anyway, so long as nothing *else* is blocking your free will. That is, Dependence is such that if something Depends on what you do, we have no reason to deny that you have a choice about that thing, again, so long as no *other* threats to your free will are yet on the table. The point, then, is that if one can establish that the relevant prior truths Depend on what one does, one will have defused the fatalist's argument.

We could also specify the nature of Dependence in the following way. Suppose we ask what must be *held fixed* when evaluating what an agent can do at a given time *t*. Intuitively, anything that needn't be *held fixed* when evaluating what you can do at *t* is something that we have no reason to deny that you have a choice about at *t* (and vice versa). The incompatibilist's

⁸ Note: we cannot say that anything that needn't be held fixed when evaluating what you can do at *t* (that is, that Depends on what you do at *t*) is something you *do* have a choice about at *t*. Perhaps the fact that it was true 1000 years ago that you would purchase this book at *t* needn't be held fixed when evaluating what you were able to have

done at t. But this fact, in itself, certainly doesn't tell us that you did have a choice about this truth 1000 years ago -

for perhaps your purchase was the result of clandestine CIA manipulation, or perhaps it was otherwise causally

determined by factors beyond your control. In this case, though the truth 1000 years ago Depends on what you do

at t, you (plausibly) still do not have a choice about that truth at t. The point remains, however: since the prior truth

Depends on what you do at t, in itself it tells us nothing concerning what you were able to have done at t.

unpreventable and over-and-done-with, when evaluating what Jones can do at *t*, we must hold fixed what was true in the distant past relative to *t* (even regarding what Jones himself would do at *t*). Those who reject the relevant instance of premise (1), on the other hand, say the following: when evaluating what Jones can do at *t*, we needn't hold fixed prior truths about what Jones will do at *t*. Rather, we can let those truths vary. More specifically, those who reject premise (1) maintain that we can let those truths vary because those truths *depend on* what Jones does at *t*. Dependence, then, is such that, when evaluating what a person can do at *t*, we must hold fixed everything that does not Depend on what that person does at *t*, and nothing that does.

We proceed as follows. We identify five different (progressively stronger) accounts of Dependence. The accounts are progressively "stronger" in this sense: that the sort of dependence at issue in apprior account holds does not entail that the sort of dependence at issue in any later account also holds, whereas if the given sort of dependence in a later account holds, this entails that the sort of dependence at issue in any earlier account will also hold. (There will, however, be doubts concerning whether the dependence at issue in the fifth account indeed entails the sort at issue in the fourth.) As we will see, the first two accounts are relatively "weak" — but their failures are nevertheless instructive. We then consider three further accounts: the account suggested by Trenton Merricks (in this volume), (our development of) Ockhamism, and the account suggested by Finch and Rea (in this volume). And we suggest (though certainly do not fully defend) the following thesis: the sort of dependence identified by Merricks is too weak, whereas the sort required by Finch and Rea is too strong. (That is, Finch and Rea [arguably] require too much, whereas Merricks [arguably] does not require enough.) The sort required by Ockhamism, however, is just right — anyway, if premise (1) is to be rejected in the first place.

Suppose Jones hadn't sat at *t*. Well, then it never would have been true 1000 years ago that he *would* sit at *t*. In that sense, then, what was true 1000 years ago depends on what he does – namely, it counterfactually depends on what he does in just the indicated way. Accordingly, one might say: if X counterfactually depends on what you do at *t*, then X, in itself, is no threat to your ability to do otherwise than what you do at *t*, and needn't be held fixed when evaluating what you can do at *t*.

Is counterfactual dependence the right sort of dependence? Arguably it isn't.

Circumstances may be such that, had Jones stood at *t*, he wouldn't have been locked up in chains (as he was) just prior to *t*. But this would hardly show that Jones had a choice about whether he was locked up in chains. The mere fact that, *had* Jones stood, he *wouldn't* have been locked up does not thereby tell us that his having been locked up was no threat to his ability to have stood. In other words, suppose I suggest that Jones had no choice about whether to sit or to stand, since he was in chains, and these chains prevented him from standing. I will hardly be moved by the observation that had Jones in fact stood, those chains never would have been there in the first place. Intuitively, when evaluating what Jones could have done at *t*, we *do* need to hold fixed that Jones was in chains just prior to *t* – *even if* he wouldn't have been had he done otherwise. So counterfactual dependence is (plausibly) too weak.

Entailment

Necessarily, it was true that Jones would sit at *t* only if Jones sits at *t*. So, not only is it the case that, had Jones not sat, it would not have been true that he would sit, it is *necessarily* the case that, had he not sat, it never would have been true that he would sit. In the "chains" case, perhaps it is true that had Jones not sat, he would *as a matter of fact* never been in chains, but it is not *necessary* that had he not sat, he never would have been in chains. It is metaphysically possible that, though he was in chains, Jones nevertheless did not sit, insofar as it is metaphysically possible

(say) that Jones should have suddenly acquired superhuman powers, or that a miracle occur, or the like. So though Jones's standing up at *t* would *imply* (in the circumstances) that he was never in chains, Jones's standing at *t* does not *entail* that he was never in chains. But Jones's standing at *t* does entail that it was never true that he would sit at *t*.

So the suggestion is this: when evaluating what Jones could have done at *t*, we needn't hold fixed anything that entailed that Jones would in fact sit at *t*. For anything that entails that Jones shall sit at *t* depends on his sitting at *t*, and anything that so depends on what Jones does at *t* is, in itself, no threat to Jones's ability to do otherwise than sit at *t*. Is this suggestion plausible? We think it is deeply problematic. Consider, first, the doctrine of *causal determinism*. On causal determinism, the (temporally intrinsic; we return to this crucial notion shortly) state of the world in the distant past, together with the laws of nature, entailed that Jones sits at *t*. More generally, for anything anyone ever does, the past and the laws entail that one does those things. The suggestion here, then, would immediately imply that causal determinism is no threat to free will. For insofar as the past and the laws *entail* what you do, they therefore *depend* on what you do (on the current account), and accordingly needn't be held fixed when evaluating *what* you can do. However, it is at least very plausible that, when evaluating what you can do at *t*, we *do* need to hold fixed the past and the laws relative to *t*. (Classical compatibilists about free will and determinism, however, will disagree.⁹) Insofar as the current suggestion would imply that causal determinism is no threat to free will, we think many will find this suggestion problematic.

Or consider a case involving divine decrees. Suppose God decrees that Jones shall sit at *t*. Necessarily, God's decrees always come to pass. So God's decree *entails* that Jones shall sit at *t*. Intuitively, a divine decree that one shall do a given thing certainly calls into question one's ability to refrain from doing that thing. But, on this suggestion, it does not. For insofar as the decree *entails* what you do, it *depends* on what you do, and accordingly needn't be held fixed when

⁹ For more on this issue, see John Perry's essay in this volume. See also Mackie's essay, pg. XX.

evaluating *what* you can do. But this suggestion seems implausible. When evaluating what Jones is free to do at *t*, arguably we should take into account (and hold fixed) any divine decrees concerning what Jones does at *t*. So, again, mere entailment would not seem to be the right sort of dependence.¹⁰ Indeed, that the past and the laws and the divine decrees (and the prior truths) *entail* what you do seems to be the *problem* – so how could the mere recognition of this fact be the solution?¹¹

The Simple Because (Trenton Merricks)

So both counterfactual dependence and entailment seem too weak, insofar as both are susceptible to counterexamples involving causal determinism and divine decrees. And upon reflection the problem with these accounts seems clear: they do not imply anything about the *order of explanation*. From the mere fact that X entails Y, for instance, we cannot conclude that X obtains *because* Y does. Indeed, as the decrees case brings out, X might entail Y, and Y obtain because X does. That is, intuitively, it seems clear that, if God decreed that Jones shall sit, Jones sat because of God's decree, and not the other way around. Further, on determinism, it seems clear that you do what you *because* the past and the laws were the given way – and it is not the case that the past and the laws were that way because of what you do. The lesson, then, would appear to be this: we don't need simple *dependence*, but *explanatory dependence* of some kind. We need the proper order of explanation.¹²

¹⁰ There is a development of this point in relation to the Ockhamist reply to the theological fatalist in Widerker's essay in this volume. See pgs. XX. See also Todd 2013a.

¹¹ David Hunt make a similar point in assessing the Ockhamist reply to the theological fatalist (and the "entailment" criterion of soft-facthood) in his essay in this volume. See pgs. XX.

¹² A similar point has been widely recognized within the literature on ontological dependence. Suppose we consider what it is for one object to exist *in virtue of* another object's existence, and thereby depend for its existence on that

Enter Trenton Merricks. In his paper, "Truth and Freedom," Merricks emphasizes the following point: truth depends on the world, and does so in the following ("trivial") sort of way:

It is true that grass is green because grass is green.

It is true that there are no hobbits because there are no hobbits.

Now we apply this sort of dependence to "prior truths" about what we will do. Suppose it is true that Jones will sit. Then, Merricks notes, we can say the following:

It is true that Jones will sit because Jones will sit.

object. Following Kit Fine's 1994 paper, "Essence and Modality," it has been widely accepted that this relationship cannot be captured in purely modal terms (in terms of necessity and possibility) - for example, by saying that one object could exist without the other, but not the other way around. For consider the example (provided by Fine) of sets and their members. Intuitively, singleton Socrates (the set consisting solely of Socrates) depends for its existence on Socrates, and not the other way around. However, Socrates could not exist without singleton Socrates, since, necessarily, whenever anything exists, so does the singleton set of that thing. The general upshot of this sort of example seems to be that the relationship in question – what it is for one thing to exist in virtue of another – cannot be captured modally. A similar sort of point (or perhaps the recognition of this point) seems to be emerging in the literature on fatalistic arguments. (Todd 2013a explicitly draws comparisons between the literature on ontological dependence and the literature on fatalism and free will.) That is, it seems clear that the relevant relationship must be sensitive to the proper order of explanation - and therefore cannot be purely modal in character (as is the notion of entailment). However, just as there are substantive disputes in general metaphysics concerning how this (admittedly not purely modal) relationship should be further characterized, so there are substantive disputes (as we shall see) concerning how the sort of dependence relevant to responding to the fatalist should be characterized. These issues are thus deeply continuous with a recent "trend" in contemporary metaphysics that focuses on the related notions of truthmaking, grounding, fundamentality, and dependence. The literature on these topics is enormous; see Lowe 1998 (ch. 6) Armstrong 2004, and Schaffer 2008 for a (small) start.

And, looking backwards, we can say that it *was* true that Jones *would* sit because Jones would sit. Call the sort of dependence at issue in these examples "M-dependence". Is M-dependence Dependence? The (rough) suggestion is this. When evaluating whether S could have refrained from doing A at *t*, we do not need to hold fixed anything that was the way it was (or existed, or obtained, or...) because S would do A at *t*. Everything else, however, must be held fixed.¹³

We believe that M-dependence is our first real contender for being Dependence. But there is, we think, substantial reason to worry that it is not. In particular, one might worry about the claim that we do not need to hold fixed anything that M-depends on what you do at t, when evaluating what you can do at t. Perhaps something may M-depend on what you do in this sense, but still must be held fixed. Accordingly, one might worry that M-dependence (like counterfactual dependence and entailment) is still too weak (is insufficient). Consider, first, a case involving divine beliefs. Suppose God believes that Jones will sit at t. On standard assumptions (viz., that God cannot be mistaken), this entails that Jones will sit at t. But suppose we add: God believes that Jones will sit at t because Jones will sit at t. Does this imply that God's prior belief tells us nothing about Jones' ability to refrain from sitting at t, and that we have no reason to deny that Jones has a choice about whether God held that prior belief? It is hard to say. For it is substantially mysterious how Jones now could have any choice at all about whether God (or anyone else) had or lacked a certain belief in the past. ¹⁴ As Linda Zagzebski notes in this context, there is no use crying over spilled milk. And past beliefs seem as much like spilled milk as anything could be. 15 So it is certainly not immediately evident that M-dependence gives us the right result in this case.

¹³ This is our *reconstruction* of Merricks's view, or our statement of a "Merricks-inspired" view – but Merricks himself does not put his points precisely in these terms.

¹⁴ It is also hard to say for the following reason: it isn't clear what it is for God to believe that p "because p", as in Merricks's constructions. For more on this issue, see Todd and Fischer 2013.

¹⁵ Zagzebski 1991: 84.

It would, however, be contentious to suggest the case of God's beliefs as a straightforward counterexample to the sufficiency of M-dependence. For, as readers of Merricks's paper will discover, Merricks argues that this precise fact – that God believes that Jones will sit at t because Jones will sit at t – serves to reconcile divine foreknowledge with human freedom. So consider instead someone who believes in divine prepunishment. (Typically, of course, punishment for a crime follows the crime. In a case of prepunishment, however, one is punished for committing a crime before one commits the crime.) Suppose this person maintains the following: in general, God prepunishes someone for committing a given crime because he or she will, in fact, commit it, and not the other way around. Intuitively, this mirrors precisely what we have just been saying about the prior truths and God's beliefs. Now, the question is this. Is there still a good argument that such divine prepunishment would be inconsistent with the freedom of those prepunished? Insofar as one thinks that there still is available such an argument, one should think that M-dependence is insufficient to lincense a rejection of premise (1). We find it at least very plausible that we *should* be able cogently to argue that divine prepunishment would be inconsistent with the freedom of those pre-punished. If M-dependence is Dependence, however, then no such argument will be available, for the proponent of divine prepunishment can maintain that God's prepunishments M-depend "on what we do," and therefore needn't be held fixed when evaluating what we can do. However, when evaluating whether Jones can refrain from sitting at t, arguably we should hold fixed that God prepunished him for doing so, insofar as this fact is now totally in the past and beyond anyone's subsequent control. However, if we do hold God's prepunishment fixed, then Jones's "alternatives" will be reduced to one, since there is only one "alternative" regarding what Jones does at t that is consistent with God's having prepunished him for sitting at t. 16 So, again, it is not clear that M-Dependence is in fact Dependence. 17

Determination and the Intrinsic/Extrinsic (Hard/Soft Fact) Distinction (Ockhamism)

Here, then, we come to "Ockhamism" – or at any rate, *our* construal of Ockhamism. We should begin by noting that the term "Ockhamism" has been used in various different ways in various different contexts to refer to sometimes subtly different theses and positions. Of course, what matters most is that, however we use our terms, we are clear about how we are using them. And we aim to be clear about how we shall use the term "Ockhamism". We intend our usage to be both descriptive *and* prescriptive. On the one hand, we believe that our usage is most faithful (insofar as any such usage can be) to the tradition of usage of this term in the literature regarding fatalism in the last 50 years. However, given recent developments, we further intend to *recommend* this usage – that is, we maintain that, in order to forestall confusion, the term *should* be used in this way (to refer to the position we now aim to describe).¹⁸

¹⁶ For an extensive development of the argument that divine prepunishment would be incompatible with the freedom of those prepunished, see Todd 2013b; see also Todd and Fischer 2013. In a word, the problem can be put as follows. Suppose that we (the authors) believe that you will do something wrong tomorrow, and prepunish you for doing it. It would seem that your only hope for innocence is that you can prove us wrong for having prepunished you for a crime you never in fact commit. But when *God* is the prepunisher, this possibility evaporates – and with it your freedom.

¹⁷ For more, see Todd and Fischer 2013.

¹⁸ "Who are you to tell us how to define our terms?" This a good question that we propose to ignore. Note: we ourselves have not always followed our own advice. In our reply to Trenton Merricks in this volume, we suggest that Merricks could take up the mantle of Ockhamism, and maintain that what we call "M-dependence" is the sort of dependence at issue in soft-facthood (which is the core notion employed by the Ockhamist). Subsequent reflection has led us to think instead that the particular sort of dependence we develop here (the sort of

Suppose that, instead of putting the problem in terms of true propositions about what someone will do in the future, we put it in terms of true *predictions* about what someone will do in the future. Suppose Jones just sat down a few minutes ago, at t. Now, we're asked: could Jones have refrained from sitting? Of course, that depends. But suppose someone points out: Smith predicted yesterday that Jones would sit today at t. Accordingly, Jones did precisely what Smith predicted he would do. Thus, not only did Smith predict what Jones would do, Smith *truly* predicted what Jones would do. However, that Smith had already *truly predicted* what Jones would do is a fact about the past (relative to Jones's sitting at t) – and thus a fact over which Jones lacked subsequent control. Accordingly, it must be held fixed when evaluating what Jones was able to do at t. Holding fixed that Smith had already *truly predicted* that Jones would sit at t, Jones could not have refrained from sitting at t.

Now, the Ockhamist says the following. Of course, when evaluating what Jones could have done at *t*, we must hold fixed the fact that Smith had already *predicted* that he would sit at *t*.

That much seems "over and done with" and beyond Jones's subsequent control. But we need not hold fixed the fact that Smith had *truly* predicted that Jones would sit at *t*. Indeed, absent any further reasons to doubt Jones's freedom, we can say that Jones, at *t*, had a choice about whether Smith's prediction was right or was wrong. That is, whether Smith had *truly* predicted that he would sit at *t* was up to Jones at *t*.

The Ockhamist's account of these facts is as follows. That Smith had already *predicted* that Jones would sit at *t* was part of the past (relative to *t*) *intrinsically considered*, whereas that Smith had *truly* predicted that Jones would sit at *t* was only "part of the past" considered *extrinsically*. More particularly, the Ockhamist's contention is this. When evaluating what an

determination at issue in the intrinsic/extrinsic distinction) is *essential* to Ockhamism, and that Merricks's approach should be *distinguished* from Ockhamism precisely because it does not employ this sort of dependence, but instead the weaker "M-dependence".

All this case, however, Jones's doing otherwise than sitting at t despite Smith's true prediction that he would sit at t would not require an intrinsic change in the past only otherwise change in the past relative to t to the sagent cannot perform that action at t. However, that an agent's performing an action at t would require an extrinsic change in the past relative to t tells us nothing, in itself, concerning whether the agent can refrain from performing that action at t. In this case, however, Jones's doing otherwise than sitting at t despite Smith's true prediction that he would sit at t would only require that Smith's prediction should have lacked a certain extrinsic property it actually did have, viz. the property of being a correct prediction. For whether a current prediction about what you will do counts as correct is at least in part determined by whether you will do that thing. Accordingly, we have not yet encountered any clear obstacle to saying that Smith could have refrained from sitting at t, despite Smith's true prediction that he would.

The Ockhamist thus makes a distinction between two sorts of facts about the past: facts that report how the past was *intrinsically* at a given time, and facts that report (at least in part) how the past was *extrinsically* at a given time. In the literature, this distinction is called the distinction between "hard facts" about the past (or at times) and "soft facts" about the past (or at times).²⁰

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¹⁹ Note: it is crucial to see that the Ockhamist *does not* contend that we can change – even Cambridge-change – the past. Rather, the Ockhamist (who thinks we have free will) contends that we can act in ways that would *require* such changes.

²⁰ We don't mean to suggest that everyone who has used the "hard/soft fact" terminology has done so in this precise way. The distinction has been "glossed" in many ways in the literature, including as

- the distinction between those facts that are "solely about" a given time and those "at least in part about the future" relative to that time
- the distinction between those facts that are "over and done with" as of a given time, and those that are not
- the distinction between those facts at a time that do not depend on or hold in virtue of the future relative to that time, and those that do (without paying explicit attention to the kind or manner of the dependence here invoked)
- the distinction between those facts relevant to determining which possible worlds "share the same past as" another given possible world (the hard facts being relevant, and the soft facts being irrelevant)
- ostensively, as the distinction that correctly explains "the difference" between such facts as (1) (3) and (1*) (3*), noted below

All of these usages are, we think, at least somewhat "legitimate", insofar as it is no longer clear (if it ever was) who "owns" the soft/hard terminology, and all pick up on results it is meant to capture. (The terminology was first introduced by Nelson Pike in Pike's 1966 reply to Saunders.) Still, we maintain that the *best* way to use the distinction, if one is going to use the terminology at all, is simply to *identify* it with the temporally intrinsic/extrinsic distinction. This "gloss" would then leave open various further ways of *analysing* the distinction.

The main constraint we would wish to insist on is only that the distinction, in itself, should *not* be stated in a way as to analytically entail any results about agency or free will. That is, it is (unfortunately) very common for writers employing this distinction to mistakenly claim that "soft facts" are those facts about the past that someone has or may have a choice about, whereas "hard facts" are those facts about the past that no one has or could have a choice about. This is *not* a legitimate usage of or "gloss on" the hard/soft distinction. The distinction itself is *neutral* on this score – indeed, the distinction was drawn (at least in part) in order to help us *resolve* such questions (though it is need for other purposes as well, such as defining the doctrine of causal determinism) so cannot be *defined* in terms of them. (For a similar point, see Zagzebski 1991: 67.) In particular, there will be, on *any* view, any number of soft facts about the past that no one has a choice about – and it is not *analytic* that no one has a choice about the hard facts about the past. Some may – and some have – maintained that even some *bard* facts about the past needn't be held fixed when evaluating what agents can do at later times. (See Fischer 1994.) Indeed, Trenton Merricks's view,

Given the variety of frameworks one might have about times, facts, and propositions (and the like), there never emerged any "canonical" way of expressing the hard/soft fact distinction. But consider some examples:

- (1) John F. Kennedy was being shot in Dallas in 1963.
- (2) Smith predicted yesterday at t1 that Jones would sit tomorrow at t3.
- (3) Smith believed yesterday at t1 that Jones would sit tomorrow at t3.

Intuitively, (1) - (3) report how the past was *intrinsically* at the relevant times. They thus are (or report) "hard facts" about the past. Consider, however, the following:

- (1*) John F. Kennedy was being shot in Dallas in 1963, 50 years prior to our writing this essay in 2013.
- (2*) Smith correctly predicted yesterday at t1 that Jones would sit tomorrow at t3.
- (3*) Smith truly believed yesterday at t1 that Jones would sit tomorrow at t3.

Intuitively, (1*) – (3*) do not simply report how the past was intrinsically at the relevant times, but also how it was extrinsically. They thus are (or report) "soft facts" about the past. For instance, whether an event is taking place 50 years prior to when another event will take place is not an *intrinsic* feature of that event, but an extrinsic feature – viz., a feature the first event has in virtue of the fact that another event will take place 50 years later. And whether a prediction or a belief counts as *correct* or *true* is not an *intrinsic* feature of that prediction or belief, but an extrinsic feature.

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insofar as Merricks admits (Merrick 2011) that God's beliefs are hard facts at times, is precisely such a view. (For more on this issue, see our reply to Trenton Merricks in this volume.)

Thus, the sort of dependence the Ockhamist appeals to – the sort they say is

Dependence – is the sort at issue in the intrinsic/extrinsic distinction. It is the sort at issue in
cases like these (which all come out on the "extrinsic" side of the distinction):

- whether one *counts* as being an uncle is (at least in part) *determined by* whether one's sibling has a child
- whether one's punishment *counts* as just is (at least in part) *determined by* whether one commits the given crime
- whether one's belief *counts as* knowledge is (at least in part) *determined by* whether that belief is true
- whether that mark on Jones's skin *counts* as a mosquito bite is (at least in part) *determined*by whether it was produced by a mosquito

And now we apply this sort of "determination" to the cases at issue²¹:

- whether a prediction about what you will do *counts* as true is (at least in part) *determined by* whether you will do that thing
- whether a proposition about what you do *counts* as true is (at least in part) *determined by* whether you will do that thing

²¹ We are open to the suggestion that the sort of determination at issue in these examples can be found in cases that do not involve the intrinsic/extrinsic property distinction. That is, though it seems that all cases involving the intrinsic/extrinsic distinction will exhibit this sort of "determination", perhaps not all cases of this sort of "determination" are also cases involving the intrinsic/extrinsic distinction. In any case, it is this sort of "determination" that, on our view, the Ockhamist says is Dependence.

Thus, according to the Ockhamist, the fact that someone had already truly predicted what Jones would do at *t* (or that it was already true that he would perform a certain action at *t*) needn't be held fixed when evaluating what Jones was able to have done at *t*. The logical fatalist's argument is thereby defused.

Note: it is crucial to our understanding of "Ockhamism" that Ockhamism is not committed to any particular thesis about which further facts about the past (beyond the sort of facts just mentioned) are indeed "soft". That is, as we are conceiving it, Ockhamism is itself neutral as concerns which further facts about the past are "intrinsic" or "extrinsic" (in the relevant way). It is thus an additional question to which further cases the Ockhamist strategy applies. As we discuss in the next section (on "theological fatalism"), some have sought to apply the Ockhamist strategy even to God's past beliefs about the future; that is, some have maintained that the Ockhamist strategy developed above will apply in this case as well, since, roughly, God's past beliefs (on the appropriate construal of God's past beliefs) are soft facts about the past. (Indeed, for many readers, "Ockhamism" may be a term that refers primarily to a way of attempting to reconcile divine foreknowledge and human freedom by means of the "hard/soft" distinction.) However, it is crucial to see that the core Ockhamist strategy itself is neutral on this score. One might endorse this core strategy, but not the application of this strategy to the argument of the theological fatalist, for one might contend that it is implausible that God's past beliefs are soft facts about the past. Ockhamism itself is just fine, one may think – but not the application of Ockhamism to this further case.

Thus, we can note the following. The Ockhamist strategy, in itself, is *not* automatically susceptible to worries arising from divine beliefs and divine prepunishments. (Recall that a central worry for Merricks's approach is that it might be thought precipitously to reconcile divine foreknowledge and divine prepunishment with human freedom. That is, the worry for Merricks's approach was that M-dependence is, in this sense, too weak.) Someone employing the Ockhamist strategy *could* say the following. If God believes that Jones will sit at *t*, then Jones's

refraining from sitting at / would not merely require an extrinsic change in the past, but an intrinsic change – it would require that God should never have even believed that Jones would sit at /. For whether someone – even God – counts as believing that one will perform a given action is not even in part determined by whether one will perform that action. (This claim, however, will be denied by those who seek to apply the Ockhamist strategy [as we have developed it] to God's past beliefs.) Similarly, if God (per impossible, perhaps) has prepunished Jones for sitting at /, then Jones's refraining from sitting would require an intrinsic change in the past – it would require that Jones should never have been punished by God at all. For whether one counts as being punished (unlike justly punished) for committing a given crime is not even in part determined by whether one will ever in fact commit that crime. In other words, someone employing the Ockhamist strategy could maintain that the relevant facts (that God had believed that Jones would sit at / or had prepunished Jones for sitting at /) are hard facts about the past relative to /. Accordingly, they must be held fixed when evaluating what he can do at /.

Is Ockhamism plausible? We believe it is (so construed). We believe that it captures the intuitive thought that our freedom – if we have freedom at all – is the freedom to *extend the actual past* one way or another. That is, in the words of Carl Ginet, our freedom is the freedom to *add to the given past.*²² But not simply anything gets to go into a statement of the "given past" relevant to this thesis. Rather, what seems intuitively very plausible is that our freedom is the freedom to add to what has *really happened* in the basic sense – to add to the real history of the world, intrinsically considered. We will, however, consider a challenge to the *sufficiency* of the Ockhamist's sort of dependence in the next section (that is, that the fact that this sort of dependence holds is sufficient to license a rejection of premise (1)). And, as we've seen, Merricks would of course wish to challenge its *necessity* (that the holding of this sort of dependence is necessary to license a rejection of premise (1)). Merricks will contend that this sort of

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dependence does not *need* to hold in order to license a rejection of premise (1), because Merricks will contend that even some things (in particular, God's past beliefs about what you will do) do not display this sort of dependence on what you do, but nevertheless, according to Merricks, needn't be held fixed when evaluating what you can do. Whether one here sides with Merricks or with the Ockhamist would seem to be a matter (at least in part) of where one stands on the cases of divine belief and divine prepunishment – but this is a matter we cannot here further aim to resolve.

"Because of" (Finch and Rea)

From the fact that it is true that Jones will sit because Jones will sit, it does not follow that it is true that Jones will sit because of Jones's sitting. And from the fact that whether the proposition that Jones will sit counts as true is determined by whether Jones will sit, it similarly does not follow that that proposition is now true (if it is) because of Jones's sitting. For we should distinguish between two things: the fact that Jones will sit, on the one hand, and Jones's sitting on the other. This is not an essay on fundamental ontology, and we will not sketch any sort of theory about the ontological distinctions between propositions, facts, states of affairs, and events. These are complicated questions. Still, there would seem to be ample room to treat "Jones's sitting" as an event – a concrete event. And from the fact that something now depends on the fact that a concrete event will come to exist, it does not follow that anything now depends on the existence of that concrete event. For to suppose that a concrete event will exist is not – many will maintain – thereby to suppose that any such event *does* exist. So here we come to the rationale for the scare quotes concerning the phase "what we do at t" (and the like). For such a phrase is ambiguous between two readings: "what we do at t" could refer to (something like) the fact that we will perform some action at t, or it could refer to the concrete event of our performing that action at t. And these are importantly different things.

It is tempting to write – and we have as a matter of fact written – that on Merricks's approach, the relevant prior truths (and God's beliefs/prepunishments) "M-depend on what we do". It is also tempting to write that, on Merricks's approach, the truth that Jones will sit at *t* "M-depends on Jones's sitting at *t*". But here we must be careful – for arguably these constructions are misleading. Suppose we grant to Merricks the claim that it is true that Jones will sit at *t* because Jones will sit at *t*. Do we *thereby* grant that this truth in any sense depends on "Jones's sitting at *t*", where Jones's sitting at *t* is construed as a concrete event? No. And some will contend that precisely this sort of dependence is the sort that is required. That is, some will contend that, if the relevant prior truths are to be no threat to Jones's free will, then Jones's very action – that concrete event – must in some sense be "explanatorily prior to" or otherwise "ground" those prior truths. Accordingly, M-dependence and the Ockhamist's "determination" are not the relevant sort of dependence. They are not Dependence.

In their paper in this volume, Alicia Finch and Michael Rea suggest (in a somewhat different guise) precisely this sort of view, and thereby connect these issues with an important and related set of issues within the philosophy of time.²³ More particularly, Finch and Rea maintain that whereas it is clear how *eternalists* can capture the right sort of dependence, it is far from clear how *presentists* or *growing-block theorists* might attempt to do so. We certainly cannot here engage in an extended discussion concerning presentism, growing-block theory, and eternalism. Roughly, however, presentists maintain that only present objects exist (nothing exists

a more robust sort is required.

²³ They do so in the name of calling into question whether presentists can be *Ockhamists* – that is, whether presentists can employ the Ockhamist strategy of responding to the arguments of the logical and theological fatalists. They thus construe "Ockhamism" more broadly than we do in this essay. On their construal, *any* response to these arguments that employs the notion of "explanatory dependence" is a version of Ockhamism. As we have it here, the Ockhamist does not "own" the point about dependence – only a particular *version* thereof. In our favored framework, then, their point can be put as follows: the sort of dependence the Ockhamist appeals to is insufficient;

at a temporal distance from the present), growing-block theorists maintain that past and present (but no future) objects exists, and eternalists maintain that past, present, and future objects are all on an ontological spar. Now, Finch and Rea point out that, prospectively at least, eternalists can give a more robust account of the relevant sort of dependence than their presentist and growing-block counterparts. Eternalists are in a position to say, whereas presentists and growing-blocks theorists are not, that *Jones's very action* (construed concretely) was itself *ontologically* (though of course not *temporally*) prior to its being true that he would perform that action. Non-eternalists, however, can tell no such story. Suppose it is true now, at 11, that Jones will sit at some future time 110. According to the presentist/growing block theorist, there simply *is no such thing* as the concrete event of "Jones's sitting at 110". But insofar as no such action *exists* at 11, if it is *true* at 11 that Jones will sit at 110, then this truth at 11 is not now "grounded in" or true "because of" the concrete (future) event of Jones's sitting at 110.

We do not have any particular *name* for (or further way of characterizing) the sort of dependence Finch and Rea take to be Dependence. This is, as they admit, a difficult question about which we can remain neutral. Their main point, we take it, is that the dependence must hold between the *right sorts of entities*. We can thus interpret their suggestion to be the following. When evaluating what an agent can do at *t*, one need not hold fixed anything that held (or existed, or obtained...) *because of* that agent's concrete action at *t*. Anything else, however, must be held fixed. Accordingly, eternalists can reject the logical fatalist's argument. Presentists and growing-block theorists, however, cannot. We could also put the point this way. According to Finch and Rea, eternalism is necessary for the relevant sort of dependence to hold. Insofar as presentists and growing-block theorists can appeal to the sort of dependence at issue in (our developments of) M-dependence and Ockhamism, these sorts are therefore insufficient to license a rejection of premise (1). (Presentists can say that it is true that something will happen

²⁴ For more, see Rea's essay in this volume, pgs. XX.

because that thing will happen; presentists are also seemingly entitled to the distinction between what is intrinsic to a time and what is not.)²⁵

We shall not here take issue with the *sufficiency* of Finch and Rea's sort of dependence (for licensing a rejection of premise (1)). The problem with this account, plausibly, is not that the relevant sort of dependence (like counterfactual dependence and entailment) is too weak.

Rather, we wish to question its *necessity* (for licensing a rejection of premise (1)). The problem with the account, arguably, is that it requires too much – it requires that one's very action be "ontologically prior" to the relevant past truth, and thus the truth of eternalism. But is this really required? It is hard to know how to settle this question. But we suggest the following. It seems that the Ockhamist's story *in itself* is sufficient to make it intuitively plausible that the given past truths needn't be held fixed. That is, insofar as it *is* intuitively plausible that, say, Jones *now* might have a choice about whether Smith's prior prediction was (then) right or (then) wrong, this is plausible because *whether* it was then right or wrong was *then* determined by Whether Jones will in fact sit – and whether Jones will in fact sit is, in turn, determined by Jones himself (or so we might suppose). No appeal is made in this account to *Jones's very action* (construed concretely). So, again, we suggest that, even on eternalism, what makes it the case that such prior truths needn't be held fixed is nothing uniquely licensed by eternalism itself. It is not, one might

²⁵ Earlier we remarked that the five accounts are progressively stronger in the sense that if the sort of dependence at issue in a latter account holds, this entails that the sort at issue in any previous account will also hold. And we noted that there will doubts that the sort of dependence at issue in the 5th account – the one we are now considering – indeed entails the sort at issue in the 4th, namely, Ockhamism. And perhaps we can now see why this might be so. Certainly someone sympathetic to Finch and Rea's position might maintain that God's prior belief is somehow "grounded in" one's concrete future action, without also wishing to maintain that God's prior belief is somehow extrinsic or relationally determined (that is, that the fact that God holds this belief at this time is a soft fact at or about this time). Whether this strategy can succeed depends on whether we can make sense of the idea that a current belief is "grounded in" a concrete future action.

suggest, the eternalist-qua-eternalist that can block the fatalist's argument, but the eternalist-qua-Ockhamist.

Summary

We hope the preceding discussion has brought out the subtlety, complexity, and difficulty of the issues here at stake. The most popular way of rejecting the fatalist's argument for incompatibilism is to reject the premise that we could have no choice about what was true in the distant past. Those who reject this premise reject it because, they think, what was true in the distant past regarding what we will do (in some sense or other) depends on our doing those very things. We have suggested that rejections of the fatalist's premise (1) should be individuated according to the nature of the dependence here invoked. And we have further argued that it is not immediately obvious precisely what sort of dependence is necessary to license a rejection of (1), nor what sort is sufficient to license that rejection. Counterfactual dependence and mere entailment, we think, are too weak. But once we move to Merricks's account, and other accounts that are explicitly sensitive to the "order of explanation," matters become substantially more difficult. Nevertheless, we have suggested that Merricks's sort of dependence is insufficient, whereas the sort required by Finch and Rea is not necessary. But certainly we have not here resolved this question, and part of the aim of this book is to put this issue at the front and center of the debate.

Here ends our discussion of the logical fatalist's argument for the incompatibility of "prior truths" and free will. Before moving on, we wish to note that most think (for good reasons or not) that the fatalist's argument is a failure. But here we must be very careful in stating our conclusion. It is *tempting* to add: "That is, most think that prior truths about what you do are perfectly compatible with your ability to do otherwise." But this would be a dangerous

addition, and indeed a gratuitous and unjustified *leap* from the failure of the fatalist's argument. From the fact that the logical fatalist does not succeed in showing that prior truths are incompatible with free will, it does not follow that they indeed *are compatible* with free will. For they might be incompatible for a different reason – a reason the logical fatalist's argument for incompatibilism fails to bring out. For instance, they might be incompatible with free will because prior truths require deterministic grounds – a position advocated, for instance, by Hartshorne's essay in this volume (and rejected by Rosenkranz's) – and determinism is incompatible with free will. (We discuss this position further in Section 3.) Or prior truths might be incompatible with free will because God necessarily exists and is essentially omniscient. On this view, *p* will be logically equivalent to *God believes p*. Thus, if there is a good argument that such prior divine *beliefs* would be incompatible with free will, one would have a good argument that prior truths in turn are incompatible with free will, for anything incompatible with *p* is incompatible with anything logically equivalent to *p*. ²⁶ Whether there is indeed a good such argument is the topic of the next section.

Everyone agrees that the logical fatalist's argument is a failure: everyone agrees that prior truths about what you do are compatible with your ability to do otherwise than what you do. But anything compatible with p is compatible with anything logically equivalent to p. But, if God necessarily exists and is essentially omniscient, then a truth such as that you would purchase this book is logically equivalent to God's having believed that you would purchase it: *God believes* p is logically equivalent to p. So God's having believed that you would purchase the book is in turn compatible with your ability to do otherwise than purchase it. So divine foreknowledge is compatible with freedom.

This is not a compelling argument. And it is not compelling at least in part due to the following: one cannot move from "the fatalist's argument is a failure" to "prior truths about what you do are compatible with your ability to do otherwise than what you do." Someone could easily – and with no shred of implausibility, we think – maintain the

²⁶ This point is crucial in seeing what is problematic with the following argument:

2. "Theological Fatalism"

Return to the logical fatalist's argument discussed above. You purchased this book. Could you have refrained from doing so? If it was true 1000 years ago that would purchase it, apparently not. After all:

- (1) You had no choice about: it was true 1000 years ago that you would purchase the book at *t*.
- (2) Necessarily, if it was true 1000 years ago that you would purchase the book at *t*, then you purchase the book at *t*. So,
- (3) You had no choice about: purchasing the book at t.

following. The logical fatalist's argument is an unconvincing failure. However, prior truths about what you do are nevertheless inconsistent with your ability to do otherwise, since God necessarily exists and is necessarily omniscient, and the theological fatalist's argument (to be discussed shortly) is not a failure. That is, one might maintain that "adding in" a divine prior belief to the argument makes the argument importantly different – and importantly better – in virtue of introducing a genuinely hard, temporally intrinsic fact about the past that entails what you do. If one thinks that God necessarily exists and is essentially omniscient, one would then reason as follows. There is no "possible world" in which both (1) it is true that one will perform some action and (2) one can refrain from performing that action. For in any world in which it is true that one will perform an action, God believes that you will perform it. And since you cannot so act that God would have been mistaken, you cannot do otherwise than perform it. One might attempt to ridicule proponents of this position by saying that "They think that prior truths are inconsistent with free will! But who thinks that?" But what would be important to keep in mind is that the proponent of this view is not thereby saddled with defending the logical fatalist's argument. Prior truths are indeed inconsistent with freedom, but the reason for endorsing this inconsistency is indirect: it goes via the theological fatalist's argument and the necessary equivalence of p and God believes p. For more on these topics, see Warfield 1997 (the argument of which, if not identical to the one provided above, anyway inspired it), Hasker 1998, Brueckner 2000, Warfield 2000, Speaks 2011, and Hunt's essay in this volume, pg. XX.

And recall: the most popular way of responding to this argument is to deny (or say that we have no reason to accept) the relevant instance of premise (1). Once we see, many suppose, that the given truth in the past *depends on* what you do (in the relevant way), we'll see that we have no reason to accept (without further argument) that you had no choice about that truth. Consider, now, a parallel argument, an argument that moves not from prior *truths* about what you do, but from prior divine *beliefs* about what you do. This is the argument of the *theological* fatalist.

Accordingly, suppose that God's beliefs cannot be mistaken, and suppose that God believed 1000 years ago that you would purchase this book. Could you have refrained from doing so?

Apparently not. After all:

- (1*) You had no choice about: God believed 1000 years ago that you would purchase the book at t.
- (2*) Necessarily, if God believed 1000 years ago that you would purchase the book at *t*, then you purchase the book at *t*. So,
- (3) You had no choice about: purchasing the book at t.

Now, nearly everyone agrees that *this* argument (for the incompatibility of prior divine beliefs and free will) is importantly better than the parallel argument of the logical fatalist for the incompatibility of prior truths and free will. And this is because, on reflection, (1*) seems more plausible than (1). That is, it can seem clearer that there is nothing you could now do about someone's having had a *belief* in the past than it is that there is nothing you could now do about something's "having been true" in the past. That someone once had a certain belief seems to be a *real feature* of the past in some important way in which something's "having been true" in the past does not. Or we can look at it this way. Suppose someone now believes that you will perform some given action tomorrow. That this person has this belief would now seem to be

part of the concrete circumstances in which you are operating. The question, then, is simply whether you can prove this person wrong for having had the relevant belief. When God is the believer, however, this possibility evaporates – and with it your freedom. For you cannot prove God wrong for having believed that you would perform an action you do not, in fact, perform.

How might one seek to reply to such an argument? Recall the strategy for denying premise (1) in the logical fatalist's argument: maintain that the given truths *depend* on what we do. One might seek to employ the same strategy with respect to God's beliefs: God's beliefs *depend* on what we do, and therefore needn't be held fixed in evaluating *what* we can do. Other things being equal, then, we may have a choice about God's having had the given beliefs. Above we considered five different accounts of the relevant sort of dependence ("Dependence") as applied to prior truths about what we do, the latter three of which seemed particularly promising. Here we briefly sketch how these accounts may be applied to God's past beliefs. Note: we here take some liberties in considering what Merricks and Finch and Rea would say in these contexts – these are, in any case, positions *inspired by* their essays in this volume.

M-dependence (Merricks)

If God believes (say) that Jones will sit at *t*, God believes that Jones will sit at *t* because Jones will sit at *t*. Anything that depends on what Jones does in this sense needn't be held fixed when evaluating what Jones is able to do at *t*. Accordingly, God's prior belief that Jones would sit at *t* does not tell us that Jones cannot do otherwise than sit at *t*. True, Jones's *refaining* from sitting at *t* would require that the past have been intrinsically different from how it actually was, viz., it would require that God should have never held the relevant belief, and that would amount to an intrinsic difference in the past.²⁷ However, so long as the thing that would have to be different

²⁷ Merricks admits that God's beliefs are hard facts about the past (in this sense) in Merricks 2011.

in the past *depends* (in the indicated way) on Jones's sitting at *t*, it is no problem that the past would have to different in that way, in order for Jones not to sit at *t*.

Ockhamism (as applied to God's past beliefs)

The trouble with Merricks's account is his admission that, if God believed that Jones would sit at *t*, Jones's refraining from sitting at *t* would in fact require an intrinsic difference in the past relative to *t*. Whereas Jones's refraining would require that God should never have held the relevant belief, this is not an *intrinsic* difference in the past, but rather merely an extrinsic difference. For on the best account of God's beliefs, and the distinction between what goes into a statement of the past, intrinsically considered, and what does not, that God held the relevant beliefs will not belong in such a statement. Rather, God's past beliefs are "soft" facts at or about past times. Accordingly, those past beliefs may depend on what we do in the sense relevant to soft-facthood, and needn't be held fixed when evaluating what we can do at later times. In a word, they do not belong in a statement of the "circumstances" in which one is now operating. The Ockhamist strategy as developed above will *also* apply to God's past beliefs.²⁸

Finch and Rea

The trouble with "Ockhamism" (as characterized in this Introductory essay) as applied to God's past beliefs is that it is implausible that, given God's past belief that he would sit at *t*, Jones's refraining from sitting would not require an intrinsic difference in the past relative to *t*. Of

²⁸ See Widerker's and Hunt's essays in this volume for further discussion of this position. For interesting recent discussions of Ockhamism (as applied to God's past beliefs), see Pendergraft and Coates 2014 and Arnold forthcoming.

course it would. God's beliefs are hard facts about the past in this sense. However, Merricks's basic insight is correct: when even a "hard fact" about the past depends in the relevant way on the future, and in particular on the future actions of agents, this fact about the past needn't be held fixed when evaluating what such agents are able to do at later times. The problem with Merricks's account, however, is simply that he has the wrong sort of dependence. In particular, Merricks's account says nothing concerning whether *Jones's very action* is explanatorily or ontologically prior to God's prior belief that he would perform that action. However, if Jones's very action is prior to God's belief in the indicated way, it needn't be held fixed when evaluating what Jones is able to do at t.²⁹

We believe that each of these accounts faces significant problems. The central problem for Ockhamism (as applied to God's past beliefs), as noted, is that it is hard to see how Jones's refraining from sitting, given God's belief, *would not* require an intrinsic difference in the past. The central problem for the other accounts, however, is that they maintain that we can act in ways that would in fact require such differences. They thus must give up what seems like a compelling principle: that freedom is the freedom to *add to the given past*. This is the principle of the fixity of the past. Anything you *can* do at *t* must be consistent with the given past relative to *t* – the past, intrinsically considered. Why believe the fixity of the past, so construed? It is hard to say, or anyway to say more about what would *justify* the fixity of the past would take us far beyond the scope of this Introduction. Nevertheless, the principle does seem plausible. As we noted in section 1, it seems to capture part of common sense: the scenarios that represent

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²⁹ This is a big "if", one might say. We believe that it is substantially mysterious how God's present belief could be held "because of" or be "grounded in" some future event, even on eternalism. For presumably that (future) event does not *cause* God's prior belief: this would be to invoke widespread backwards causation.

possibilities for us are scenarios that *branch off* from our actual past. Those and only those scenarios are the ones we may now have it within our power to actualize.

At this stage, we wish to consider a somewhat conciliatory line of thought that might be pursued by those sympathetic to the thesis that divine foreknowledge is compatible with human free will. Initially, the fixity of the past does seem very plausible. We naturally arrive at the fixity of the past via consideration of ordinary contexts: if, say, someone already believes that you will commit a given crime tomorrow, the question whether you can avoid committing the crime is pretty clearly the question whether you can prove this person wrong. And now we consider the case of divine foreknowledge, or divine forebelief. Now, we (the authors) are seeming to suggest that we should simply *keep applying* the natural, common sense idea that the past is fixed, and so to arrive at the conclusion that, given God's belief, you cannot avoid performing the action God believes you will perform, since you can't prove God wrong.

But now the complaint. Aren't we simply failing to give *any credit* to the thought that this is *God* we're talking about? Doesn't introducing *God* into the picture – a person with, we might grant, an entirely different mode of knowing than our own – *count* for something? Doesn't introducing God into the story here call into question the propriety of continuing to apply a principle arrived at via reflection on *ordinary* contexts in which no foreknowing God is presumed to be present? But introducing God into the picture introduces an *extraordinary* context – akin to introducing a crystal ball. And why then should the fixity of the past still apply? On reflection, then, yes: maintaining that divine foreknowledge and human free will are consistent requires a denial of the thesis of the fixity of the past. But this is acceptable, and further, just what we should expect, at least in certain cases, given the truth of theism: we should expect that, given theism, the structure of reality will sometimes not be as it seems to us to be. Why shouldn't the existence of a foreknowing God imply that the structure of time and agency are perhaps not what they might initially appear to be?

We don't know what to say, precisely, to this line of thought. Indeed, the resolution of these questions appears to implicate an entire metaphysics. Instead, we should simply like to suggest that this is, in part, where the debate concerning divine foreknowledge might make progress. What justifies the fixity of the past? Or what is it in virtue of which the past is fixed, if it is? And what would justify rejecting it? Perhaps, until such questions are further resolved, we should simply be agnostics concerning the compatibility of foreknowledge and freedom. For now, however, we set these issues aside. If one *were* confident, however, that the past is fixed, and that divine foreknowledge is thus incompatible with free will, one might wish to seek a way to avoid the conclusion that, given God's existence, we are not, in fact, free. We now turn to one such strategy.

2.1. Open theism

Just as there are two aspects to the logical fatalist's overall argument that no one is free, there are two aspects to the theological fatalist's argument that no one is free. The first is that, for anything we do, God always knew (and believed) that we would do that thing. And the second is that (as is shown by the argument above) God's having had such beliefs is incompatible with our having free will. One strategy of responding to the theological fatalist that has become more popular recently is to reject this *first* aspect of the theological fatalist's overall argument. On this view, it does not follow from the fact that you bought this book that God always knew that you would buy it.³⁰ To reject the first aspect of the theological fatalist's argument is to endorse *open*

³⁰ Strictly speaking, views that maintain that God is "outside time" also endorse this thesis, insofar as they deny that God (strictly speaking) "foreknows" anything at all. This view, is, of course, one of the historically most prominent ways of "dissolving" the problem of freedom and foreknowledge. For some contemporary developments of this sort of view, see Pike 1970, Leftow 1991, and Stump and Kretzmann 1981. We assume in this section that God is not "outside time".

theism. There are, however, two importantly different ways of being an open theist. The first is to maintain that though it was true 1000 years ago (say) that you would purchase this book, this was simply a truth God did not then know or believe. We might call this view "limited foreknowledge open theism". On this sort of view, though some future contingent propositions are in fact true, these are not truths that God knows. The second is to maintain that there was no such truth 1000 years ago in the first place, given that you freely purchased this book; this view endorses the "open future" view to be discussed in the next section, according to which all future contingents fail to be true. And God, of course, fails to believe what isn't true. We might call this view "open future open theism". 32

Perhaps the primary challenge for limited foreknowledge open theism is to explain why God fails to know (and believe) the relevant propositions, when they are, in fact, true. Perhaps the most natural thought for the limited foreknowledge open theist would be this: though truth itself concerning the future does not require deterministic grounds, infallible belief about the future nevertheless does. That is, on this sort of view, it needn't be the case that something now causally determines that a given event will occur in order for it to be true that that event will occur. However, in order for anyone – including God – now to infallibly believe that an event will occur, there would have to be something about now that grounds that belief – that is, there would have to be deterministic evidence now accessible to God that the event will occur. In the case of a future contingent, however, ex hypothesi there is no such evidence. So, we might imagine, even

³¹ For defences of this version of open theism, see Swinburne 1977, Hasker 1989, and van Inwagen 2008.

³² For defences of this version of open theism, see Prior 1962, Lucas 1989, Rhoda et. al. 2006, Rhoda 2007, Tuggy 2007, and Todd 2014.

³³ Skipping ahead: the limited foreknowledge open theist thus endorses what is called "Ockhamism" in the *next* section (according to which there can be truths about the undetermined future), though *not* what was called "Ockhamism" in the *previous* section as applied to God's past beliefs: the limited foreknowledge open theist will typically contend that God's past beliefs are "hard facts" about the past.

though it was true 1000 years ago that you would purchase this book, this was not something God then believed – and *not* because of any epistemic (or some other) defect in God, but instead precisely because of God's epistemic perfection. Not even God could "just see" that a future contingent proposition is true, if in fact it is.³⁴

We set aside the question of whether this is a plausible picture of God's beliefs and future contingents. What about the difficulties attending open future open theism? The chief *philosophical* difficulties for the open future open theist are simply those facing open futurism more generally. Such problems are the topic of Section 3 below (on the problem of future contingents).

2.2. Hunt and Augustine's Way Out

Before moving on to the problem of future contingents, we wish to consider a different sort of reply to the arguments of the logical and theological fatalist. One might simply concede that one or both of the relevant arguments show that we lack free will in the sense at issue – that is, that we lack the ability to do otherwise than what we actually do. One might contend, however, that free will (so construed) is not necessary for what we typically care about when we care about "free will". What matters is that we have the sort of control with respect to our behavior that is necessary for moral responsibility. (The connection between the ability to do otherwise and moral responsibility is one of the main reasons the issues of this book have taken on such historical importance.) But having the ability to do otherwise is not necessary for moral responsibility.

Accordingly, one could be "free" in the sense we care about, but lack the sort of free will targeted by the fatalist's arguments.

³⁴ Todd suggests this account on behalf of the limited foreknowledge open theist in Todd 2014.

This is precisely the strategy pursued by David Hunt in his essay in this volume ("On Augustine's Way Out") – a strategy Hunt finds in the writings of Augustine on this topic.³⁵ Needless to say, this sort of position has various attractive features, one of which is that it is not committed to finding fault with any of the fatalistic arguments we have considered. We wish, however, to mention at least one difficulty with Hunt's own development of this sort of position. It is crucial to Hunt's "Augustinian" solution to the problem that though God's prior beliefs imply that one's future actions are unavoidable, they do not do so because God's prior beliefs imply that one's future actions are causally determined. In the contemporary parlance of the "free will" debate, Hunt wishes to be a so-called "source incompatibilist". That is, Hunt wants to maintain that though the ability to do otherwise is not necessary for moral responsibility, nevertheless *causal determinism* is still incompatible with moral responsibility, because causal determinism is incompatible with one's being the proper "source" of one's behaviour. Thus, since Hunt wishes to maintain moral responsibility, Hunt cannot maintain that the ultimate reason divine foreknowledge implies that one lacks free will (the ability to do otherwise) is that it implies that one's actions are causally determined. For Hunt, divine foreknowledge in itself rules out one's free will, even though one's actions remain causally undetermined. Nothing at all causally determines you to do what you do – nevertheless, you lack the ability to do otherwise than what you actually do.

Upon reflection, there can seem to be something puzzling about Hunt's position here – something that raises a crucial set of issue often ignored in discussions of fatalistic arguments. Hunt's position, again, is that, given God's foreknowledge, though nothing causally determines you to do what you do, you nevertheless lack the ability to do otherwise than what you do. But

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³⁵ Hunt thus follows in a tradition that has emerged in discussions of free will in the wake of Harry Frankfurt's famous 1969 attack on the "principle of alternate possibilities", according to which one is morally responsible for performing a certain action only if one could have done otherwise. For more on this important topic, and for a defense of Frankfurt's strategy, see Fischer 1994, Fischer and Ravizza 1998, and Fischer 2012.

the question here is simple. How could God's foreknowledge, in itself, have any such effect? That is, how could God's foreknowledge, in itself, make you unable to do otherwise than what you actually do, if it neither causes what you do nor implies that something *else* causes what you do? On this latter score, one strategy for a theological fatalist would be to maintain that though God's foreknowledge *shows* (via the argument considered above) that you lack the ability to do otherwise, such foreknowledge is not itself what *makes* you unable to do otherwise. Rather, what *makes* you unable to do otherwise are the causal conditions that would have to be in place in order for God to have such infallible foreknowledge in the first place. On this sort of picture, God's foreknowledge and one's own actions are both (though in different ways) effects of a common cause: it is the presence of the relevant causal factors that explain both God's foreknowledge of your actions and your actions themselves. That is, on this picture, though the fatalistic argument considered above provides good *epistemic reason* to conclude that divine foreknowledge is incompatible with free will, the *metaphysical account* of this incompatiblity is that divine foreknowledge would ultimately have to be explained by deterministic causes.

But this is *not* a position available to proponents of Hunt's Augustinian solution. Again, Hunt must maintain that God's foreknowledge, in itself, could *make* one's actions unavoidable, even if it doesn't (and nothing else does) causally determine those actions. But again we can ask:

³⁶ This is a question Hunt explicitly considers concerning the freedom required to be morally responsible – but *not* considering the ability to do otherwise. That is, Hunt maintains (pg. XX) that it is mysterious how God's prior belief could "transform" an action that might otherwise be a perfect candidate for a free, morally responsible action into one that is not free (in that sense) at all. But Hunt seemingly does *not* find it mysterious how God's prior belief, in itself, could render one's future actions unavoidable (i.e. could make one lack the freedom to do otherwise). Our point here is that the question Hunt addresses on pg. XX (namely, how God's beliefs could have the relevant result) *also* arises for the sort of free will Hunt *does* think is ruled out by God's foreknowledge.

³⁷ This is a possibility considered by Trenton Merricks (inspired by Jonathan Edwards) in this volume on page XX. For more on this topic, see Craig 1987, Anderson and Watson 2010, Byerly 2012, Byerly 2014, and Todd 2014.

how could it have any such effect? If no *causal* factor makes one unable to do otherwise than what one does, precisely what sort of factor *does* accomplish this result? Are we to believe in some sort of "metaphysical force field" that makes one unable to do otherwise than what one does? But what could *that* be? We do not claim that this problem (as developed thus far) is decisive against Hunt's position. However, we do think these issues raise a crucial question for those sympathetic to fatalistic arguments. If prior truths or prior divine beliefs are incompatible with free will, *how* are they incompatible with free will? What, if anything, does the work in *making* us unfree, given such truths or such beliefs? What is the *relationship* between such truths or beliefs and our unfreedom? Do such truths and beliefs themselves *make* us unfree, or do they merely *show* that something else makes us unfree? If the latter, what is it that they show makes us unfree? And it is plausible that the given truths or beliefs have this sort of consequence? These are deep questions proponents of fatalistic arguments seemingly must further address.

3. The Problem of Future Contingents

We turn now to the *problem of future contingents*. Future contingent propositions are propositions saying of contingent, presently undetermined events that they will happen.³⁸ (The events must be neither determined to occur, nor determined *not* to occur.) The problem of future contingents arises from the following conflict. On the one hand, we have what we might call *the grounding problem*. If nothing about present reality – and the laws governing how reality unfolds over time – settles it that the relevant events will happen, how and why is it *true* that they will happen? What, in short, accounts for the truth of future contingent propositions? Or if nothing *does* account for their truth, how are they nevertheless true? On the other hand, we have what we might call *the logical problem* and *the prediction problem*. If, instead, such propositions are never true,

³⁸ No doubt a more rigorous definition could be provided. See, e.g. Rosenkranz (this volume) pg. XX

what are they – neither true nor false? But then we seem to be denying classical logic. Or are they simply false? But how could *that* be? This is the logical problem. Further, if such propositions are never true, how are we to make sense of the common practice of retrospectively predicating truth to predictions that in fact come to pass? If you predict that a horse will win a race, and then that horse does win, we will typically say that "you were right". If future contingents are never true, however, then it is not clear how this practice can make sense. This is the prediction problem.³⁹

As we shall use the terms, "open futurists" deny that future contingents can ever be true, and thus face the logical problem and the prediction problem. "Ockhamists" maintain that there can be truths about the undetermined future, and thus face the grounding problem. Here, however, we must pause to discuss how Ockhamism – so defined – relates to the "Ockhamism" discussed in the previous sections on the arguments of the fatalists. As Sven Rosenkranz's article in this book makes clear, there is a usage of the term "Ockhamism" to refer simply to the thesis that there can be truths about the undetermined future. So construed, Ockhamism is simply a thesis about the status of future contingent propositions, and *in itself* says nothing about free will, the fixity of the past, or anything concerning agency at all. In particular, you could be an Ockhamist in this sense, *without* endorsing what we called the "Ockhamist" reply to the fatalist's argument for the incompatibility of "prior truths" and free will discussed above.

³⁹ Richard Taylor presses both the logical problem and the prediction problem in his essay in this volume, pg. XX.

⁴⁰ We don't mean to suggest that only "open futurists" (so defined) can capture the familiar, pre-theoretical idea that the future is "open" to our agency in a sense in which the past is not. Whether "open futurism" (as defined by us) is indeed required to account for this intuition is a substantive, controversial matter.

⁴¹ As we are defining Ockhamism here, the Ockhamist is committed to the possible truth of indeterminism. However, one might think this result to be problematic, if one thought that Ockhamism itself has nothing to do with this issue. For our purposes, however, it will be easier simply to say that Ockhamism is the view that it is jointly possible that it be true that an event will occur and it be undetermined that that event will occur.

For instance, one might instead endorse Merricks's response to that argument; for that matter, one might think that though there can be truths about the undetermined future, nevertheless the fatalist's argument for the incompatibility of such truths and *free will* is successful. On this view, the truth of future contingents would be compatible with indeterminism, but nevertheless *not* with freedom.

Before moving on, it will be helpful to state another way one might characterize the difference between Ockhamism and open futurism, a way that employs a familiar way of *modelling* our thought and talk about time and the future. Assume indeterminism. Intuitively, on indeterminism, there are many distinct (maximal and complete) "ways" things could go from a given time *t*, consistently with the past (relative to *t*) and the laws of nature. These are the causally possible futures at *t*. Now, on open futurism, all we have, so to speak, are the various futures – but what we do not have, on this model, is a *privileged* future, the one that is "going to obtain". On Ockhamism, however, not so. According to the Ockhamist, when we're assessing whether a future contingent such as "It will be the case that *p*" is true, we simply need to go forward along the privileged "branch" (or look at the "actual" future of those that remain causally possible) and see whether that branch (or future) features *p*. Both Ockhamism and open futurism allow for various causally possible futures, but only the Ockhamist allows the further claim that one such future is now-privileged – lit up, as it were, with "the thin red line". *

Looked at from this point of view, those who press the "grounding problem" maintain that the existence of a "thin red line" marking a privileged future would be ungrounded – unacceptably arbitrary or brute. However, as Ockhamists may point out, without a "thin red line", we face the logical problem and the prediction problem. We turn first to the logical problem and the prediction problem for Ockhamism.

 $^{\rm 42}$ This terminology was introduced in Belnap and Green 1994.

3.1. The Logical Problem

There are, as far as we are aware, two different potential open futurist responses to the logical problem. The first is to maintain that though future contingents are neither true nor false, and though we must therefore deny classical logic, denying classical logic in the requisite way is not, in the end, an unacceptable result. This response to the logical problem has a long, venerable pedigree, going all the back to Aristotle's famous discussion of the sea-battle tomorrow in *On Interpretation 9.*⁴³ It has been developed with considerable sophistication by logicians such as Jan Łukasiewicz and A.N. Prior.⁴⁴ This response has also been developed in connection with issues concerning *vagueness* and compared to so-called *supervaluationist* positions on that topic.⁴⁵

Here, and in this volume, we wish instead to highlight a different (and relatively unknown) response to the logical problem, one that seeks to *preserve* classical logic: this response does not maintain that future contingents are neither true nor false, but that they are simply *false*. As far as we are able to determine, the view at issue was first articulated and defended in 1941 by Charles Hartshorne, who later further developed the view in his 1965 *Mind* paper, "The Meaning of 'Is Going to Be", reprinted in this volume. ⁴⁶ The view was also (it seems independently) developed (though not explicitly endorsed) by the founder of tense logic himself, A.N. Prior, in the 50s and 60s. ⁴⁷ Prior's only non-technical discussion of this view, in his posthumously (and somewhat obscurely) published essay, "It Was to Be", is also printed in this volume. Part of our aim in publishing these essays here is to draw increased attention to this view, which we feel has been unjustly neglected in the vast literature on free will, fatalism, and future contingents.

⁴³ For an excellent discussion of the history of this topic during the medieval period, see Knuuttila 2011.

⁴⁴ See Łukasiewicz 1957 and 1967 and Prior 1957 and 1967

⁴⁵ See Thomason 1970. For a helpful overview, see Øhrstrøm and Hasle 2011.

⁴⁶ See Hartshorne 1941: 100 – 101.

⁴⁷ See Prior 1957 and 1967.

But what is the view? In brief, if we say that something *will* happen if and only if that thing is determined to happen, and that something *will not* happen if and only if that thing is determined *not* to happen, then future contingents will all turn out false. After all, a future contingent says of an event that is neither determined to happen nor determined *not* to happen that it *will* happen. In this case, however, it is false that the event *will* happen (since it is false that it is determined to happen), and it is false that the event *will not* happen (since it is false that it is determined *not* to happen). On this view, then, "will" and "will not" are *contraries* (both can be false, but both can't be true) rather than contradictories. Thus, a statement such as that "It will be the case that p, or it will not be the case that p" is not an instance of p v $\sim p$. This is because one cannot move from "It is not the case that it will be the case that p" to "It will not be the case that p", for the same reason as one cannot move from "It is not the case that X is determined to happen" to "X is determined *not* to happen". This latter move is, of course, plainly illegitimate (an event could be, as yet, undetermined to happen either way) — and consequently, according to this view, so is the former.

Despite the seeming elegance of this view, many writers on future contingents (and related matters) do not seem to be aware of it. For instance, in his essay in this volume (which, we hasten to add, has many compensating virtues), Michael Rea maintains, roughly, that "presentists" cannot adequately respond to the logical fatalist's argument for the incompatibility of prior truths and free will, and accordingly must either give up such truths by denying bivalence, or instead give up free will. In fact, however, what Rea's argument shows, if it succeeds, is not that presentists who maintain free will must deny bivalence, but that they must deny bivalence *or* adopt the "all false" view of future contingents.⁴⁸ That is, Rea writes as if there is only one option in regard to maintaining that future contingents are never true: that they are

⁴⁸ Seymour also makes this point in (manuscript).

neither true nor false. There is, however, also the view developed by Hartshorne and Prior (and others): that they are simply false.

At this point, we will leave the Hartshornean/Priorean development of the "all false" view to Hartshorne and Prior. 49 Before moving on, however, we wish briefly to note that there is a yet further, distinct way of getting to the "all false" view of future contingents, a way recently developed by one of the current authors (Todd).⁵⁰ Instead of defining "will" to mean "determined", this view takes its cue from the famous debate between Russell and Strawson concerning bivalence and 'the present King of France'. According to the Strawsonian view, "The present King of France is bald" is neither true nor false, whereas, on the Russellian view, that proposition is simply false, since its logical form (roughly) is "There exists a present King of France, and that person is bald", and there does not exist any such king. Now, on the relevant "Ockhamist" semantics for 'will', something 'will' happen (as a first approximation) if and only if 'the unique actual future' features the thing happening – the privileged future of those that remain causally possible. But if there is no such privileged future (no "thin red line"), as open futurists contend, then (on a Russellian analysis) such a proposition simply comes out false, for precisely the same reason as that "The present King of France is bald" comes out false, according to Russell. In short, the sense of "will" at stake - the sense Ockhamists claim that the Hartshornean/Priorean semantics is failing to capture – implicitly quantifies over a privileged future. But, if Russell is right, in the absence of a privileged future, such a proposition simply comes out false. This, anyway, is the very basic idea. If successful, we arrive at the "all false"

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⁴⁹ The most thorough discussion and defense of Hartshorne's views concerning future contingents is the excellent Shields and Viney 2003. Hartshorne's writings on this topic have not attracted much attention, but see this essay for a defense of Hartshorne's view against criticisms in Cahn 1967 and Clark 1969; see further Shields 1988 and Viney 1989. Rhoda et al. defend a similar "all false" view in their 2006, as does Seymour (manuscript).

⁵⁰ For an extensive development of this view, see Todd forthcoming.

view (and thereby preserve classical logic) without (implausibly, it seems) simply *defining* "X will happen" to mean "X is determined to happen".

3.2. The Prediction Problem

So much for the logical problem for open futurists. We turn now to the *prediction problem* for open futurists. Prior expresses the problem nicely in his essay in this volume:

Nevertheless, the way of talking that I have just sketched [on which future contingents all come out false] shares with the three-valued way of talking [on which they are neither true nor false] one big disadvantage, namely that it is grossly at variance with the ways in which even non-determinists ordinarily appraise or assign truth-values to predictions, bets and guesses. Suppose at the beginning of a race I bet you that Phar Lap will win, and then he does win, and I come to claim my bet. You might then ask me, 'Why, do you think this victory was unpreventable when you made your bet?' I admit that I don't, so you say, 'Well then I'm not paying up then – when you said Phar Lap would win, what you said wasn't true – on the three-valued view, it was merely neuter: on this other view of yours, it was even false. So I'm sticking to the money.' And I must admit that if anyone treated a bet of mine like that I would feel aggrieved; that just isn't the way this game is played. (Prior, this volume, pg. XX)

This problem is widely regarded to be the most difficult problem facing open futurists. One strategy for dealing with it is explored at length in John MacFarlane's essay in this book. Roughly, according to MacFarlane, relative to the context of utterance, one's prediction that Phar Lap will win is neither true nor false; relative, however, to the context of assessment (now, once Phar Lap has won), one's prediction is true. MacFarlane's "relativist" solution to the

prediction problem is ingenious – and controversial. Certainly the jury on MacFarlane's solution is still out.⁵¹

If one does not go in for MacFarlane's relativism, however, then how should one respond to the prediction problem? It isn't clear, and certainly there is no canonical open futurist response to the difficulty at hand. Hartshorne addresses this problem in his essay in this volume, though how successfully we leave an open question. There are, however, at least two avenues of reply that we wish briefly to suggest as worthy of further development.

First, the open futurist might insist that we pay close to attention to *another* thing we are liable to say in contexts of prediction. One thing we say is that "you were right". Another thing we say, however, is that "what you said *came true*". And the open futurist might see in this latter construction an opening for her position. After all, on this construction, we do not say that what you said *mas* true, but that it *came* true – and what *that* seems to mean is simply that the thing one predicted to happen in fact ended up happening. But certainly the open futurist is entitled to "what you predicted would happen in fact happened." If, however, the open futurist is entitled to "what you predicted to happen in fact happened", then, arguably, she is entitled to "what you predicted came true". And if she is entitled to "what you predicted came true", then she can plausibly argue that, though we do say, "you were right", this commits us to nothing over and above what we're committed to in saying (or *just is* a way of saying) that "what you predicted came true", which, we just saw, is something the open futurist can happily accept. One sometimes sees open futurists making this sort of point (or a similar one) in the literature, but, to our knowledge, no one has developed it with the sort of care it would seem to deserve.

Second, though we aren't aware of anyone who has done so, the open futurist might seek to employ the resources of a (relatively) new area of metaphysics and philosophy of language to

⁵¹ For criticism of MacFarlane's relativism, see, e.g. Heck 2006 and Moruzzi and Wright 2009. MacFarlane develops his view further in his 2014.

the prediction problem: fictionalism.⁵² Broadly speaking, fictionalism regarding a range of discourse maintains that claims made within that discourse are best regarded as engaging in a fiction, not as aiming at the literal truth. Fictionalism, roughly, is a way of maintaining that although we may *say* a great many things that appear to commit us to some problematic entities, we are not *really* committed to those entities, since, when we are engaged in such talk, we are engaged in talk about a fiction. In short, it is a way of escaping certain unwelcome ontological commitments. In general, one can apply the fictionalist strategy whenever: (a) one has some folk claims that seem to be true; (b) their truth seems to entail the existence of an object or objects of a given type; and (c) the existence of objects of that type seems metaphysically extravagant (or otherwise problematic).⁵³

So construed, fictionalism would seem to have a natural application to the problem of future contingents. First, we have some folk claims that seem to be true, claims such as that "you were right". Second, their truth seems to entail the existence of an object (broadly construed) of a certain type: namely, a metaphysically privileged future of those that were causally possible, or a so-called "thin red line". Third, the existence of a "thin red line" seems – anyway to some – to be metaphysically extravagant. Accordingly, it would seem that the fictionalist strategy should be on the table. On this approach, one interprets "you were right" as something like, "According to the fiction of the thin red line, you were right." That is, when, looking backwards, we engage in such talk, we are engaged in a fiction; we take up a point of view on which there existed a fictional "thin red line", and assess matters from that point of view. It is, of course, perfectly natural, and perfectly understandable, that this practice should arise; it is, equally, perfectly natural to see it as imbued with less than full ontological seriousness. Needless to say, we have only hinted at how to develop this sort of proposal; however, given the

⁵² For more on fictionalism, see Eklund 2011.

⁵³ We thank Mark Balauger for this construal of the fictionalist strategy.

similarities between this context and other contexts in which ficitionalist strategies have been applied, we believe that these connections deserve more attention than they have received.

And, regarding the prediction problem, it isn't as if the open futurist already has a wealth of other plausible options on the table.

3.3. The Grounding Problem

As we've just seen, open futurism faces problems – the logical problem and the prediction problem. What, then, motivates the view? As we saw in Section 1, one set of motivations is "indirect", going *via* the fatalist's argument for the incompatibility of the truth of future contingents and free will. But another is "direct", and this is simply that the alternative view, Ockhamism, seems to face a serious *grounding problem*. What accounts for the truth of future contingent propositions?

One way to press the grounding problem for Ockhamism is to invoke some version of "truthmaker theory". According to "truthmaker maximalism", every truth has a truthmaker — roughly, some feature of the world that *makes* the relevant proposition true. ⁵⁴ According to this line of thought, future contingents would lack truthmakers: there is no feature of the world that would *make* such propositions true. For instance, one could not cite current causal conditions and laws as truthmakers for the relevant truths, for *ex hypothesi* such conditions and laws fail to secure the given outcomes. Another way to develop this objection would be to invoke the related thesis that "truth supervenes on being", the thesis that, for any true proposition, if that proposition were instead false, there would have to be some difference somewhere in reality. ⁵⁵ Intuitively, however, true future contingents would seem to fail to supervene on reality. If some true future contingent were instead false, this would seem to require no difference at all in the

⁵⁴ For a defense of truthmaker maximalism, see Armstrong 2004.

⁵⁵ For an overview of truthmaker theory and the thesis that "truth supervenes on being", see MacBride 2013.

"facts on the ground", so to speak: such facts could be just as they are, and yet that proposition be false instead of true. For instance, suppose it is a true future contingent that Hillary Clinton will be the next President of the United States. The objector says: the facts on the ground could be *just as they actually are*, given indeterminism, and yet it be *false* that Hillary will become president. The falsity of the future contingent would not require any discernible difference in the way things are. The objection is thus that the truth that Hillary will become the next president seems problematically "disconnected" from reality: it "floats free" of reality in some allegedly objectionable way.

Of course, these objections are only as good as the principles that truths require truthmakers and that truth supervenes on being. And they are only as good as the argument that, given indeterminism, we cannot provide "truthmakers" for future contingents or say that truth supervenes on being. Another way to press the grounding objection, however, is to pay attention to the *model* of the future (or our discourse about the future) that Ockhamists must endorse. Return to the theme noted above: in addition to the causally possible futures at *t*, the Ockhamist also maintains that there exists a *privileged* future of those that remain causally possible – a "thin red line". But now we can ask: whence comes the privilege? As John MacFarlane notes in his paper in this volume, don't symmetry considerations push strongly in favor of the conclusion that no such future is now-privileged? After all, whatever one such future could "say" (so to speak) concerning why *it* is the privileged future, any other such future could also say. That is, all such futures would have, ex hypothesi, an "equal claim" on being "how things go from here". Wouldn't it be simply arbitrary if one such way *just were* the way things *will* go from here?

There is one final way we could put the grounding objection to Ockhamism – a way that serves helpfully to unite the themes of this book. Assume indeterminism. And assume that there are some true future contingents. Now we ask: how could God *know* that any such propositions are true? How could God know, in advance, the outcome of a genuinely

indeterministic process? Intuitively, there would be *nothing at all* about the world that God has created on the basis of which God could come to know that the event will occur. In order to know that it will occur, then, it seems that God will have to have some mystical insight into the truth itself: God will have to know what will happen by being immediately and directly acquainted with the truth.⁵⁶ The Ockhamist, then, is seemingly committed to the following: either God can have this sort of mysterious access to the truth – or instead there is a "metaphysical gap" between what even a *perfect knower* could know, on the one hand, and what is true, on the other. And it is precisely this sort of "metaphysical gap" that strikes many who press the grounding objection to be so problematic. Neither option thus seems altogether comfortable – though, with respect to the former, one might say that greater mysteries have been associated with God. In this respect, it is perhaps fitting that we should conclude with a quote from Ockham himself, an ardent defender of the compatibility of divine foreknowledge and human free will: "It is impossible to express clearly the way in which God knows future contingent events".⁵⁷

⁵⁶ For an excellent discussion of this position, see Mavrodes 1988.

⁵⁷ Ockham in Adams and Kretzmann 1969: 50.