# Freedom, Omniscience and the Contingent A Priori

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Penultimate version. Forthcoming in Mind.

#### Abstract

One of the major challenges in the philosophy of religion is theological fatalism—roughly, the claim that divine omniscience is incompatible with free will. In this article, I present new reasons to be skeptical of what I consider to be the strongest argument for theological fatalism. First, I argue that divine foreknowledge is not necessary for an argument against free will if we take into account divine knowledge of contingent a priori truths. Second, I show that this argument can be generalized so that ordinary human knowledge of contingent a priori truths also leads to an argument against free will. This, I believe, results in an absurd conclusion that is unacceptable to both theists and non-theists. But if there is something wrong with this argument, there is something wrong, too, with the argument for theological fatalism. Although there is a range of possible responses, I suggest that the core issue in all cases is a closure principle—specifically, the principle that 'no choice about' is closed under entailment (or strict implication).

# 1. Introduction

Theological fatalism, or theological incompatibilism, can be formulated as the thesis that there could be no free will had there been an omniscient God with infallible and complete knowledge of the future. In other words, the existence of an omniscient God who already knows everything that will happen is incompatible (i.e. not jointly possible) with the existence of free will. Many theists believe in an omniscient God who already knows what the future will be like. And many such theists also believe in free will—that is, that human beings can sometimes make genuine decisions and choices. For these theists, the truth of theological fatalism would seem to pose a formidable problem. But is it true?

I shall argue for a novel response to theological fatalism. I aim to show that some of the key assumptions in the strongest arguments for this thesis, when combined with plausible and widely accepted principles from logic and the philosophy of language, lead to the conclusion that past knowledge of trivial and a priori truths prevents many actions from being freely performed. I believe this is an unacceptable conclusion, and that the best way to avoid it is to reject a closure principle that is central to the arguments supporting theological fatalism, although there is a range of other possible responses. In §2, I formulate what I take to be a paradigmatic argument for theological fatalism. In §3, I argue that by considering divine knowledge (or infallible beliefs) of contingent a priori truths, we find that divine foreknowledge is not necessary for an argument against free will. In §4, I show that this argument can be generalized so that ordinary human knowledge of contingent a priori truths also leads to an argument against free will. In the concluding section, I argue that rejecting the closure principle involved in all these arguments has theoretical advantages over other possible responses.

### 2. The Master Argument against free will

The contemporary debate on theological fatalism began with Nelson Pike's 1965 article, 'Divine Omniscience and Voluntary Action'. In this article, Pike presented a new defense of the thesis that an omniscient God with comprehensive knowledge of the future exists only if 'no human action is voluntary' (Pike 1965, p. 27)—a claim that Pike himself admitted had a 'sharp counterintuitive ring' (ibid.). Since its publication, Pike's argument has been extensively studied and discussed, with various philosophers offering variations and developments of what is often referred to as the *Foreknowledge Argument*.<sup>1</sup> Instead of focusing on Pike's original argument, which has already been widely examined in the literature, I will formulate a simpler and, in my view, more plausible version based on similar assumptions.<sup>2</sup>

Consider any action that someone will perform. For example, suppose you will raise your hand at some future time *t*, perhaps simply to ask a question. If you will raise your hand at *t*, then, given the assumptions that God exists at all times and is omniscient, where the latter property implies infallibly believing everything that will happen, God would have known— and, therefore, infallibly believed—this fact a billion years ago. Given these assumptions, will you raise your hand freely at *t*? Do you have, or will you have, a choice about raising your hand at that time? According to the following argument, which I will refer to as the *Master Argument for Theological Fatalism*, or simply the *Master Argument*, the answer is no:

(1) You have no choice about: God believed a billion years ago that you would raise your hand at t.

(2) Necessarily, if God believed a billion years ago that you would raise your hand at *t*, then you raise your hand at *t*.

<sup>&</sup>lt;sup>1</sup>See Plantinga (1986), Widerker (1990), Zagzebski (1991, 2002, 2004, 2011), van Inwagen (2006, 2008), Merricks (2009, 2011), and Fischer and Todd (2011, 2013, 2015).

<sup>&</sup>lt;sup>2</sup>For detailed and helpful discussions of Pike's original argument, see Fischer et al. (2009) and Fischer (2011).

(3) You have no choice about: raising your hand at *t*.

The Master Argument is generalizable and applies to any agent, action, and time. Since no one ever had a choice about the fact that, in the past, God believed such and such, no one ever had a choice about such and such. As there being free will requires there being a choice about something, it follows that there is no free will. Therefore, theological fatalism is true.

Premise (1) of the Master Argument embodies the general idea that nothing can be done about something that has already happened. To be sure, it is incidental for the argument whether God has *long* believed in the relevant proposition about you raising your hand at t. What matters is that God held this belief at some point in the past, so that it is a fact 'about the past' that God believed you would act in a certain way. For if it is true that God held such a belief at some point—whether yesterday or a billion years ago-there is nothing you can do afterwards about the fact that God held that belief. The past is no longer up to us. It is beyond our control. Our actions and decisions can only influence the future, if at all. For centuries, philosophers have attempted to better understand this asymmetry between the past and the future, for instance, often suggesting that contingent truths about the past acquire some sort of necessity, referred to as accidental necessity. This is what Linda Zagzebski helpfully describes as a 'temporally relative kind of necessity' (Zagzebski 1991, p. 15). Contingent truths about the past are fixed in a manner similar to necessary truths. Just as there is nothing one can do about the fact that 2+2=4 or that all bachelors are unmarried, there is nothing one can do about the fact that, for instance, yesterday, one missed the last train to Berlin.

Such considerations can turn into an explicit ancillary argument in support of premise (1), thereby revealing other assumptions involved in the Master Argument. Given that God has long believed infallibly what you and everyone else will do, the following can be assumed:

(1a) God believed a billion years ago that you would raise your hand at t.

Additionally, to explicitate the further assumption that true contingent propositions about the past are fixed and out of our control, assume the following principle:

(1b) If *p* is a contingent truth about the past, then *p* is accidentally necessary.

And since (1a) is, by assumption, a contingent truth about the past, (1c) follows from (1a) and (1b):

(1c) It is accidentally necessary that God believed a billion years ago that you would raise your hand at t.

But if no one has a choice about what is already accidentally necessary, the following principle should also hold: (1d) If p is accidentally necessary, then no one has a choice about it.

Now (1) follows from (1c) and (1d).

As previously noted, this argument in support of (1) unveils additional assumptions in the Master Argument. One such assumption is that there are true 'future contingents' regarding human action, that is, contingently true propositions about what human beings will and will not do in the future. For example, it is either true that you will raise your hand at t, or it is false—if it is false, the Master Argument can be formulated just as well under the revised assumption that you will *not* raise your hand at t. Despite t being a future moment, the idea is that the contingent proposition about you raising your hand at t already has a truth value. This can be motivated, in turn, by the more general and traditional view that all propositions, including those about what human beings will (freely or not) do at times, have a single truth value: either true or false.<sup>3</sup>

Another assumption in the Master Argument is that God both exists at all times and is (essentially) omniscient, where the latter property entails both that he knows, and therefore believes, every truth at any time, and thus could never fail to believe a truth, and that he is infallible, so that it is impossible for him to ever hold a false belief.<sup>4</sup> Therefore God's beliefs are like knowledge, at least in the following sense: necessarily, if he at any time believes p, then p. To put it briefly, God's beliefs are *factive*.<sup>5</sup>

Given this understanding of divine omniscience and the assumption that there are true future contingents about human action, it follows that you raise your hand at t iff God at any time believes that you raise your hand at t. Therefore, (1a), from which the ancillary argument for (1) is derived, is true.

What about premise (2)? This premise is straightforwardly supported by the assumption that divine beliefs are factive. It is the least controversial premise in the argument, as theistic philosophers almost invariably agree that God could never hold a false belief.<sup>6</sup>

The conclusion of the Master Argument follows from (1) and (2) by what appears to be a very plausible inferential principle: one has no choice about what necessarily follows from a truth about which one has no choice. In other words, 'no

 $<sup>^{3}</sup>$ I am assuming an *eternalist* view of propositions, which holds that their truth value is not evaluated at times. This view is defended in van Inwagen (1983, pp. 35-43) among other sources. I shall not defend it here due to space constraints.

<sup>&</sup>lt;sup>4</sup>To be sure, there are similarly powerful arguments for theological fatalism wherein it is assumed that God is outside time. See van Inwagen (2008, pp. 218-220) and Zagzebski (2004, p. 8).

<sup>&</sup>lt;sup>5</sup>For this reason, it is common when talking about divine knowledge to slide from 'knowledge' to 'belief' and vice-versa.

<sup>&</sup>lt;sup>6</sup>Alston (1986) echoes some prominent medieval philosophers and challenges the contemporary practice of attributing *beliefs* to God. I cannot do justice to Alston's arguments here, though it suffices to note that it makes no difference for *my* purposes whereas the Master Argument is formulated in terms of belief or knowledge.

choice about', when applied to truths, is closed under *entailment* (or *strict implication* or *necessitation*). More schematically, where p is any truth, 'S' is any agent, 'Np' abbreviates 'S has no choice about p', ' $\Box$ ' stands for 'necessarily' and ' $\supset$ ' is the material conditional, the principle in question can be formulated as follows:

# **Closure**: From N*p* and $\Box(p \supset q)$ , infer N*q*

Many philosophers accept **Closure** (or some principle in the vicinity) either because it 'seems plausible' (Fischer and Todd 2015, p. 3) or because its invalidity would seem 'puzzling', 'paradoxical' and 'make no sense' (Hasker 2001, p. 102). If **Closure** is valid, then the Master Argument is also valid, as it involves simply an application of **Closure**. Furthermore, if **Closure** is valid and (1) and (2) are both true, then the Master Argument is sound. Given that (1) and (2) are compelling and **Closure** appears to be valid, the Master Argument seems quite convincing, at least to the point where it should be taken seriously by theists. And so it has been.<sup>7</sup>

How can the theist who wishes to uphold the existence of free will respond to the Master Argument? There are various well-known responses to the Master Argument and its variants. Given that **Closure**, or a version of it, is widely believed to be valid and (2) is virtually uncontroversial, most theistic responses focus on challenging (1), either directly or indirectly.

Some 'open theists' reject the general assumption that every proposition is either true or false. They say the future is *open* in the strong sense that there is no fact of the matter concerning what you and I will freely do, and thus no true proposition about that for God to have known or infallibly believed in advance. According to this view, if t is a future time, it might neither be true nor false now that you will raise your hand at t. In this case, there will be no reason to accept (1), as God only believes in truths.<sup>8</sup>

Another response involves accepting the view that every proposition, including those about the future, is either true or false, while rejecting the assumption that God is omniscient. This response, defended by what we may call 'restricted omniscience theorists', defends that what the Master Argument really shows is that God is not omniscient after all. Under the assumption that we do have free will and that there are truths concerning what we will freely do, the Master Argument would show that God does not infallibly believe these truths in advance. Therefore, according to this view, (1a), which underpins (1), is false.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup>Apart from minor terminological differences, the Master Argument is essentially the same as the arguments presented by Finch and Warfield (1999), Merricks (2009, 2011), Fischer and Todd (2015), and more recently by Todd (2023). Zagzebski (2004, p. 5) offers another intriguing version of the Master Argument—see also Hasker (2001)—relying on a version of **Closure** that she calls *transfer of necessity principle*. The arguments I formulate here can also be formulated in the style of Zagzebski's argument. For further discussion, see Zagzebski (2011).

<sup>&</sup>lt;sup>8</sup>There are various nuanced philosophical positions that may fall under the rubric of 'open theism'. See Rhoda (2008) for a helpful description of those views.

<sup>&</sup>lt;sup>9</sup>This view may of course be seen as an epistemological variety of open theism, as opposed to

For the theist who upholds a standard, all-encompassing view of omniscience and maintains that every proposition is either true or false, an alternative response is to follow William of Ockham's suggestion to the effect that some truths which appear to be about the past are not 'strictly' so, but are also about the future, and only those truths that are strictly about the past are in general accidentally necessary and thus beyond our control (see Ockham 1983, pp. 46-47).<sup>10</sup> Ockhamists argue that past facts about divine knowledge or beliefs about the future are not strictly about the past but are also about the future, as God's knowing or believing that something will occur entails that it will occur. So Ockhamists argue that (1a) is only a 'soft fact' about a billion years ago, being also about *t*. Furthermore, Ockhamists contend that (1b) should be applied only to truths that are strictly about the past, i.e. only to 'hard facts' about the past. Because (1a), on this view, is not strictly about the past, (1c) does not follow from (1a) and (1b). The last step in Ockham's way out is the contention that (1a) is the kind of soft fact about which you do or did have a choice, thereby arguing that (1) is in fact false.<sup>11</sup>

There are, indeed, other interesting responses available, with varying levels of plausibility, though it is not my intention to consider them all here.<sup>12</sup> Instead, I shall like to put forward what I believe to be fundamentally different reasons for rejecting the Master Argument or, at the very least, to offer new motivation for thinking there is something deeply amiss with it.

# 3. The A Priori Belief Argument against free will

What the Master Argument essentially does is to 'transfer' lack of choice or powerlessness about the past into lack of choice or powerlessness about the future. It does so via what is often called a 'transfer rule', which I have named **Closure**, in light of the factivity of divine beliefs about the future. However, **Closure** also supports an argument that is, in a sense, parallel to the Master Argument, but without requiring divine beliefs *about the future*. Rather, this parallel argument assumes only that God believes every *contingent a priori* truth of a certain kind (which God

the alethic variety thereof—see Rhoda (ibid.). For proponents of this kind of response to the Master Argument, see Swinburne (1993, 2016), Hasker (1989, 1994, 2004), and van Inwagen (2006, 2008).

<sup>&</sup>lt;sup>10</sup>Some supporters of Ockhamism include Adams (1967), Freddoso (1983), Hoffman and Rosenkrantz (1984), as well as Pendergraft and Coates (2014).

<sup>&</sup>lt;sup>11</sup>To be sure, while hard facts about the past are accidentally necessary and thus lie beyond our control, some soft facts about the past may also lie beyond our control. According to (1d), accidental necessity is only a sufficient condition for lack of choice, not a necessary condition. For instance, the fact that the Halley's Comet was in Earth's vicinity 35 years before the Orionids meteor shower, which occurred in 2021, was plausibly beyond everyone's control. See Fischer and Todd (2011, pp. 107-108).

<sup>&</sup>lt;sup>12</sup>For instance, Merricks (2009) also rejects (1), but for different reasons. See Fischer and Todd (2011) for a response to Merricks, and Merricks (2011) for a rejoinder. Swenson (2016) offers an alternative way of rejecting (1) by relying on an account of ability in terms of explanatory dependence.

undoubtedly does), which has no bearing on future facts.

The best way to formulate this argument requires some logical setup. In addition to the typical modal operators for necessity and possibility, I will add the 'actually' operator, @. According to its standard semantic entry, for any p, @p is true at a possible world iff p is true at the actual world. The following can then be established in any standard system of modal logic with the addition of the 'actually' operator:

Act:  $@p \supset \Box @p$ 

If actually *p*, then it is necessary that actually *p*. In a sense, therefore, the 'actually' operator is a *rigidifier*: what is actually so is necessarily actually the case. For example, it may be contingent that I raise my hand at *t*, but it is not contingent that I actually raise my hand at *t*; this is either necessarily true or necessarily false.<sup>13</sup> Moreover, standard modal logics that include **Act** and the modal axiom **K**, that is,  $\Box(p \supset q) \supset (\Box p \supset \Box q)$ , validate the following principle:

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Act Lemma: @p \supset \Box((@p \supset p) \supset p)
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To see this, note that (4) below is a tautology, being simply a substitution instance of the classical tautology  $q \supset ((q \supset p) \supset p)$ :

 $(4) @ p \supset ((@ p \supset p) \supset p)$ 

Because the *rule of necessitation*—which roughly states that the necessitation of every theorem is also a theorem—can always be applied to tautologies, (5) follows from (4) by necessitation:

 $(5) \square (@p \supset ((@p \supset p) \supset p))$ 

Moreover, the following is an instance of axiom K:

$$(6) \Box (@p \supset ((@p \supset p) \supset p)) \supset (\Box @p \supset \Box ((@p \supset p) \supset p))$$

Now (7) can be inferred from (5) and (6) by modus ponens:

 $(7) \square @p \supset \square((@p \supset p) \supset p)$ 

Finally, Act Lemma follows from Act and (7) by hypothetical syllogism.

Furthermore, by combining **Act Lemma** with a formal rendering of the claim that God's beliefs are infallible, something strictly stronger can be shown, which is essential to the argument developed below. To see this, let 'Bp' abbreviate 'God believes at some time that p', and consider the following principle:

**Infallibility**:  $\Box(Bp \supset p)$ 

<sup>&</sup>lt;sup>13</sup>See Crossley and Humberstone (1977) for more details on standard modal logics for 'actually'.

Necessarily, if God believes at some time that *p*, then *p*. This principle captures adequately the idea that God's beliefs are infallible, as discussed previously. Assuming both **Act Lemma** as well as **Infallibility**, the following can be inferred:

**Belief Lemma**:  $@p \supset \Box(B(@p \supset p) \supset p)$ 

If @p, then, necessarily, God believes at some time that  $(@p \supset p)$  only if p. For note that (8) is an instance of **Infallibility**:

 $(8) \Box (\mathbf{B}(@p \supset p) \supset (@p \supset p))$ 

But since any conditional  $p \supset q$  follows logically from its consequent q, (9) follows from (8):

 $(9) @p \supset \Box(\mathbf{B}(@p \supset p) \supset (@p \supset p))$ 

And **Belief Lemma** follows from (9) and **Act Lemma**, since the inference from  $p \supset \Box(q \supset r)$  and  $p \supset \Box(r \supset s)$  to  $p \supset \Box(q \supset s)$  is valid in any standard modal logic.

Now that **Belief Lemma** is established, the argument that parallels the Master Argument can be formulated. I call this the *A Priori Belief Argument Against Free Will*, or simply the *A Priori Belief Argument*. Assume that you will actually raise your hand at *t*, where *t* is, again, some time in the future. Then:

(10) You have no choice about: God believed a billion years ago that you actually raise your hand at t only if you raise your hand at t.

(11) Necessarily, if God believed a billion years ago that you actually raise your hand at *t* only if you raise your hand at *t*, then you raise your hand at *t*.

Premise (10) can be motivated in the same way as (1), namely by the idea that you have no choice about what is already past. In fact, an argument in favor of (10) can be given by simply modifying the argument for (1). First, assume the following:

(10a) God believed a billion years ago that you actually raise your hand at t only if you raise your hand at t.

Why would (10a) be true? There are at least two ways to motivate (10a). One is to assert that (10a) is true because God is omniscient. Since the proposition that you actually raise your hand at t only if you raise your hand at t is true in the actual world, it must be true that God knows it and, consequently, infallibly believes it. Alternatively, a more minimal defense of (10a), not based on divine omniscience, is also possible. One can argue for (10a) on the grounds that among the things

<sup>(12)</sup> You have no choice about: raising your hand at t.

believed by God are those truths which are a priori and easily knowable, even by human standards. Conditionals such as  $@p \supset p$  are, after all, not only true but are also a priori *logical truths*, and this holds regardless of whether p is itself true or a priori.<sup>14</sup> Indeed, such conditionals are typically easily knowable by people like you and me. For instance, I know that I will actually eat khinkali tonight only if I eat khinkali tonight, even though I am uncertain if I will be fortunate enough to have khinkali for dinner. I know this conditional from the armchair, even if I am still clueless about my dinner plans. And since I know these conditionals, trivial and a priori as they are, God, *a fortiori*, knows and hence believes them, too. Note, additionally, that whenever p is a contingent truth,  $@p \supset p$  is likewise contingent, even if @p is not. Consequently, (10a) is *itself* a contingent truth about the past. Therefore, (10b) follows from (10a) and (1b):

(10b) It is accidentally necessary that God believed a billion years ago that you actually raise your hand at t only if you raise your hand at t.

Now (10) follows from (10b) and (1d), and the first premise of the A Priori Belief Argument is established.

Regarding the second step in the A Priori Belief Argument, namely (11), it follows not directly from the factivity of divine beliefs, but rather from **Belief Lemma** (which does assume factivity) by modus ponens, under the assumption that you actually raise your hand at t. It is important to highlight that the A Priori Belief Argument does not require God to have believed in advance that you actually raise your hand at t, or even that you raise your hand at t, as in the Master Argument. The argument relies solely on the assumption that God believes the trivial a priori truth that you actually raise your hand at t only if you raise your hand at t. Finally, (12) follows from (10) and (11) by a straightforward application of **Closure**, just like in the Master Argument.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup>It is not essential for the arguments here whether (the sentence expressing)  $@p \supset p$  is in fact a *logical* truth. Zalta (1988) argues that the examples in question can be considered logical truths even when they are only contingently true. This also applies to their corresponding biconditionals. In Kaplan's (1989) work, focused on an extended logical treatment of indexicals, 'I am here now' is in a way one among many instances of contingent logical truths. For further discussion on the possibility of contingent logical truths and notions of logical validity focused on the cases involving 'actually', see Hanson (2006, 2014), Nelson and Zalta (2012), French (2012), Wehmeier (2014), and Lampert and Waldrop (2023). Williamson (2006) explores applications of such logical truths in logics of conditionals.

<sup>&</sup>lt;sup>15</sup>The derivation of (11) depends on the assumption that you will actually raise your hand at t, which we can write more formally as @p. Some might think that truths such as @p are up to us when p is, and since @p is necessarily true if true, this raises the question of whether necessary truths could be up to us. Yet, under the assumption that there is at least one truth one has no choice about, and given that necessary truths are entailed by any proposition, it is straightforward to see that the following principle is provable from **Closure**: From  $\Box p$ , infer Np. Therefore, one alternative way to challenge incompatibilist arguments formulated with **Closure** is to argue that some necessary truths are up to us. I discuss this possibility in the concluding section of this article.

How convincing is the A Priori Belief Argument? On the face of it, it seems just as convincing as the Master Argument, though with a more complicated logical background. One could object to the use of the 'actually' operator, for instance, by claiming it may not correspond to the way 'actually' is used in English. This is a fair point. Nevertheless, there is a clear and coherent philosophical sense of 'actually' which is widespread. I submit that the operator considered here successfully formalizes, at the very least, a philosophical and modal sense of 'actually', even if it does not correspond to ordinary and non-technical usage of the word. Moreover, there are good reasons for adding an 'actually' operator to formal languages of modal logics, as this operator makes it possible to express truth conditions that are otherwise inexpressible, under specific circumstances, in first-order modal languages. This has been known and defended since the seminal works of Hazen (1976) and Crossley and Humberstone (1977), and since then the 'actually' operator has become an important tool of logical and philosophical investigations, with applications in epistemology, philosophy of language and metaphysics.<sup>16</sup>

Nonetheless, it is important to note that there are similar arguments that make no use of the 'actually' operator. For instance, a variant of the A Priori Belief Argument can be developed using rigidified descriptions instead. Consider, for instance, the rigidified definite description 'the actual manager of Man City'. According to the simplest semantics for first-order modal languages, if a rigid singular term picks out an individual in the actual world, it picks out that same individual in every other

<sup>&</sup>lt;sup>16</sup>Since at least the work of Evans (1979), the rigidifying reading of 'actually' is widely believed to generate examples of contingent a priori truths. Salmon (1988) and Soames (2003, ch. 16) object to some of the well-known examples of the contingent a priori suggested by Kripke (1980), though both accept some cases involving 'actually' (see Soames 2007 and Salmon 1986, p. 180, though here Salmon talks about sentences being contingent a priori). With the aid of the 'actually' operator, different notions of necessity were formally distinguished by Davis and Humberstone (1980), shedding light on Evans's ideas. The operator is used extensively in logical and philosophical investigations of two-dimensional semantics, as evidenced by Chalmers (1996, 2004), Restall (2012), and the essays collected in García-Carpintero and Macià (2006), among others. Other applications of this operator include discussions on counterpart theory (see Fara and Williamson 2005, Meyer 2013, and Rigoni and Thomason 2014), conditionals (see Weatherson 2001 and Williamson 2006, 2009), paradoxes of knowability (see Edgington 1985 and Williamson 1987), approaches to intensionality (see Köpping and Zimmermann 2021), context dependence (see Davies 1983, 2004, Kaplan 1989, and Percival 1991), and the metaphysics of free will and moral responsibility (see Kearns 2011, Lampert and Merlussi 2021a, 2021b, and Lampert and Waldrop 2023). Chalmers (2011) challenges the general principle that for all p, or all entertainable p, @p iff p is a priori. However, even if Chalmers's argument is sound, it does not affect the present arguments, as the aforementioned principle is not required here in full generality. One might naturally have additional questions concerning how we come to know truths such as @p iff p. There is a sense in which the answer is simple, as both @p and p are a priori equivalent, and we only distinguish them in contexts where counterfactual possibilities are involved—since the modal or counterfactual status of @p differs from p if the latter is contingent. Still, there are outstanding questions raised by the 'actually' operator and the a priori character of truths such as @p iff p, some of which are discussed in the aforementioned works. Finally, to see how arguments similar to Chalmers's can be formulated to challenge other putative a priori principles, see Lampert (forthcoming).

world.<sup>17</sup> The rigidified description in question thus picks out Pep Guardiola, who is in fact the manager of Man City, in every possible world, as opposed to the nonrigid description, 'the manager of Man City', which picks out Guardiola in this world but may pick out different individuals in other worlds (e.g. Jürgen Klopp or José Mourinho). And since 'Pep Guardiola' and 'the actual manager of Man City' are both rigid singular terms referring to the same individual in the actual world, the sentence 'Pep Guardiola is the actual manager of Man City' expresses a necessary truth. This, of course, is a known feature of rigidified descriptions. However, it will also be necessary that *if* Pep Guardiola is the actual manager of Man City only if he is the manager of Man City, *then* he is the manager of Man City. This latter claim can be established in just the same way as Act Lemma, by substituting 'Pep Guardiola is the actual manager of Man City' for @p, and 'Pep Guardiola is the manager of Man City' for p. Because a version of Belief Lemma will therefore also be readily available, and since it is trivial and a priori that Pep Guardiola is the actual manager of Man City only if Pep Guardiola is the manager of Man City, the A Priori Belief Argument can be reformulated to conclude that Pep Guardiola has no choice about the fact that he is the manager of Man City—a contingent truth which we would naturally assume is under his control.

There is, however, an important difference between the A Priori Belief Argument and the Master Argument, as the former does not license the same *modal* conclusion that is licensed by the latter. In other words, the A Priori Belief Argument does not show the *incompatibility* of God's omniscience and free will. To make use of **Belief Lemma**, the argument assumes that you *actually* raise your hand at t, that is, that it is true *in the actual world* that you raise your hand at t. It is therefore crucial for the A Priori Belief Argument, by contrast, we may assume that the proposition that you raise your hand at t is true at an arbitrary possible world wherein (1a) is likewise true. The premises of the Master Argument may be assumed to be true at any possible world.

This difference notwithstanding, it is important to emphasize that the A Priori Belief Argument, if successful, does warrant the conclusion that the fact that God had the a priori beliefs in question actually excludes free will, and this is significant. For even if God's omniscience turned out to be compatible with free will, what truly matters is whether *actual* beings were ever free. Because of this, even if it is not an argument for incompatibilism *stricto sensu*, the A Priori Belief Argument carries enough weight.

<sup>&</sup>lt;sup>17</sup>In Linsky and Zalta (1994), there is a detailed presentation of the semantics in question. By adopting a semantic framework that allows for some objects to exist only contingently, one might also wish to qualify the concept of rigidity. Specifically, a rigid singular term would designate the same object in every world *in which it exists*, while designating nothing in worlds in which the object in question fails to exist. This is what Salmon (1982, pp. 33-35) calls *persistent rigidity*. Stanley (1997) offers a helpful discussion about different conceptions of rigidity.

Moreover, what makes this argument noteworthy is that it does not rely on foreknowledge or divine beliefs about the future in any substantial sense. The argument requires only that God believes, in advance and infallibly, trivial and a priori conditionals, and specifically in cases where their antecedent is both true and about purportedly free actions. To be sure, this is not a tall order, even if God is not omniscient and thus fails to know some truths.

If God created the world and somehow learned, as if from a list, everyone who would inhabit it, and held the relevant conditionals to be true (only the contingent ones, as we can assume further that God did not believe a single necessary truth), and then decided to turn his back on the world, thereby leaving its inhabitants to their own devices, there would still be no free will—even if God never believed a single thing about what any of his creatures would actually do in the future.

To sum up, unlike the Master Argument, the A Priori Belief Argument requires no divine beliefs concerning what you or anyone else will do in the future. It shows, under certain assumptions, that human free will is excluded by God's believing a restricted collection of trivial and a priori truths. While the argument still assumes that God is infallible, the range of God's beliefs need not be nearly as comprehensive as in the Master Argument. Thus the A Priori Belief Argument warrants a somewhat surprising conclusion: it shows that God's foreknowledge or infallible beliefs about the future are not essential for excluding free will, at least when regard to the actual world. To this end, some of God's armchair beliefs are enough.

## 4. The A Priori Knowledge Argument against free will

Even though theists typically accept that God knows and thus believes all truths, full omniscience-knowing all truths-is not required for an argument against free will. The Master Argument, for instance, relies only on a collection of divine beliefs about actions performed in the future. Yet, the A Priori Belief Argument shows that even these are unnecessary to the end of excluding free will in the actual world. God's belief that you actually raise your hand at t only if you raise your hand at t is not a belief about an action you will perform at t, nor is it a belief about how the future will turn out in any substantive sense. One does not get knowledge of the future state of Mars, for instance, by learning that an asteroid will actually collide with it next year only if it does so. Analogously, God may hold the aforementioned belief while remaining entirely agnostic about whether you actually raise your hand at t, or, more generally, about how the future will turn out. Because the A Priori Belief Argument relies on divine beliefs in truths that, in many cases, can also be easily known by human beings, it allows for a powerful generalization with respect to *human knowledge*. The purpose of this section is to develop this further argument.

God's beliefs are factive, even though belief *per se* is not generally factive. But knowledge, divine or otherwise, *is* factive; one cannot have knowledge of false-

hoods. By letting 'Kp' abbreviate 'S knows at some time that p', the factivity of knowledge can be stated more schematically as follows:

**Factivity**:  $\Box(Kp \supset p)$ 

Necessarily, if *S* knows at some time that *p*, then *p*. Factivity, of course, bears much resemblance to Infallibility, which can be seen as a restricted version of the former principle where the agent in question is God and the logical distinction between divine belief and divine knowledge is obliterated. Because of this, while Infallibility was essential in the argument for Belief Lemma, Factivity is likewise crucial for establishing its knowledge counterpart:

**Knowledge Lemma**:  $@p \supset \Box(K(@p \supset p) \supset p)$ 

If @p, then, necessarily, S knows at some time that  $(@p \supset p)$  only if p. The argument for this is the same as the argument for **Belief Lemma**, except that it uses **Factivity** instead of **Infallibility**.

Now, in light of **Knowledge Lemma**, we can formulate a new argument against free will, which, in a sense, is a generalization of the A Priori Belief Argument. I call this the *A Priori Knowledge Argument Against Free will*, or simply the *A Priori Knowledge Argument*. Let t - 1 be some time in the past, t be some time in the future, assume both that you will actually raise your hand at t, and that some agent *S* knew at t - 1 that you actually raise your hand at t only if you raise your hand at t. Then:

(13) You have no choice about: S knew at t - 1 that you actually raise your hand at t only if you raise your hand at t.

(14) Necessarily, if *S* knew at t - 1 that you actually raise your hand at *t* only if you raise your hand at *t*, then you raise your hand at *t*.

While the A Priori Belief Argument explores the fact that for every (actually) true proposition p about what someone will do at any given time, God infallibly

<sup>(15)</sup> You have no choice about: raising your hand at t.

Premise (13) can be motivated in the same way as the first premise of the A Priori Belief Argument (i.e. (10)), while premise (14) is derived with **Knowledge Lemma** by modus ponens under the assumption that you will actually raise your hand at *t*. The conclusion, (15), follows directly from (13) and (14) by **Closure**. Therefore, according to the A Priori Knowledge Argument, if *p* is any truth about what you or anyone else will do at a future moment *t*, and someone comes to know the trivial a priori truth  $@p \supset p$  at any time before *t*, you will have no choice about *p*. The lack of choice about the past fact that someone came to know  $@p \supset p$  is transferred, by **Closure**, to *p* itself, in light of **Knowledge Lemma**.

believes  $@p \supset p$  in advance, the A Priori Knowledge Argument makes use of the fact that *some* such conditionals are known, in advance, by someone. Since God does know  $@p \supset p$  in advance, for every (actually) true *p* about what someone will do, the A Priori Knowledge Argument establishes that no one has a choice about it, and therefore that there is no free will. However, the argument does not require a *divine* knower to block many actions from being freely performed. If I knew yesterday that you actually raise your hand tomorrow only if you raise your hand tomorrow, and if it is true that you will raise your hand tomorrow, you will have no choice about raising your hand tomorrow.

But this is unacceptable. How could the mere fact that I came to know a certain logical truth be enough to render your future action unfree? How could this mere fact carry such power? To be sure, this fact does not involve a prediction, in any substantive sense, of what you will or will not do in the future. It seems, rather, like a fact that has nothing to do with the way you will actually act. Perhaps I came to know that you actually raise your hand tomorrow only if you raise your hand tomorrow while entertaining an example of a triviality that, though contingent, can be known a priori.

It would be tempting to try to disarm the A Priori Knowledge Argument by contending that the relevant facts about someone's past knowledge should not be considered hard facts about the past, which are never up to us, in contrast to facts about someone's past beliefs. But this temptation should be resisted. Facts about past knowledge of the a priori and logical truths in question are plausibly genuinely and strictly about the past, even though other facts about past knowledge, involving knowledge of basic facts about the future, may indeed fail to be genuinely and strictly about the past.<sup>18</sup>

Why might someone be tempted to claim that the fact that someone knows at some time that  $@p \supset p$ , or, in other words, the fact that  $K(@p \supset p)$ , is only a soft fact about that time, not strictly about it but also about some other time? This temptation might arise when p is about the future, leading to the idea that  $@p \supset p$  is, in a way, compositionally about the future. But then any old tautology  $p \supset p$  would likewise be about the future when p is, and tautologies are certainly not about the future in the relevant sense. Whether it is a fact that Ukraine will win the war only if Ukraine will win the war does not 'depend' on what happens in the future. It does not tell us anything about what will happen, and nothing that happens in the future determines whether it is a fact. I take it that a fact is about the future in the relevant sense only when it depends on the future for it to be a fact—or, in other words, it counts as a fact in virtue of how the future turns out.<sup>19</sup> So, for example, the fact

<sup>&</sup>lt;sup>18</sup>This is the typical incompatibilist position on this matter. See Pike (1965, pp. 42-45) and Fischer (1986, p. 599), for example. See also what Widerker (1990, pp. 463-464) and Todd (2013, pp. 831-832) say about beliefs and correct beliefs.

<sup>&</sup>lt;sup>19</sup>This view is inspired by the Todd (2013, p. 840). It is worth pointing out that one could try and distinguish between (a) something counting as a fact in virtue of the future, whichever way the

that Ukraine will win the war depends on the future, for it counts as a fact because of how the future will turn out.

The real reason why one might be tempted to say  $K(@p \supset p)$  is only a soft fact about a time is that it entails p, given that @p is true. So, if p is about the future,  $K(@p \supset p)$  entails a truth about the future. This entailment is granted by **Knowledge Lemma**. But whether  $K(@p \supset p)$  entails p if @p is true is hardly evidence that  $K(@p \supset p)$  is only a soft fact about a time. Note that  $@p \supset p$  is true in the actual world regardless of whether p is. Thus, irrespective of how the actual world turns out,  $@p \supset p$  is and has always been a fact.<sup>20</sup> Whether  $K(@p \supset p)$  is a fact about t is a fortiori not determined by what happens after t, even if it entails pwhen @p is true. The fact that I know, today, that Ukraine will actually win the war only if Ukraine will win the war is not determined by what will happen in Ukraine.

<sup>20</sup>One might indeed formulate an argument similar to the A Priori Knowledge Argument, but without appealing to knowledge, as follows:

(13\*) You have no choice about: you actually raise your hand at t only if you raise your hand at t.

(14\*) Necessarily, if you actually raise your hand at t only if you raise your hand at t, then you raise your hand at t.

future goes, and (b) something counting as a fact independently of the future. Hard facts about the past would be in the second category, and the view defended here is that the fact that someone knows at some time that  $@p \supset p$  is a hard fact about that time. Nevertheless, one might try to defend the view that truths such as  $@p \supset p$ , when p is about the future, obtain in virtue of the future, whichever way the future goes. This view might be motivated by the claim that p's truthmaker or falsemaker is located in the future, and because the truth of  $@p \supset p$  can be said to 'functionally depend' on the truth value of p, the truth value of this conditional would depend on the future; therefore, the fact that someone knows this conditional at some time would likewise depend on the future. One challenge for this view is that it would seem to entail that tautologies such as  $p \supset p$  would also fall into category (a) when p is about the future, though it seems much more reasonable to claim that tautologies are true independently of what happens at any time whatsoever. Moreover, and still assuming that p is about the future, it is more plausible to hold that it is the *modal status* of  $@p \supset p$  is contingent if p is contingently true in the actual world and (vacuously) necessary if p is false in the actual world, though it is true either way.

<sup>(15\*)</sup> You have no choice about: raising your hand at t.

Assuming that you will actually raise your hand at t, (14\*) can be derived with **Act Lemma** by modus ponens, and (15\*) is derived from (13\*) and (14\*) with **Closure**. The question is whether (13\*) is true. This premise may be justified by the principle that no one has a choice about logical truths, and the proposition you are said to have no choice about in this case is plausibly a logical truth (or expressed by an instance of a logical truth). Yet, this claim would have to be justified differently from how (13) is justified, for the intuition behind (13) is that the *past* is not up to us. In fact, one could use considerations similar to the ones made by Zagzebski (2004, p. 8) about timeless propositions to argue that we have no choice about logical truths or principles. The question of moral responsibility for logical truths is discussed in Lampert and Waldrop (2023). Much of what is said there about moral responsibility can be applied in this case.

Rather, it obtains irrespective of how the future turns out. To put it differently, I do not count as knowing such a priori truth today in virtue of what will happen in Ukraine.

Virtually every incompatibilist concerning divine omniscience and free will believes that merely entailing a contingent proposition about the future is not sufficient for soft facthood; otherwise, the Master Argument would fail. Indeed, some Ockhamists argue that it does fail for precisely this reason, although entailment criteria to this end have been widely challenged and rejected.<sup>21</sup> Regardless of whether we should count the fact that God had an infallible belief about what someone will do as a hard fact about a time, it is plausible that facts such as  $K(@p \supset p)$  and  $B(@p \supset p)$  should be counted as such. At the very least, anyone who believes that facts concerning God's past beliefs about future contingents are genuinely and strictly about the past should agree with this. Therefore, the distinction between soft and hard facts about the past does not seem to provide a successful response to the A Priori Knowledge Argument.

But neither is a rejection involving the 'actually' operator an efficient response to the argument, as versions of the A Priori Knowledge Argument can be formulated without it. First, one can formulate a version of the argument with rigidified descriptions instead, just like in the A Priori Belief Argument. But, more interestingly, there are other versions of the argument appealing neither to the 'actually' operator nor to rigidified descriptions. In what follows I will present some of those versions. Such arguments may be somewhat more artificial and less elegant than the arguments using an 'actually' operator, but they appeal to broad assumptions concerning, for example, proper names and rigid designation, which are in turn widely shared in contemporary philosophy. I will group these arguments into a family that I call *Naming Arguments Ragainst Free Will*. These arguments indicate that the issues the present arguments raise concerning debates on theological fatalism are broader than considerations involving contingent a priori knowledge of truths such as @ponly if p. The issues highlighted here should be understood as arising from a wide range of cases involving contingent a priori knowledge.

#### 4.1. Naming arguments against free will

The first argument in this section involves consequences for free will of naming truth values or objects that can serve as proxies for them. Let 'George' be a proper name for the number 1 if you actually raise your hand at t, where t is some time in the future; otherwise, let 'George' be a proper name for the number 0, that is, in case you do not actually raise your hand at t. (If you believe, with Frege, that truth values are objects, you can let 'George' name the True if you will actually

<sup>&</sup>lt;sup>21</sup>Todd (2013) surveys numerous failed attempts to defend entailment criteria for soft facthood and ultimately proposes his own dependence criterion. As noted earlier, the characterization of soft facts presented here aligns with Todd's approach, which does not rely on entailment.

raise your hand at *t*, and the False otherwise.) Let *p* be the proposition that you raise your hand at *t*. Since 'George' and '1' are both rigid designators, they rigidly designate the same thing, namely 1, if *p* turns out to be true. Similarly, because '0' is also a rigid designator, it designates the same thing as 'George' if *p* turns out to be false. Thus, by the *necessity of identity*, if 'George' and '1' rigidly designate the same thing, they do so necessarily, that is, George =  $1 \supset \Box$ George = 1 is true—and analogously for '0', that is, George =  $0 \supset \Box$ George = 0 is true.

Granted that I know what has just been stipulated about the name 'George', I can easily claim knowledge of the following contingent a priori truth:

(16) George =  $1 \supset p$ 

I can know this even if I do not know whether p is true—and thus fail to know whether George = 1. In fact, even if I do not know p, I can easily know the biconditional that George = 1 iff p, given my stipulation that 'George' names 1 if p is true.

Now, there is a variation of **Knowledge Lemma** that can be established. Suppose it is true that George = 1, so that p is true, and you raise your hand at t. And suppose some agent S knows the metalinguistic stipulations about the name 'George'. By the necessity of identity, since George = 1 is true, it is necessarily true; so, necessarily, if S knows at some time that (16) is true, which has a necessarily true antecedent, (16) must be true, too, by **Factivity**, and so the consequent of (16), namely that you raise your hand at t, must itself be true. Therefore, and at the very least under the assumption that S has the metalinguistic knowledge in question, the following holds:

**KL\***: George =  $1 \supset \Box(K(\text{George} = 1 \supset p) \supset p)$ 

If George = 1, then, necessarily, if *S* knows at some time that George = 1 only if *p*, then *p*. Given this version of **Knowledge Lemma**, what I call the *Truth Values Argument Against Free Will* can now be formulated. Assume that you will actually raise your hand at *t*, and that *S* established the aforementioned metalinguistic conventions concerning the reference of 'George' at t - 1, which is some time in the past.<sup>22</sup> Then:

(17) You have no choice about: *S* knew at t - 1 that George is 1 only if you raise your hand at *t*.

(18) Necessarily, if S knew at t - 1 that George is 1 only if you raise your hand at t, then you raise your hand at t.

<sup>&</sup>lt;sup>22</sup>The background assumption that it was not up to you whether *S* established the metalinguistic conventions in question might be added here if you believe (17) is false otherwise. To make the argument more plausible, we can therefore imagine that *S* decided on the reference of 'George' unbeknownst to you. Moreover, it goes without saying that *S* did not know that you would raise your hand at *t*. The same assumptions might underpin (*mutatis mutandis*) the arguments below.

(19) You have no choice about: raising your hand at t.

This argument is structurally very similar to the A Priori Knowledge Argument, except it uses neither the 'actually' operator nor rigidified descriptions. It explores the relationship between rigid designation, the necessity of identity, and contingent a priori knowledge with assumptions concerning what is and is not up to us. Specifically, it assumes that certain facts about the past are not up to us and that **Closure** is valid. (19) is derived by **Closure** from (17) and (18), which is in turn derived with **KL**\* by modus ponens under the assumption you raise your hand at t.

The Truth Values Argument is perhaps more controversial than the A Priori Knowledge Argument. One could object to it, for instance, by arguing it fails to involve a genuine act of naming or baptism (leading to the a priori knowledge in question), which would need to adhere to certain plausible constraints about how names are used in language and how they are used when we think about their referents.<sup>23</sup> Additionally, one could resist the argument by rejecting the existence of the objects named '1' and '0', and the existence of truth values altogether. One may defend that identities involving numbers cannot be true because there are no numbers, etc., and likewise for truth values. Despite these objections, the assumptions behind the Truth Values Argument are widely shared, and they are not altogether implausible. Note, moreover, that even if one does not think that knowledge that George =  $1 \supset p$  is a priori, the bare fact that someone got to know this in the past suffices for the argument.

Another Naming Argument can be formulated using a similar idea, but naming a *set* rather than truth values. Let 'George' name the set of all truths, that is, the set containing all the propositions that are true in the actual world, and let p be the proposition that you raise your hand at t, which is, once more, some time in the future. It is widely believed that set membership is rigid, that is, that it is not contingent whether this is a member of that; thus, if something belongs to a set, it necessarily belongs to that set. This implies that p is a member of George only if, necessarily, p is a member of George.

Once more, a variation of **Knowledge Lemma** can be shown. First, note that even if I do not know p, I can easily attain knowledge of the following contingent a priori truth (where ' $\in$ ' denotes set-theoretic membership):

(20)  $p \in \text{George} \supset p$ 

I can know this a priori just as I can know that (16) is true a priori. Moreover, if I know that George is the set of all truths, I can know the biconditional that p is a member of George iff p, even if I do not know p. Now, suppose  $p \in$  George, so that p is true. And suppose some agent S knows the aforementioned metalinguistic

<sup>&</sup>lt;sup>23</sup>See, for instance, Jeshion (2002, pp. 63-66).

stipulations about the name 'George'—that is, that it stands for the set of all truths. By the rigidity of set membership, since  $p \in$  George is true, it is necessarily true; so, necessarily, if *S* knows at some time that (20) is true, which has a necessarily true antecedent, (20) must be true, too, by **Factivity**, in which case its consequent, *p*, is also true. So, similarly to the Truth Values Argument, under the assumption that some agent *S* has the metalinguistic knowledge in question, the following holds:

**KL**\*\*:  $p \in \text{George} \supset \Box(K(p \in \text{George} \supset p) \supset p)$ 

If  $p \in$  George, then, necessarily, if *S* knows at some time that  $p \in$  George  $\supset p$ , then *p*. Now what I call the *Set-Theoretic Argument Against Free Will* can be formulated. Assume that you raise your hand at *t*, and assume that *S* established the aforementioned metalinguistic conventions concerning the reference of 'George' at t - 1, which is some time in the past. Then:

(21) You have no choice about: S knew at t - 1 that that you raise your hand at t is a member of George only if you raise your hand at t.

(22) Necessarily, if S knew at t - 1 that that you raise your hand at t is a member of George only if you raise your hand at t, then you raise your hand at t.

(23) You have no choice about: raising your hand at t.

The structure of this argument is by now clearly similar to the structure of the previous arguments, and the conclusion, (23), once more follows from premises (21) and (22) by an application of **Closure**—where (22) is derived by modus ponens with **KL**\*\* under the assumption you raise our hand at *t*.

There are multiple ways of objecting to this argument. First, one could make use of a result proved by Patrick Grim (1984) to the effect that there is no such thing as the set of all truths. Nevertheless, there are ways of avoiding Grim's argument, some of which involve endorsing not so implausible theories of propositions according to which they are not fine-grained enough for Grim's argument to go through.<sup>24</sup> Alternatively, one could reject that set membership is rigid in the unrestricted sense assumed in the argument. If one thinks propositions exist only contingently, and that only objects that exist have properties, then even though p is a member of George, it would not be a member of George in worlds where it does not exist, and George would likewise fail to exist in such circumstances. Consequently, one could conclude that in such worlds the proposition that  $p \in$  George fails to be true and, a

<sup>&</sup>lt;sup>24</sup>See Uzquiano (2015). Lampert and Merlussi (2021b) show that by assuming a sufficiently finegrained notion of propositional content it is possible to develop a Grim-style argument to show that there is no set of all truths one can render false.

*fortiori*, that it fails to be necessarily true.<sup>25</sup> Still, many assumptions that are crucial for the Set-Theoretic Argument are quite standard and held by many—as witnessed, for instance, by the modal set theory developed by Kit Fine (1981).

A final argument I shall register here is a simple variation of the argument above, but using *pluralities* instead of sets. By letting 'George' name the plurality instead of the set of all truths, one can easily know a priori that a proposition is, as it were, one of the Georges iff it is true. So, for instance, one can know a priori that p is one of the Georges only if p, which is in turn a 'plural variant' of (20). Since, furthermore, it is also not contingent whether this is one of them (i.e. plural 'membership' is also rigid), another version of **Knowledge Lemma** and, consequently, another argument against free will can be construed, which is just like the previous, Set-Theoretic Argument.<sup>26</sup> Once more, there will be ways of responding to this argument by rejecting some of its theoretical assumptions, which will involve similar moves as in the rejection of the Set-Theoretic Argument.

To conclude, all the arguments in this section could be reformulated as versions of the A Priori Belief Argument, too. Yet, they would seem to involve, presumably, assumptions such as that God baptizes truth values, sets and whatnots, which is stranger and more peculiar than claiming God believes  $@p \supset p$  for every true p about our actions. There will also be questions involving the relation of God with the language to which such names belong, as well as how and whether God uses names to think about objects, etc. These questions, though interesting, will not be investigated here. Instead, what is important for us is that the A Priori Knowledge Argument and its variants do not require an omniscient or divine being. Since these arguments are free from theological assumptions, they pose a challenge to anyone who upholds the logical and philosophical principles that enable their formulation.<sup>27</sup>

<sup>&</sup>lt;sup>25</sup>Issues related to this, and to the distinction between *truth in a world* versus *truth at a world* that is relevant here are discussed by Adams (1981), Plantinga (1983), Williamson (2001), and many others.

<sup>&</sup>lt;sup>26</sup>See Williamson (2013, p. 245-251), for more details on plural quantification and modal principles.

<sup>&</sup>lt;sup>27</sup>There is a sense in which Zagzebski (2004) and I pursue a similar strategy. She develops a parallel argument that, in a way, moves from the future to the past, which she calls the *Reverse Foreknowledge Argument*. This argument aims to show that if the future is 'unfixed' and 'open' (Zagzebski calls it 'contingent' in a special, temporal way), then so is the past. Conversely, the Master Argument appears to show that if the past is fixed and closed, then so is the future. Zagzebski asserts that 'each of these arguments undermines the intuition supporting the modality generating the argument—either the necessity of the past or the contingency of the future' (Zagzebski 2004, p. 13). I, however, derive parallel arguments moving from the past to the future to motivate the claim that something is amiss with the Master Argument (independently of the reverse foreknowledge argument).

#### 5. Closing remarks

According to the A Priori Belief Argument, if God believes, infallibly, @p is true only if p, for every true proposition p about our actions, then nothing is up to us. Restricting divine omniscience by excluding divine knowledge or beliefs about the future, as suggested by restricted omniscience theorists, is, therefore, insufficient to preserve free will. Beyond this restriction, one would also have to defend that God does not know many logical or a priori and trivial truths that you and I surely do, and there is no independent reason for attributing such ignorance to God. One conclusion we may draw from this is that the incompatibility between divine omniscience and free will is not avoided by focusing on the extent of omniscience.<sup>28</sup>

The A Priori Knowledge Argument and its variants, on the other hand, appeal neither to divine omniscience nor to infallible beliefs in a priori truths. But if the A Priori Belief Argument is puzzling enough, the A Priori Knowledge Argument seems to be unacceptable. How could mere facts about past human knowledge of trifling a priori truths prevent many actions from being freely performed? If this is indeed unacceptable, as I believe it is, then those arguments ought to be rejected. But what exactly is wrong with them?

Even though these arguments crucially involve past knowledge rather than mere belief, I have argued that it is not plausible that the relevant facts about past knowledge of contingent a priori truths are merely soft facts about times that are up to us. I believe they are indeed hard facts about times. This goes against the paradigmatic Ockhamist position, which holds that hard facts about times do not entail facts about other times. If the Ockhamist position were correct, it would provide grounds to reject the arguments against free will developed here—on top of the assumption that they involve soft facts about times which are up to us. However, I believe the cases discussed here may actually pose a new challenge for Ockhamists.

One may attempt to avoid the present arguments by adopting some version of open theism, as all the arguments presented here against free will, including the Master Argument, assume the existence of true future contingents. There are, nevertheless, outstanding questions for those following this route, as it is not immediately clear which logical principles should ultimately be accepted or rejected if not every proposition is either true or false, which logic would be deemed acceptable, etc. This solution involves logical and theoretical restrictions, which may come at a cost.

Alternatively, one might maintain divine omniscience and traditional logical principles while rejecting **Closure**, without appealing to Ockhamism.<sup>29</sup> One could

<sup>&</sup>lt;sup>28</sup>Hunt (1998, 2017a, 2017b) argues that theological fatalism is not a *theological* problem but rather suggests that we view it as a puzzle—specifically, an *aporetic problem*. I sympathize with Hunt's analysis, and my suggestion may be interpreted as claiming that the arguments presented here, including the Master Argument, are all puzzles generated by **Closure**.

<sup>&</sup>lt;sup>29</sup>Hasker (2001) lists rejecting **Closure** as one of the 'major solutions' to theological fatalism, a solution that traces back to the sixteenth-century theologian Luis de Molina, who is known for the

argue that the arguments presented here do not provide evidence against **Closure**, since **Closure** is merely one crucial component of these arguments. Nevertheless, how might counterexamples to **Closure** look? One possible answer is to interpret the above arguments as illustrating the invalidity of **Closure**: being powerless over past facts should not necessarily imply being powerless over future facts merely due to an entailment relationship between these facts. Furthermore, if we find that there is something fundamentally flawed in the A Priori Knowledge Argument and its variants because past knowledge of trivial a priori truths has no bearing on free *will*, why not apply the same critique to the Master Argument? As Pike himself remarked, 'what connection could there be between the claim that God is *omniscient* and the claim that human actions are determined?' (ibid.). Thus, one might argue that the present arguments show that **Closure** proves 'too much'.<sup>30</sup> Besides, the theoretical costs of rejecting **Closure** are minimal. First, **Closure** is not a theological principle like divine omniscience, so rejecting it does not impact theological commitments. Second, Closure is not an inferential principle that clarifies the notions of freedom and choice. Instead, it is a principle that many philosophers find intuitively plausible but is primarily or even solely used to formulate arguments against free will. Third, there are independent reasons to reject **Closure** and its variants, stemming from recent literature on ability and modality, particularly in the context of *Consequence Arguments* and the versions of **Closure** they employ. The views in question defend that we are sometimes able to do the impossible and that some necessary truths are up to us.<sup>31</sup> How does this affect **Closure**? The claim that some

view that God possesses 'middle knowledge'. This view is not assumed here.

 $<sup>^{30}</sup>$ In Lampert (2022), it is argued that one may derive a contradiction from the assumptions that there is free will alongside a 'possible worlds' and counterfactual version of the principle of the fixity of the past, which has in turn been defended variously-and ably-by John M. Fischer and others (see the works by Fischer cited here, especially Fischer 2016). This might seem to suggest that our focus should ultimately be on counterfactual principles of the fixity of the past, and not on **Closure**, as there are versions of the Master Argument appealing *explicitly* to the former rather than to the latter. Nevertheless, unlike **Closure**, these counterfactual principles have been highly controversial, criticized especially by compatibilists (see Perry 2004, 2008, Merricks 2011, and Mackie 2021, 2017, to name a few). Furthermore, one can defend the original intuition that the past is not up to us without relying on or committing to these principles, which are better considered as putative consequences of the intuition (if at all). Additionally, the argument attempting to derive a contradiction from the counterfactual principle of the fixity of the past in question is, in some ways, more controversial and open to objections than the present arguments, as it involves counterfactual beliefs with 'indexical content', which the present arguments avoid. Finally, one could adopt a more minimal position, arguing that the present arguments are problematic only for the **Closure** versions of the Master Argument.

<sup>&</sup>lt;sup>31</sup>See Kearns (2011), Spencer (2017), and Lampert and Merlussi (2021a, 2021b, 2022). Given the similarities between the Master Argument and some modal formulations of the Consequence Argument (e.g. such as the one in van Inwagen 1983), rejecting **Closure** could also lead to rejecting these arguments. This might be a disadvantage for those who wish to resist theological fatalism while maintaining an incompatibilist view about freedom and causal determinism. Still, there are principles similar to **Closure** that might be effective in formulations of Consequence Arguments,

necessary truths are up to us is incompatible with **Closure**. If some necessary truth q is up to you, then, since necessary truths are entailed by any proposition, they are entailed, too, by any truth p about which you have no choice; but then, by **Closure**, since  $\Box(p \supset q)$ , you would have no choice about q, a contradiction. The view that some necessary truths are up to us is, admittedly, controversial. To be sure, no such thing is assumed here.<sup>32</sup>

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even if they seem implausible in arguments for theological fatalism. For instance, consider the following principle, which is similar to one suggested in Lampert and Waldrop (2023, p. 2303):

**Bec**: From Np and q because p, infer Nq

This principle says that if S has no choice about p, and the fact that q obtains because of p, then S has no choice about q. If one believes that causal determinism implies that facts about what one will do in the future obtain *because of* facts about the past and the laws of nature, then one might consider **Bec** a plausible closure principle that supports distinct formulations of the Consequence Argument. However, theists typically do not believe that facts about what one will do in the future obtain because of facts about God's beliefs: it is not the case that you will raise your hand at t because God believed a billion years ago that you would raise your hand at t—it is the other way round. Consequently, rejecting **Closure** might also prompt the development of new principles concerning 'no choice about', driving a wedge between distinct forms of incompatibilism and their motivations.

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