

Logical Fatalism

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There are three components of logical fatalism (hereafter *fatalism*): (i) *bivalence*, the thesis that every proposition is either true or false (and no proposition is both true and false); (ii) the thesis that free action is impossible; and (iii) the thesis that bivalence entails that free action is impossible. The pith of the argument is this:

Assume that it is true that agent S performs act A at time t , where time t is in the future.

Since it is *already* true that S will perform A at t , S cannot *not* perform A at t . But if S cannot *not* perform A at t , S will perform A at t *non-freely*. Given that S , A , and t might be any agent, any act, and any future time, free action is impossible.

Because this argument depends on certain assumptions about the definition of free action, I will pause to say a few words about the debate over this definition. Participants in the debate fall into two camps: so-called *leeway theorists* contend that free action “requires alternative possibilities,” so that an agent acts freely only if she is “able to do otherwise” than she actually does. *Source theorists*, by contrast, maintain that if an agent is the *source* of an action (in some relevant sense of “source”), she acts freely even if she lacks alternative possibilities. The leeway-sourcehood debate is orthogonal to the fatalism debate. Indeed, the fatalism debate is for leeway theorists only. After all, unless free action “requires alternative possibilities,” bivalence seems to pose no threat to free action.

In this chapter, I will offer a brief history of this debate, present what I take to be the strongest argument for fatalism, and consider the dialectical options available to its opponents.

These options include: (i) denying that it is possible for propositions to be true *at times*; (ii) contending that propositions change truth values (which implies either the falsity of bivalence or the falsity of every proposition of the form $\langle S \text{ will freely perform act } A \rangle$); (iii) contending that there are cases in which it is *now* up to an agent which states of affairs obtained in the past; and (iv) denying the validity of so-called “Diodoran principles.” Along the way, I will indicate the structural similarity between the argument for fatalism, on the one hand, and the Consequence Argument for the incompatibility of free action and determinism, on the other.

A Brief History of the Debate

Within the western philosophical tradition, Aristotle’s *De Interpretatione* (Chapter 9) seems to be the origin of the argument for fatalism, though Aristotle himself was no fatalist. He presents the argument in the context of making a case *against* bivalence, reasoning that if bivalence were true, everything that happens would happen of necessity and, thus, “There would be no need to deliberate or take trouble.” Implying that there is, in fact, a need to deliberate or take trouble, Aristotle concludes that bivalence is false: contingent propositions about the future are neither false nor true. The fatalist, obviously, sees *modus ponens* where Aristotle sees *modus tollens*.

One generation after Aristotle, members of the Dialectical School revisited this line of thought as they began building systems of modal logic. With Aristotle’s argument against bivalence in mind, Diodorus offered the so-called “Master Argument” for the impossibility of contingently true propositions about the future. Unfortunately, so few of Diodorus’s manuscripts survive that it is unclear exactly how he formulated the argument in question. We do know, however, that a key premise was the principle that “Nothing impossible follows from the possible.” If ‘ $\neg\Diamond p$ ’ designates ‘It is not possible that p ’ and ‘ $\Box(p \rightarrow q)$ ’ designates that p entails q , this principle may be formulated as: $\{\neg\Diamond q, \Box(p \rightarrow q)\} \vdash \neg\Diamond p$. As Kapitan (2002) points out, many variations on this principle have

been introduced into the debate over the Consequence Argument for the incompatibility of free action and determinism. While participants in that debate tend to speak of “ β -like principles” (in reference to van Inwagen’s “Principle β ,” which he introduced in his 1983 presentation of the Consequence Argument) or “transfer of necessity principles,” I will use the term “Diodoran Principles” to refer to all relevantly similar principles.

When Christianity came to dominate Western philosophy, interest in *theological fatalism* supplanted interest in logical fatalism. According to theological fatalism, since an omniscient God knows what agents will do before they do it, it is impossible for agents to act other than they do. Toward the end of the medieval era, William of Ockham offered an approach to the problem of theological fatalism according to which we *now* have a choice about what God has *always* believed. Among contemporary scholars, Ockhamism is a relatively popular response to theological fatalism; in what follows, I will discuss the Ockhamist response to logical fatalism.

Logician A. N. Prior spent the 1950s and 1960s grappling with the argument for logical fatalism, which “brought together three of [his] great interests: indeterminism, modal logic, and the logic of time.” (Copeland) Having studied Aristotle, Stoic logicians (including Diodorus), and medieval logicians (including Ockham), Prior developed a groundbreaking tense logic with which he reformulated Diodorus’s Master Argument. Like Aristotle, he responded to the argument with the claim that propositions can change their truth values. Unlike Aristotle, he maintained a commitment to bivalence, suggesting instead that all contingent propositions about the future are false (unless entailed by contingent propositions about the past, contingent propositions about the present, and necessary propositions). I will discuss this position briefly in what follows, though it is beyond the scope of this chapter to do justice to Prior’s work.

The Argument

I begin my presentation of the argument for fatalism with a necessary consequence of the (leeway theorist's) definition of free action:

(FA) Necessarily, S freely performs A at t only if (i) S performs A at t and (ii) for some time t^- such that t^- is earlier than t , it is up to S at t^- whether S performs A at t ;

where:

(UP) It is up to S at t^- whether S performs A at t =df. (i) t^- is earlier than t and (ii) S at t^- is both (a) able to perform A at t and (b) able to refrain from performing A at t ;

and:

' S ' designates some arbitrary agent S ,
' A ' designates some arbitrary action A ,
' t ' designates some arbitrary time t ,

and:

' t^- ' designates some arbitrary time t^- such that t^- is earlier than t .

With this, the fatalist's concern may be stated rather simply: since there is no time at which it is not true that S performs A at t , there is no time at which it is up to S whether S performs A at t .

In order to present the concern as a formal argument, I will follow Peter van Inwagen in employing the idiom of “being able to render a proposition false.” Although the locution is strange, the notion is relatively straightforward, provided that we make certain stipulations. First, let us stipulate that for any action A performed by any agent S at any time t , there is a corresponding proposition p_A such that:

‘ p_A ’ designates the proposition that S performs A at t .

Let us further stipulate not only that:

Necessarily, it is up to S at time t - whether S performs A at t if and only if it is up to S at t - whether p_A ,

but also that *whatever it is* for it to be up to S at time t - whether S performs A at t , *this* is what it is for it to be up to S at t - whether p_A . In other words, let us stipulate that the definition of “It is up to S at t - whether S performs A at t ” is the definition of “It is up to S at t - whether p_A .”

And now let us imagine a particular case. In particular, let us imagine that Mary freely marries Harry at noon on March 13, 3013 and that time t_M is the one and only time at which it is up to her whether she does so. Let us stipulate that:

‘ t_M ’ designates noon on March 13, 3013;

and:

p_M designates the proposition that Mary marries Harry at t_M .

And let us be clear: p_M is false if and only if Mary does not marry Harry at t_M , and Mary does not marry Harry at t_M if and only if Mary refrains from marrying him at t_M . With this, it should be evident that each of these is equivalent to the other:

- Mary freely marries Harry at t_M .
- Mary marries Harry at t_M and it is up to Mary at t_M whether Mary marries Harry at t_M .
- p_M and it is up to Mary at t_M whether p_M .
- p_M and Mary at t_M is able to refrain from marrying Harry at t_M .
- p_M and Mary at t_M is able to do something (i.e., refrain from marrying Harry, not marry Harry) such that, if Mary were to do it, p_M would be false.

At this point, the basic notion of being able to render a proposition false should be clear enough:

(RPF) S at t is able to render proposition p false $\stackrel{\text{def.}}{=} S$ at t is able to do something such that, if she were to do it, p would be false,

provided that “doing something” is construed broadly enough so that “not performing act A ” or “refraining from performing A ” counts as “doing something.” In the case of Mary and Harry, Mary at t_M is able to do something that would render p_M false if, for instance, Mary at t_M is able to postpone the wedding, leave Harry at the altar, utter “I don’t” when asked whether she does, or take so long to respond to the relevant query that Harry says, “Never mind!” and storms out. Provided that Mary freely marries Harry at t_M and t_M is the one time at which it is up to Mary whether she

does so, it follows that there is *something* Mary at t_M can do such that, if she were to do it, p_M would be false; it follows, that is, that Mary at t_M is able to render p_M false.

Of course, the fatalist's point is that no one ever acts freely; as such, let us consider the notion of *not* being able to render a proposition false. In his classic formulation of the Consequence Argument, van Inwagen made use of an N-operator, where the sentence 'Np' was to be read as "*p* and no one has, or ever had, any choice about whether *p*" (93), which is equivalent to "*p* and no one is, or ever was, able to render *p* false." Taking a cue from van Inwagen, I will use a similar N-operator, where:

' $N_{s,t}p$ ' designates: p & it is not up to S at t whether p .

I offer that $N_{s,t}p$ is equivalent to:

$(N_{s,t}p^*) p$ & S at t is unable to render p false;

$(N_{s,t}p^{**}) p$ & it is not the case that there is something S at t can do such that, if S were to do it, p would be false;

and:

$(N_{s,t}p^{***}) p$ & there is nothing S at t can do such that, if S were to do it, p would be false;

Anyone familiar with McKay and Johnson (1996) might wonder whether it would be better to replace 'would' with 'might' in $(N_{s,t}p^{**})$ and $(N_{s,t}p^{***})$. Fortunately, in the context at hand, nothing

hinges on whether ' $N_{s,t}p$ ' is read in terms of "would" or "might," so I will simply adopt the "would" reading.

With the N-operator in view, I introduce a Diodorian Principle. Though many are available, I will rely on this one in particular:

$$(DP) \{N_{s,t}p, \Box(p \rightarrow q)\} \vdash N_{s,t}q$$

Such principles are familiar to anyone familiar with the debate over the Consequence Argument.

Indeed, unless there is a valid Diodorian Principle, the Consequence Argument is invalid.

Moreover, both the Consequence Argument and the argument for fatalism depend on some version or other of either the Principle of the Fixity of the Past or the Principle of the Fixity of the Present. The former is the principle that:

(FP): Necessarily, for any agent S , any proposition p , and any time t , if (i) p describes a state of affairs that obtains prior to t , (ii) it is not up to S at or after t whether p ;

while the latter is the principle that:

(FP*): Necessarily, for any agent S , any proposition p , and any time t , if (i) p describes a state of affairs that obtains at t , (ii) it is not up to S at or after t whether p ;

In what follows, I will narrow my focus to to the Fixity of the Past: I do so only for the sake of brevity; every claim that I will make about the Fixity of the Past could be made, *mutatis mutandis*, about the Fixity of the Present.

At this point, the argument for fatalism and the Consequence Argument diverge: the latter but not the former depends on the thesis that it not up to anyone what the laws of nature are; the former but not the latter depends on both of these principles:

(Truth-at- t) Necessarily, for any proposition p , if p is true, there is some time t such that p is true at t .

(Immutability): Necessarily, for any proposition p , for any time t , and for any time t^* , p is true at t if and only if p is true at t^* .

In what follows, I will consider objections to these principles, just as I will consider objections to the Diodoran principle and the Fixity of the Past. For now, I simply note that while it is possible to formulate the argument for fatalism without explicitly invoking them, these principles (or, at least, quite similar principles) seem essential to the argument.

I have already said that the argument begins with the assumption of bivalence. Given bivalence, it follows that proposition p_A has a truth value; let us assume that p_A is, in fact, true. Stipulating that t_{-1B} is a time approximately one billion years before t_- , the argument for fatalism can be formulated such that:

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|--|-----------------------|
| 1. p_A | Bivalence, Assumption |
| 2. $\Box(p_A \leftrightarrow p_A \text{ is true at } t)$ | Truth-at- t |
| 3. $\Box(p_A \text{ is true at } t \leftrightarrow p_A \text{ is true at } t_{-1B})$ | Immutability |
| 4. $\Box(p_A \text{ true at } t_{-1B} \leftrightarrow p_A)$ | 2, 3 |
| 5. $N_{s,t}(p_A \text{ is true at } t_{-1B})$ | Fixity of the Past |

Because any time earlier than t may be substituted for t_{IB} , this argument purports to show that the proposition that S performs A at t entails that it is never up to S whether S performs A at t . Free action is impossible.

Response 1: Rejecting “Truth-at- t ”

What does it mean to say that a proposition is *true-at-a-time* as opposed to true *simpliciter*? In *An Essay on Free Will*, Peter van Inwagen suggests that the expression is meaningless. More exactly, he points to similar expressions (e.g., ‘true at some particular moment’, ‘true at every moment’, ‘became true’, ‘remained true’, ‘is unchangeably true’, and so on), and offers that he does not “see what these phrases mean if they are used as they are used in the above argument for fatalism.” (35) He grants that if he were to say, “Municipal bonds are a good investment,” and if someone were to respond with “That used to be true but it isn’t true anymore,” his respondent’s words “would be a model of lucidity.” (35) After all, his respondent’s meaning could easily be captured with sentences that do not invoke the notion of true-at-time- t , e.g., “In 1945, municipal bonds were a good investment. In 2015, municipals bonds are not a good investment.” But how could one capture the meaning of “It was true one billion years ago that Mary marries Harry in 3013” without using the notion of truth at a time? Van Inwagen conducts a survey of plausible candidate meanings and argues that each is unsatisfactory. He seems to suggest that it follows that these expressions are meaningless. Of course, if these expressions are meaningless, so is the premise that $\langle p_A \text{ is true at } t_{IB} \rangle$. In this case, the argument for fatalism is unsound.

Unfortunately, it is impossible to do justice to van Inwagen’s position here, just as it is impossible to consider the various ways a fatalist might respond. I will simply gesture at two

responses on behalf of the fatalist. First, one might baldly assert that ‘*p* is true at *t*’ means whatever ‘*p* is true’ means: to say that a proposition is true at a time is just to say that it is true simpliciter. If one supposes that nothing exists outside of time, one might be sympathetic toward this view. Second, one might offer a *tu quoque* response by arguing that: (i) for any true proposition, *either* it is true at a time *or* it is timelessly true, (ii) the notion of “timeless truth” is meaningless, therefore (iii) every true proposition is true at (at least) one time.

Response 2: Rejecting Immutability

Opponents of fatalism who affirm the *truth-at-t* principle might consider rejecting Immutability and embracing the ‘open future view’, which Patrick Todd (forthcoming) defines as “the view that there are some events (or states of affairs, or...) such that it is not true that they *will* occur and not true that they *will not* occur.” Proponents of this view can acknowledge a distinction between (i) contingent propositions about the future that are entailed by contingent propositions about the past and present and necessarily true propositions and (ii) contingent propositions about the future that are not so entailed. The pith of the open future view is that there are propositions of the latter sort (hereafter “un-entailed future contingents”), and that if an un-entailed contingent says either that some event *will* occur or that some event will *not* occur, that proposition is not true: the future is “open” insofar as it is not yet a “fact” whether certain events will (or will not) occur. In response to the argument for fatalism, the open futurist contends that there are no true propositions of the form $\langle S \text{ will freely perform } A \rangle$. In the case of Mary and Harry, for instance, it is not true that Mary marries Harry in March of 3013. *Ex hypothesi*, this proposition will *become* true because, *ex hypothesi*, the ceremony will take place. Until 3013, though, it is not the case that the proposition is true. As my brief discussion of the history of the debate suggested, anti-fatalists who deny Immutability may

either (i) join Aristotle in rejecting bivalence or (ii) join Prior in asserting the falsity of all un-entailed future contingents. In a moment, I will discuss the latter option. First, I turn to bivalence denial.

Bivalence, again, is the thesis that every proposition has exactly one truth value and there are no truth values other than truth and falsity. Open futurists who reject bivalence insist that un-entailed future contingents are neither true nor false. They might contend that such propositions have another truth value or falsity, or that such propositions have no truth value at all. Such a response to fatalism is certainly straightforward. After all, if propositions about the future are neither true nor false, their truth values do not impinge upon agents' abilities to other than they do. Moreover, this straightforward response has a ring of plausibility to it. One might well reason that until something happens, there is no fact about whether it happens, and if there is no fact about whether something happens, the proposition *that it happens* is neither true nor false. At first blush, this response might seem very plausible indeed.

This response might seem less plausible, though, when one considers that classical logic is bivalent. To deny bivalence is, thus, to commit to the thesis that “classical logic is wrong—that it provides an inadequate model of (genuine) logical truth and logical consequence.” (Sider 72) Fortunately for the bivalence denier, various three-valued (trivalent) systems of logic are on offer (see, for instance, the systems developed by Jan Kukasiewicz and Stephen C. Kleene). In addition to truth and falsity, “The third truth value is (in most cases, anyway) supposed to represent sentences that are neither true nor false, but rather have some other status. This other status could be taken in various ways, depending on the intended application, for example: ‘meaningless’, ‘undefined’, or ‘indeterminate’.” (73) With respect to the intended application of the third truth value, I note that sentences expressing future contingent propositions are not the only plausible candidates. One might reasonably suppose that a sentence is neither true nor false if, for instance (i) it involves a

vague term, (ii) it expresses a proposition that involves a false presupposition (perhaps that the present king of France is bald), or (iii) it includes a reference to a fictional entity. Given that trivalent logic systems already exist, and given that concerns about vagueness, false presuppositions, and fictional entities provide additional reasons for rejecting bivalence, perhaps the rejection of classical logic is not too high a price to pay for a response to the fatalist.

Not so, say the proponents of *Russellian open futurists* (so named by Patrick Todd, forthcoming). As open futurists, they reject Immutability and contend that no future contingent propositions are true. However, they contend that with respect to the choice between (i) rejecting classical logic and (ii) holding that all un-entailed future contingents are false, the latter option is far more economical. At the heart of their view is the thesis that a proposition is true if and only if the corresponding state of affairs obtains. Since future contingent states of affairs (such as Mary's marrying Harry) do not (yet) obtain, the corresponding future contingent propositions are not (yet) true. Moreover, given bivalence, a proposition is not true if and only if it is false. Hence, future contingent propositions are false.

An obvious objection arises: if Russellian open futurism is true, it is false that Mary will marry Harry and it is false that Mary will not marry Harry. Given that this result seems inconsistent with the Law of Non-Contradiction (according to which it is necessarily the case that $\neg(p \ \& \ \neg p)$), one might be suspicious of the Russellian open futurists' claim that they are able to maintain a commitment to classical logic. Russellian open futurists will respond that \langle Mary will not marry Harry \rangle is not the negation of \langle Mary will marry Harry \rangle . Indeed, according to their view, (i) for any proposition p , the negation of p is equivalent to the proposition \langle It is false that p \rangle and that (ii) \langle It is false that Mary will marry Harry \rangle is not equivalent to \langle Mary will not marry Harry \rangle . Again, to say that it is false that Mary will marry Harry is to say that the state of affairs of Mary's marrying Harry does not obtain, which is *not* to say that this state of affairs *will not* obtain, ever. As such, they

contend, there is no contradiction in claiming both that it is false that Mary will marry Harry and false that she will not marry him.

At this point, it should be clear that the difference between Russellian open futurism and open futurism with bivalence denial is subtle. While proponents of the former view contend that its consistency with classical logic gives it a dialectical advantage over the latter, the significance of that advantage is not obvious. In order to assess its significance, one would need to explore the philosophy of logic in more depth than the limitations of this chapter allow. I will thus set aside the open futurists' internecine dispute about bivalence and classical logic.

Instead, I will raise a more general question about open futurism. When I introduced the view, I conceded the plausibility of the thesis that there is not yet a "fact" about whether Mary will marry Harry. I now point out that it *also* seems plausible that if (i) Mary does indeed marry Harry on March 13, 3013, and if (ii) I now assert that Mary *will* marry Harry on that day, then (iii) I am now asserting a true claim. According to open futurists, however, even if Mary and Harry go through with the ceremony, I nonetheless fail to speak truly when I assert that they will do so. Granted, this is hardly a decisive objection. Nonetheless, the open futurist ought to acknowledge that as we go about our ordinary lives, many of us assume that (i) some of our *beliefs* about what will happen are true and (ii) some *statements* about the future are true. It seems as if we regularly make predictions about what will happen, and then wait to see whether our predictions are correct. In so doing, we seem to assume that it is possible for a future contingent proposition to be true. If the open futurist's response to fatalism is correct, these widespread assumptions are problematic. This seems to be a strike against open futurism.

But, of course, every response to fatalism has at least one strike against it. On this note, I turn to Ockhamism.

Response 3: Ockhamism

As Ockhamism is usually presented, its central thesis is that there is a distinction between so-called *hard facts* and so-called *soft facts*. While providing a clear and precise characterization of this distinction is difficult, the general idea is that, “A hard fact about the past is entirely about the past whereas a soft fact is not: a hard fact about, say, t_{-1B} is a fact whose obtaining is entirely independent of whatever might happen after t_{-1B} , whereas a soft fact about t_{-1B} somehow depends on, or involves, or includes events that take place at later times.” (See Finch and Rea 2008) I follow Finch and Rea in characterizing the distinction in terms of *future-directedness*, stipulating that a soft fact is a state of affairs that obtains and is future-directed, and a hard fact is a state of affairs that obtains and is not future-directed, where “a state of affairs S is *future-directed* just in case either S ’s obtaining entails that some contingent thing will exist or S ’s obtaining entails that no contingent thing will exist.” Of course, whether a fact is hard or soft is relative to a time.

Once they draw this distinction, Ockhamists may object that the fatalists’ argument trades on ambiguity regarding the principle of the Fixity of the Past. After all, they will say, the Fixity of the Hard Past is obviously true:

(FHP) Necessarily, for any agent S , any proposition p , and any time t , (i) if p describes a state of affairs O that is a hard fact at t , (ii) it is not up to S at or after t whether p (is true),

but the Fixity of the Soft Past is false:

(FSP) Necessarily, for any agent S , any proposition p , and any time t , (i) if p describes a state of affairs O that is a soft fact at t , (ii) it is not up to S at or after t whether p (is true).

Given that the fatalists' argument is sound only if the latter principle is true, Ockhamists reject fatalism.

Fatalists obviously deny the relevance of this distinction. They contend that with respect to propositions about the past, it is in virtue of their being *about the past*, and not in virtue of their being *about a particular kind of fact*, that agents lack power over their truth values. Ockhamists may respond that this approach rests on a misunderstanding about what it is to be able to render a proposition false.

In order to appreciate the Ockhamists' response, let us recall that the Principle of the Fixity of the Past must be read as including a counterfactual conditional: if p describes a state of affairs that obtains prior to t , there is nothing that S at or after t can do such that, if S were to do it, p would be false. If we consider the hard fact that Ockham died in 1347, it follows from the Principle of the Fixity of the Hard Past that:

Ockham dies in 1347 and there is nothing anyone can now do such that, if she were to do it, it would be false that Ockham dies in 1347.

The Ockhamist and the fatalist agree that everyone lacks this power.

With respect to the soft facts relating to Mary's wedding, though, Ockhamists can deny that:

Mary marries Harry at noon on March 13, 3013, and there is no time at which anyone can do anything such that, if she were to do it, it would be false that Mary marries Harry at noon on March 13, 3013.

In the case of Mary and Harry, Ockhamists will say, Mary at t_M is able to do something such that, if she were to do it, it would be false that Mary marries Harry at noon on March 13, 3013. I have already suggested that t_M may be a time at which Mary is able to postpone the wedding, leave Harry at the altar, utter “I don’t,” or remain silent so long that Harry himself stops the ceremony.

Ockhamists qua Ockhamists need not give a full account of the genesis of Mary’s free action. Their contention is that since Mary freely marries Harry at t_M and t_M is the one time at which it is up to Mary whether she does so, it follows that there is *something* she can do. On pain of the begging the question, Ockhamists insist, fatalists cannot respond by simply denying that Mary has these abilities. Fatalists owe Ockhamists an argument.

Of course, fatalists will say that they have already given an argument: the burden is on the Ockhamist to explain how it is possible for someone to do something such that, if she were to do it, the past would be different than it is.

To be clear, Ockhamists do not claim that agents can *change* the past, which would be absurd. Rather, they contend that if, for instance, Mary were to refuse Harry, it *never would have been true* that Mary marries Harry at noon on March 13, 3013. Soft facts somehow *depend on*, or obtain *in virtue of*, or obtain *because of* states of affairs that obtain in the future. So, for instance, one billion years ago, it was a soft fact that Mary marries Harry in 3013. That this was *then* a fact depends on what happens in 3013. As an Ockhamist might say, “Mary does not marry Harry in 3013 because it was true one billion years ago that she will do so; rather, it was true one billion years ago that Mary marries Harry in 3013 because she will, in fact, marry Harry on that date.”

Unfortunately for Ockhamists, it is not clear what notion of “dependence” they have in mind. One might suppose that they are committed to some kind of backward causation and, as such, are susceptible to the many objections that have been raised against it. However, Ockhamists themselves typically deny that they have this commitment and it seems that there are other notions

of dependence that seem to better capture what is at the heart of Ockhamism. For instance, one might follow Todd (2013) in saying that soft facts are *grounded in* or *ontologically dependent* on hard facts. As promising as that suggestion might be, though, unless Ockhamists can explain what it is for one fact to ground, or ontologically depend on, another, their response to fatalism is incomplete. And as even a quick survey of the literature on grounding and ontological dependence shows (see, e.g., Correia and Schneider 2012), providing such an explanation is no mean feat.

Response 4: Rejecting Diodoran principles

One response to fatalism remains: rejecting Diodoran principles. While I formulated the fatalist's argument by way of the principle that (i) if p is true and it is not up to S at t whether p , and (ii) if p entails q , (iii) then q is true and it is not up to S at t whether q , there are, as I said, many principles that have the same form as Diodorus'. As anyone familiar with the literature about the Consequence Argument knows, one might reasonably object to one formulation of such a principle while affirming the validity of another. For instance, McKay and Johnson (1996) present a counterexample to β , the Diodoran principle van Inwagen offered in *An Essay on Free Will*, but endorse a β -like (Diodoran) principle that is not susceptible to the counterexample in question. The strategy I am considering in this section is the wholesale rejection of all Diodoran principles. For ease of exposition, though, I will speak as if there is only one and that it is to be formulated as I formulated it here.

Unfortunately, in the context of the fatalism debate, having a fruitful discussion about the truth of the Diodoran principle may be impossible. On the one hand, there seems to be nothing to say in its favor except that it seems obviously true. One could ask rhetorical questions or state the principle in various ways, but the pith of the case for the Diodoran principle is an imperative: "Look at it." (As it happens, this case is quite strong: look at it indeed!) On the other hand, it is

not as if it would be useful *in this context*, to try to provide a counterexample to it. After all, in order to provide a counterexample, we would need to describe a scenario in which (i) q and it was up to S at t whether q , (ii) p entails q , and (iii) p and it is not up to S at t whether p . But the fatalists' very point is that it is logically impossible that there is any scenario in which (i) q and it is up to S at t whether q . Fatalists can concede that there are cases in which it *appears* that agents act freely: they offer their argument to show that appearances are misleading. However, fatalists qua fatalists will reject any proposed counterexample as illegitimate. Debate between a fatalist and someone who does not accept the validity of the Diodoran principle will quickly reach an impasse.

At the outset of this chapter, I said that as I presented the argument for fatalism, I would indicate the ways in which it is structurally similar to the Consequence Argument for the incompatibility of free action and determinism. I note here that this structural similarity is convenient for compatibilists who are already committed to the invalidity of the Consequence Argument: they should simply deny the validity of the fatalist's argument and move on. Libertarians (incompatibilists who reject fatalism), by contrast, are not in such an easy dialectical situation. While there are other arguments for incompatibilism, there is no denying that the Consequence Argument is widely considered one of the best.

Conclusion

The argument for logical fatalism begins with bivalence and the (leeway theorists') definition of free action. Armed with (i) Truth-at- t , (ii) Immutability, (iii) the Fixity of the Past, and (iv) a Diodoran Principle, fatalists derive the conclusion that free action is impossible. While various responses to the argument are available, none is without cost. The question (as always in philosophy) is which costs one is willing to pay.

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