

# A Companion to Free Will

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# The Experience of Free Agency

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## 1 Introduction

Imagine the following situation:

It's your day off. Your phone buzzes. "Oh no," you think, "It's Liam, at work." You're about to head out to play soccer with your kids. You had worried all morning that Liam might not be ready for that big client meeting today and would need your help, even though you had prepared all the relevant files ahead of time. "Surely nothing can go wrong," you think. Yet, when Liam last called on your day off, you had to go in. You've been promising the kids for days you'd play soccer with them. They're waiting outside. You look at your phone. Will you press green to accept? Or red to decline?

Presumably, in this sort of situation you feel that at least two options are possible, or available for you to make. Even as you make your choice, you may feel that an alternative option is available. Additionally, you may feel that the choice is up to you – that you are, in some sense, the source of your choice. Such experiences of seemingly free agency, especially when they involve conscious deliberation, awareness of open possibilities, and a feeling that the choice is up to oneself, are often appealed to by philosophers and scientists discussing free will. These theorists draw on such experiences, and people's reports about them, in support of various positions about free will.

Philosophical debates about free will focus on a number of questions, including the question of whether free will is compatible with determinism (the *compatibility* question), as well as whether humans actually have free will (the *existence* question). Yet many of these questions depend crucially on a prior question about the concept of free will (the *conceptual* question). This question asks how free will is supposed to be defined or analyzed. Typically, the conceptual question is motivated and addressed from at least one of two angles: (a) our experiences of apparently free agency, and (b) the type of control required for morally responsible agency. Recently, philosophical debates about the compatibility and existence questions have

focused almost entirely on the latter angle, concerning the type of control needed for moral responsibility. Here, we will discuss instead the largely neglected angle of understanding the conceptual question in terms of our experiences of deliberation, choice, and action.

This angle has presumably been neglected in part because it is not always clear what the relevant experiences even are, or whether we can reliably introspect and describe them in such a way that they might provide information relevant to the conceptual question, or because it is unclear whether reliable information about experiences of free agency could justify certain answers to the conceptual question. Furthermore, even if consideration of experiences of agency helps to address some aspects of the conceptual question, it might not address aspects related to the type of control required for moral responsibility. And many philosophers are primarily motivated to understand the conditions of responsibility, i.e., for justified praise and blame, reward and punishment. Even so, experiences of free agency may be the more basic source of ordinary people's understanding of free will, and of their concerns about whether we have it. This issue has motivated scientists who are skeptical about whether we have free will (e.g., Wegner 2002; Harris 2012), since they take scientific discoveries to show that we lack the sort of free agency that we experience having (for responses to such claims, see, e.g., Mele 2009; Nahmias 2014).

In the next section, we lay some groundwork for thinking about experiences of agency, including free agency, and we outline some of the relevant literature on this topic. In subsequent sections, we focus on how claims about experiences of free agency relate to debates about free will. In these debates, incompatibilists argue that free will is inconsistent with determinism, whereas compatibilists argue that it is consistent. Libertarians are incompatibilists who think that we have free will, and so determinism is false. Typically, incompatibilists also think that our experience of free agency would be inaccurate if determinism is true. Call such experiences *libertarian*. By contrast, compatibilists think that experiences of free agency might be accurate, even assuming determinism. The accuracy of our experiences of free agency is related to the existence question, since it seems that such experiences are veridical only if we really are agents of the sort that we experience being.

The main question that we will address in this chapter is what to say about reportedly libertarian experiences of free agency – in other words, experiences of options as being open, and up to oneself to decide among, such that, if they are accurate or veridical, then (at a minimum) indeterminism must be true.<sup>2</sup> A great deal rides on this question. If normal experiences of free agency are libertarian, and if compatibilists cannot explain them away, then all of us may be under systematic illusion at almost every moment of our waking lives. That is, our experiences would be illusory if humans do not in fact satisfy libertarian conditions (e.g., if indeterminism does not occur in the right time or place during decision-making, or we lack agent-causal powers). In some sense, *more* rides on the question of whether we are agents of the sort that we experience ourselves as being than on the question of whether we have the type of control required for moral responsibility. After all, most philosophers agree that we can be morally responsible in a number of interesting senses even if determinism is true (see e.g., Shoemaker 2015 for an overview of these different senses of moral responsibility). Whatever disagreement exists is instead focused on a particular sense of moral responsibility – namely, a backward-looking, desert-based sense required specifically for retributive blame and punishment (see e.g., Pereboom 2014). At worst, we are not responsible in this sense if we lack what libertarians say we need. Yet even then, we would not be under systematic experiential illusion during most of our waking lives, as we are if our experience is libertarian, yet false.

## 2 Preliminaries

Part of the difficulty in thinking about free will is the tangle of issues that underlies any starting point. Typically, free will is taken to consist in an agent's possessing and exercising some cluster of executive or metaphysical control capacities. Sometimes, philosophers focus on these capacities in isolation – in other words, independently of how they might relate to an agent's moral responsibility for her behavior (e.g., Mele 1995, p. 3; Yao 2017). At other times, philosophers focus instead on whether such capacities are sufficient, in terms of control, for an agent to be morally responsible for what she does (e.g., McKenna 2012; Pereboom 2014). To complicate matters further, the relevant control capacities have often been understood to include the ability to do otherwise (Van Inwagen 1983; Vihvelin 2004; cf. Fara 2008), while at other times what is considered more important is whether an agent is the relevant source of her decision or action, even if she could *not* have done otherwise (e.g., Frankfurt 1969; Mele 1995; Fischer and Ravizza 1998; Pereboom 2014).

Although some work in metaphysics addresses questions about free will directly, rather than addressing them through an analysis of our concepts (e.g., Sartorio 2016), often what is of primary concern is how to analyze the concept of free will. Thus, the compatibility question, which asks whether free will is compatible with determinism, asks whether the concept of free will could refer successfully in a deterministic world. Similarly, the existence question, which asks whether we actually have free will, asks whether this concept refers in the actual world. Yet even here, various complex questions arise about the nature of this concept and how to think about its reference (e.g., Heller 1996; Murray and Nahmias 2012; Vargas 2013; Nichols 2013; Caruso 2015; Deery 2021a, 2021b). For instance, someone might think that the concept of free will refers only if our beliefs about free will are true, or not significantly in error. By contrast, others think that the concept might refer even if many of our beliefs about free will are false, or significantly erroneous.

Related to the conceptual question, at least on some versions of it, is the question of how we acquire the concept of free will (call this the *etiological* question). Focusing on this question, it seems plausible that we acquire the concept (a) as a result of tracking certain control capacities in other agents (often for the purpose of assigning responsibility), and (b) as a result of our own exercise of such capacities. Regarding the latter, one suggestion with a long pedigree is that we acquire the concept of free will partly due to how we *experience* our own seemingly free agency (see e.g., Strawson 1986). Yet even this apparently straightforward suggestion is, as it turns out, fraught with difficulty and raises a number of further questions.

For one thing, it is unclear what it even means to say that we *experience* our own agency, let alone that we experience *free* agency. According to some, what we call *experiences* of agency are really *beliefs* or *judgments* about the exercise of our own agency (e.g., Korsgaard 1996). On certain versions of this view, such “experiences” are really quasi-third-personal self-attributions of attitudes aimed at explaining, through rationalizing, our own behavior and sensory states, thereby fitting them into a “self-narrative” (Dennett 1992; Carruthers 2007). However, there are various reasons to doubt that such accounts can be the whole story (see Bayne and Pacherie 2007 for a detailed response to such views).

Moreover, even if we do experience (free) agency, a question arises about whether such experiences have proprietary phenomenology – i.e., experiential character that is different from any other type of experiential character – as visual or proprioceptive experiences do. Or

do they instead have non-proprietary phenomenology, perhaps like experiences of emotions? Relatedly, should we think that experiences of agency have *content*? Maybe agentic experiences are like experiences of tickles or itches, which some claim have no content – are not *about* anything – despite their having phenomenal character. And even if experiences of agency have content, what sort is it? Does it have to be explicitly representational, or might it be partly implicit, such that the overall content of the experience might outstrip what is explicitly represented in that experience (Horgan and Nichols 2016)?

We can also ask about the *structure* of agentic experiences. Do they have a world-to-mind direction of fit, or structure, like desires do (e.g., Searle 1983)? Or instead, do they have a mind-to-world direction of fit, like beliefs or perceptual experiences (see Bayne 2008 for discussion)? Assuming that the structure is like that of beliefs or perceptual experiences, so that experiences of agency have satisfaction conditions in the sense of having veridicality conditions (unlike desires, for instance, which have satisfaction conditions but *not* veridicality conditions), what might that content be? Here, a great deal depends on whether agentic experiences have liberal, or instead only sparse, content. In perceptual experience, liberal contents attribute not just low-level properties like redness or squareness, but also high-level properties like being an apple (e.g., Siegel 2009). Likewise, liberal contents for agentic experiences attribute high-level properties like acting freely, not just low-level properties like being an action (Bayne 2008 pp. 189–191).

In turn, the question of how liberal the content of agentic experiences is depends partly on what one takes to be the relation between content and phenomenology. According to *content-first* intentionalists, for instance, phenomenology is determined by intentional content (e.g., cf. Lycan 1996; Tye 2000; Carruthers 2000). As a result, it may seem reasonable to say that the content (if any) of experiences of agency is sparse (in fact, such theorists will most likely deny that there is, strictly speaking, any such phenomenology or content at all). By contrast, *phenomenology-first* intentionalists think that at least some intentional content is determined by phenomenology (cf. Siewert 1998; Horgan and Tienson 2002). As a result, it may seem natural to say that the content of our agentic experiences is liberal (e.g., cf. Siegel 2009; Horgan 2015; see Bayne 2008 for discussion). In particular, it is open to such theorists to talk in terms of *phenomenal content* (Kriegel 2002), which is content that is constitutively determined by phenomenology. If experiences of agency have phenomenal content, as some suggest, then this content might well be liberal enough to make the experiences count as experiences of *free* agency. Even so, the question remains whether such content is compatibilist or instead libertarian (i.e., veridical or not depending on whether determinism is true). Some maintain that our experience is too “anemic” (Nichols 2012, p. 293) to require the falsity of determinism for the experience to be accurate (cf. Bayne 2008, p. 196).

In what follows, we will assume that, normally, humans do experience their own agency, and these experiences can have liberal enough content to be experiences of *free* agency. We will, however, remain agnostic about whether experiences of agency have proprietary phenomenology, or whether instead they are experiences only in a non-proprietary sense – like emotions, for example. As a result, we will sometimes talk about experiences of free agency as having phenomenal content, in the way that they might if phenomenology determines content and such experiences have proprietary phenomenology, and at other times only of whether such experiences, more loosely construed, result in our making (for instance) certain judgments about free agency. We will also assume that experiences of free agency at least

partly explain how we acquire the concept of free will, although we will focus less on whether such experiences influence the application conditions of this concept – i.e., the conditions under which the concept correctly applies – or whether they support belief in the sort of free agency that we experience having.

With these assumptions in place, the main questions are, first, about the content of our experiences of free agency: are they libertarian or not? And second, if they *are* libertarian, do these experiences provide evidence for libertarian answers to the conceptual question or the existence question – i.e., do the experiences support a libertarian theory of free will? There is a long tradition of libertarians' claiming that our experience is full-blooded enough to have libertarian content, and that such experiences give us defeasible evidence for our having libertarian free will (e.g., Reid 1788, p. 36; O'Connor 1995, pp. 196–197; Swinburne 2012, p. 82; Guillon 2014). For instance, regarding the experience of being able to choose among open possibilities, John Searle asks us to:

[R]eflect very carefully on the character of the experiences you have as you engage in normal, everyday human actions. You will sense the possibility of alternative courses of action built into these experiences ... that we could be doing something else right here and now, that is, all other conditions remaining the same. This, I submit, is the source of our own unshakeable conviction of our own free will. (1984, p. 95)

Likewise, C. A. Campbell writes that

Everyone must make the introspective experiment for himself: but I may perhaps venture to report ... that I cannot help believing that it lies with me here and now, quite absolutely, which of two genuinely open possibilities I adopt. (1951, p. 463)

By contrast, some compatibilists insist that the relevant experiences have *obviously* compatibilist content, while others focus on the responsibility angle and remain silent on the issue of experience, perhaps because they assume that experiences of free agency are not robust enough to support a libertarian answer to the conceptual question.<sup>3</sup>

Yet, by rejecting the claim that experiences of free agency even *seem* to have libertarian content, these compatibilists risk ignoring one of the central motivations for incompatibilism, and they also risk offering analyses of free will that are inapt or incomplete. Ideally, of course, we could answer this question about the content of experiences of free agency by means of empirical evidence, rather than by relying on philosophers' competing introspective claims.

Unfortunately, however, the extremely limited empirical evidence that might bear on this question has not yet resolved the issue, since it appears to cut both ways. In some experiments, participants report libertarian experiences (Deery, Bedke, and Nichols 2013), while in others they report that their experience is compatibilist (Nahmias et al. 2004).<sup>4</sup>

In any case, to the extent that people report libertarian experiences for at least *some* of their choices, compatibilists incur an explanatory burden: they must explain libertarian reports about experiences of free agency. In other words, they must explain *away* the appearance of libertarian content in these experiences rather than simply deny that there even is such an appearance.

In the next three sections, we turn to recent compatibilist attempts to shoulder this burden. The first is developed by Oisín Deery (2015a, 2015b, 2021a). Deery assumes, at least for

argument's sake, that experiences of free agency have libertarian content. Still, such experiences also plausibly have a second sort of content that might be accurate, and thus compatibilist, assuming determinism. As a result, even experiences with libertarian content might be accurate if determinism is true, as long as the second sort of content is satisfied.

The second proposal is due to Terry Horgan (2007, 2011, 2012, 2015). Horgan grants that introspection *seems* to reveal that experiences of free agency are libertarian. Yet he insists that such introspection is not reliable. When people judge their experience of free agency as libertarian, they misinterpret it. Even when people think or say that their experience is libertarian, actually it is compatibilist.

Third, Deery (2015c, 2021a) develops an alternative view to Horgan's, which agrees with Horgan's assessment that experiences of free agency only seem to be libertarian, when in fact they are compatibilist. Yet Deery disagrees with Horgan regarding where the relevant mistake lies. For Deery, the mistake lies in how the experience itself is generated, rather than in how people interpret their experience.

### 3 Compatibilism about Libertarian Experience

According to Deery (2015a, 2015b, 2021a), even if we assume that experiences of free agency have libertarian phenomenal content, those very experiences might be veridical even if determinism is true. That is because these experiences might have more than one distinct type of phenomenal content, and the experiences might be veridical even if the satisfaction conditions of just one of these types of content are met.

Deery outlines how his suggestion works by analogy with a similar move that David Chalmers (2006) makes in connection with the phenomenal content of visual color experiences. Chalmers maintains that the view about phenomenal content that is most adequate to our normal phenomenology in color experiences is *primitivism*. According to this view, we experience colors visually as simple intrinsic properties of objects, spread out over their surfaces. As Chalmers explains it:

When I have a phenomenally red experience of an object, the object seems to be simply, primitively, *red*. The apparent redness does not seem to be a microphysical property, or a mental property, or a disposition, or an unspecified property that plays an appropriate causal role. Rather, it seems to be a simple qualitative property, with a distinctive sensuous nature. (2006, p. 66)

That is, experiences of color have contents that attribute primitive properties (cf. J. Campbell 1997). This is what Chalmers calls *perfect* content. He thinks it natural to judge such content as phenomenal content, given that the properties presented in the experience are constitutively determined by the phenomenology.

However, Chalmers points out that, "For all its virtues with respect to phenomenological adequacy, the ... primitivist view has a familiar problem. There is good reason to believe that the relevant primitive properties are not instantiated in our world" (2006, p. 66). If so, then none of our visual experiences of color is veridical. We are under an illusion at every moment of our waking lives (when we see colors).

In addition to perfect content, Chalmers defends another type of phenomenal content that makes color experiences veridical in the right kinds of cases. This is *imperfect* content, which

has its own associated veridicality condition: it is satisfied just in case the relevant object has whatever property (or set of properties) normally *causes* color experiences. The central idea is that experiences of color are (usually) veridical, despite the fact that primitive color properties are not actually instantiated.

Chalmers's view is complex. At bottom, however, imperfect phenomenal content is a *mode of presentation* of a property, rather than the property itself. When someone has an experience as of seeing a red apple, her experience attributes the property redness. For Chalmers, the second content is a mode of presentation of this property, which is "a condition that a property must satisfy in order to be the property attributed by the experience" (2006, p. 59).

Assuming that the property is a physical property, "one can naturally hold that the associated condition on this property is the following: it must be the property that normally causes phenomenally red experiences (in normal conditions for the perceiver)" (2006, p. 59). Such content is phenomenal since it is constitutively determined by the phenomenology.

For color experiences to be perfectly veridical, objects would have to instantiate primitive color properties. Yet even an experience that is not veridical in this way might be imperfectly veridical – i.e., veridical according to the standards by which we ordinarily differentiate veridical from non-veridical color experiences, as when we judge that we are seeing, rather than hallucinating, a red apple. For Chalmers, there is no conflict here, as long as we bear in mind that these two notions of veridicality are associated with distinct *conditions* of veridicality. A visual experience of color thus has more than one type of phenomenal content, depending on the associated notion of veridicality, and the experience counts as veridical as long as *one* of these conditions is satisfied.

Chalmers argues that the most fundamental type of content is perfect content. This is because what is presented in phenomenology determines the imperfect content via a "matching" relation, which works as follows. For a color experience to be perfectly veridical, we would have to live in "Eden," a world in which primitive color properties are instantiated (since that is what is presented in phenomenology). The best that we can do in our (presumably non-Edenic) world is to have certain properties "match" the primitive properties attributed by perfect content, by playing the role that those properties *would* play in Eden. Although no property can play this role perfectly, some property (or properties) may play it well enough, by being the normal cause of color experiences. In this way, imperfect phenomenal content is grounded in perfect content. In Chalmers' terms, perfect content serves as a "regulative ideal" in determining the imperfect content. Perfect content sets an ideal standard for the veridicality of phenomenal content, and the imperfect content is a condition that relates us to whatever properties come closest (in our world) to meeting that standard.

Deery (e.g., 2021a) argues that a similar story can be told for experiences of free agency. Even if we allow that what we are presented with in experience is libertarian, and thus is non-veridical if determinism is true, still there is a second type of phenomenal content that might be veridical, assuming determinism.

By analogy with primitivism about color experiences, it may seem reasonable to think that an experience of free agency with libertarian phenomenal content is veridical only if libertarianism is true. Deery calls a world in which libertarianism is true an "Agentive Eden." However, Deery maintains that experiences of free agency plausibly also have a second, imperfect, phenomenal content. Recall that this content is a condition that a property must satisfy in order to be the property that is attributed by the experience. Here, the attributed property is of various options being open for one to decide among, in a way that would require



the truth (minimally) of indeterminism. We feel that we could be “doing something else right here and now, ... all other conditions remaining the same” (Searle 1984, p. 95), or that that “it lies with me here and now, quite absolutely, which of two genuinely open possibilities I adopt (C. A. Campbell 1951, p. 463). What condition might work as the *imperfect* content for such an experience?

For color, the second content is whatever property (or set of properties) ordinarily causes phenomenal color experiences. In the agentive case, the imperfect content might, Deery maintains, be the following condition: that there is instantiated whatever relevant property (or set of properties) is ordinarily instantiated when one experiences being free to decide among alternatives, or that causes such experiences. This content is veridical just in case this condition is satisfied, and there is no reason to think that it could not be satisfied if determinism is true. Moreover, the content is phenomenal since it is constitutively determined by the phenomenology.

Deery argues that among the two types of phenomenal content, the most fundamental is perfect content. That is because we are assuming that perfect content most accurately reflects what is presented in phenomenology, which is that we are free in the way described by libertarians. Analogously with Chalmers’s view, Deery maintains that this libertarian content determines the second, imperfect, content, via a matching relation. For an experience of free agency to be perfectly veridical – i.e., veridical according to the standards associated with its perfect content – we would have to live in an Agentive Eden. The best that we can do if determinism is true (for example) is to have certain properties match the libertarian properties that are attributed by the perfect content, by playing the role that these properties *would* play in an Agentive Eden. No property can play this role perfectly. Yet some property (or set of properties) may be able to play it well enough, by being the property (or set of properties) that ordinarily *causes* experiences of free agency – e.g., when choosing among various options. This content is compatibilist: it might be veridical even if determinism is true, since it depends only on what *actually* underlies or causes such experiences.<sup>5</sup> Nevertheless, this compatibilist imperfect content is grounded, Deery maintains, in libertarian perfect content, since (to use Chalmers’s phrase) the perfect content acts as a “regulative ideal” in determining the imperfect content. In other words, perfect content sets an ideal standard for veridicality, and the imperfect content is a condition that relates us to whatever properties come closest (assuming determinism) to meeting that ideal standard. Once the second content is satisfied, the experience is imperfectly veridical, even if determinism is true – and this despite granting that the relevant phenomenology is libertarian.

Thus, an experience of free agency can be veridical, it can have libertarian phenomenal content, yet libertarianism can be false (i.e., we might not be libertarian agents). The mistake, according to Deery, is to presuppose that there is a *unique* phenomenal content to experiences of free agency – namely, libertarian perfect content. Plausibly, as with our color experiences, such experiences also have an imperfect phenomenal content that is compatibilist. If determinism is true then, even granting (for the sake of argument) that experiences of free agency have libertarian perfect content, there is still a sense in which *these very experiences* might be veridical – despite their veridicality not being dependent on their libertarian content. On this view, libertarian experiences of free will might provide reasons to *believe* free will requires libertarian conditions, yet compatibilism need not be an *error theory*, and it might be true, including for the type of free will that grounds moral responsibility.

## 4 Horgan's View: Error Theory #1

Let us dispense now with the assumption that experiences of free agency have libertarian content, and consider two error theories for introspective reports that suggest that they *do* have such content.

First, Terry Horgan (2007, 2011, 2012, 2015) grants that introspection may *seem* to reveal libertarian content. Nevertheless, Horgan insists that introspection is not reliable in this domain. Horgan agrees that people often *judge* their experience of free agency to be libertarian. However, he argues that when people do so, they misinterpret their experiences, which do not actually have content that would be illusory if determinism were true. By spelling out how this happens, Horgan gives an error theory for libertarian judgments about experience.

Horgan begins by conceding that people often judge their experience to be libertarian. For instance, he allows that

... when one attends introspectively to one's free-agency phenomenology, with its presentational aspect of ... freedom ... and when one simultaneously asks reflectively whether the veridicality of this phenomenology requires ... libertarianism, one feels some tendency to judge that the answer to this question is Yes. (2011, p. 94; cf., 2007, p. 23)

However, Horgan thinks that while introspection is reliable in some domains, introspective judgments about whether one's experience of free agency is libertarian are unreliable. He begins by distinguishing between two sorts of introspection: (a) attentive introspection, which involves "paying attention to certain aspects of one's current experience" (Horgan 2011, p. 84), and (b) judgmental introspection, "the process of forming a judgment about the nature of one's current experience" (2011, p. 84). The content that we attentively introspect is "presentational content," which is "the kind that accrues to phenomenology directly – apart from whether or not one has the capacity to articulate this content linguistically and understand what one is thus articulating" (2011, p. 91).

In judgmental introspection, by contrast, we attend to certain aspects of our experience, but we also form judgments about those aspects. Thus, "Judgmental introspection ... deploys attentive introspection, while also generating a judgment about what is being attended to" (2011, p. 84). For Horgan, there cannot be an appearance/reality gap when we attentively introspect. Yet in judgmentally introspecting, we can go wrong: we might be subject to what Horgan calls a "labeling fallacy" (2012, p. 408–409). For instance, we might make a performance error in applying the concept 'red' to our experience of redness: we might mistakenly apply the concept 'green.' In Horgan's parlance, we might "mislabel" the phenomenology. Presumably, this sort of mistake hardly (if) ever happens with simple sensory experiences. As a result, while attentive introspection is infallible, judgmental introspection is not quite infallible, although it typically is, especially with simple experiences.

Even so, Horgan claims, our judgments about whether our experiences of free agency are libertarian (or compatibilist, for that matter) are highly fallible. For a start, answering this question goes beyond what attentive introspection is capable of: we cannot read off the answer from phenomenology. The question can only be answered by judgmental introspection. Yet Horgan thinks that when we try to answer the question of whether our experience is libertarian (or instead compatibilist) by judgmentally introspecting, we find that we cannot arrive at a reliable

answer, even though the question is about the character of our own introspectively available experiences. It is not just that we are subject to the occasional labeling fallacy.

Horgan thinks that there is a good explanation for this inability, as we will outline in a moment. Yet he admits that many philosophers tend to judge their experience of free agency as libertarian, and says, “I confess to experiencing some temptation to think so myself ... a temptation that needs explaining” (2012, p. 416). To this end, Horgan offers a two-part debunking explanation for such judgments. First, he suggests that if we think we can tell by introspection that our experience is libertarian, this may reflect a form of “introspective con-fabulation.” It is one thing to know (a) by introspection:

- a) My experience does not present my behavior as determined by my prior states.

Yet it is another thing to know (b) by introspecting on phenomenology:

- b) My experience presents my behavior as not determined by my prior states.  
(Cf. Horgan 2015, p. 54)

Horgan admits that we can ascertain whether (a) is true by introspecting. However, (b) is distinct from (a), and we cannot ascertain whether (b) is true by introspection. Even if (b) were true, we could not know this by judgmentally introspecting. When we judge our experience to be libertarian, and thereby assert (b), either we are mistakenly inferring (b) from (a), or simply conflating (a) and (b).

Additionally, Horgan thinks that the concept of free will has compatibilist application conditions, and the veridicality conditions of experiences of free agency “coincide” with these application conditions. This claim is important since it bears on the second part of Horgan’s two-part debunking explanation of libertarian judgments about experiences of free agency, as we will now explain.

Part of why Horgan thinks that the concept of free will is compatibilist is that people appear to be competent in applying this concept in ordinary contexts – for instance, when they distinguish free from unfree choices or actions (e.g., where agents are coerced at gunpoint, or are subject to irresistible addictions, and so on). Compatibilism accommodates these judgments easily, by enabling them to come out true even under the assumption of determinism. By contrast, libertarians require that a more stringent condition be met, namely, that indeterminism (at a minimum) be true. Horgan thinks that we should prefer compatibilism to libertarianism (and to incompatibilism more generally) since, all else being equal, one hypothesis – compatibilism – is better than another – libertarianism – if it accommodates how competent users of the relevant concept ordinarily apply it.

This issue is important for the second part of Horgan’s two-part explanation of libertarian judgments about experience. Here, Horgan tells a contextualist story about the application conditions of the concept of free will, which also applies to judgments about *experiences* of free agency. Horgan maintains that “the very posing of the question whether human freedom is compatible with ... determinism tends to alter the contextually operative settings on certain implicit semantic parameters that govern the concept *freedom* – and tends to drive those parameter settings so high that, in the newly created context, no item of behavior that is ... determined counts as *free*” (Horgan 2007, p. 22).

Horgan grants that contextual parameters of this sort do not plausibly apply (directly, at least) to experiences of free agency. After all, he thinks that many non-human animals share

with us “a fair amount of agential phenomenology” (2007, p. 10), despite the fact that their mental content is not governed by contextual semantic parameters. Even so, when we introspect on our experiences of free agency while also asking ourselves whether they are veridical if determinism is true, Horgan thinks that our introspective *judgment* about the experience gets “infected” by the same confusion that occurs whenever we ask the compatibility question about determinism and the *concept* of free will. On Horgan’s view, it is understandable why our experiences might lead people to believe in libertarian free will, but these beliefs can be explained away so that they do not provide evidence against compatibilism.

## 5 Prospaction and Causal Modeling: Error Theory #2

Deery (2015c, 2021a) agrees with Horgan that to judge an experience of free agency as libertarian is to make a mistake. Yet Deery disagrees with Horgan about where the mistake lies. For Deery, the mistake lies in how the experience itself is generated, rather than in how people interpret the experience.

According to Deery, people judge their experiences of free agency as libertarian because the relevant experiences are generated by prospaction, which is the mental simulation of future possibilities for the purpose of guiding action. When experiences of prospaction are understood in terms of causal modeling, the result is a mechanism by which the experience itself seems libertarian, even though it is not.

Prospaction, as Martin Seligman, Peter Railton, Roy Baumeister, and Chandra Sripada (2013) outline it, “is guidance... by present, evaluative representations of possible future states. These representations can be understood minimally as ‘If X, then Y’ conditionals, and the process of prospaction can be understood as the generation and evaluation of these conditionals” (2013, p. 119). For Seligman and colleagues, agents – in order to regulate their interactions with the environment – construct representational mental models of that environment. The most efficient models will be of the form, “if in circumstance C and state S, then behavior B has outcome O with probability p” (2013, p. 124). Such “feedforward/feedback” models will typically have the following type of structure:

expectation → observation → discrepancy detection → discrepancy-reducing change in expectation → expectation → ...

On this picture, agents generate and use simulations of future possibilities, often by drawing on and learning from past experience, and the function of these simulations is to enable the agents to navigate effectively into the future by selecting suitable actions. Prospaction thus nicely captures the forward-looking character of typical experiences of free agency, since agents experience their options as a “branching array of evaluative prospects that fan out before them” (Seligman et al. 2013, p. 119).

Most prospaction occurs outside of conscious awareness and is unavailable to introspection, since it would be inefficient for agents to consciously keep track of all the simulations that they generate. Yet prospaction *is* sometimes consciously experienced. According to Seligman and colleagues, *affect* plays a central role in its becoming conscious. When prospaction encounters “incommensurable dimensions and conflicting values and perspectives”

(2013, p. 131), explicit comparison of these factors is facilitated by the brain's "common metric" of affect, such that "conscious subjective affect attached to prospectations ... enable[s] them to compete effectively with ongoing experience" (131). Thus, when agents have conflicting thoughts about what to do, their simulated options feed into "an experientially rich and detailed workspace," with the result that agents can "use their intelligence and imagination to best effect" (2013, p. 131). In such cases, "it can be best to act in awareness of ... conflicting thoughts" (131). As a result, prospectation is consciously experienced (cf. Sripada 2016; Nahmias 2016).

Deery (e.g., 2021a) maintains that prospectation explains how agents can experience mere future possibilities for choice. Yet it fails to explain why this sort of experience seems indeterministic, and thus libertarian. Deery maintains that causal modeling provides the missing, seemingly indeterministic element.

According to Deery, it is natural to interpret the hypotheticals generated in prospectation as carrying causal information about what *would* happen under variations in the values of variables – alternative choices the agent might make – in a causal model. A causal model is a representation that encodes hypothetical relationships between variables, which represent causal relata (i.e., events). Evidence suggests that ordinary causal cognition is indeed underpinned by such modeling (Sloman 2005; Lagnado, Gerstenberg, and Zultan 2013).

In causal modeling, to establish whether one event, X, causally influences another event, Y, we consider what would happen to Y by altering X's value (for full details, see Woodward 2003). If a change reliably occurs in the value of Y, then X is judged to be a cause of Y. In intervening on X in this way, causal modeling requires that we ignore the prior causal variables that normally result in X's value, and instead we allow X to vary freely across a range of alternative values, which it could not otherwise take. In other words, we treat it as an exogenous variable, i.e., as a variable whose values are determined by factors outside the model, rather than as an endogenous variable whose values are determined by the values of other variables within the model.

Philosophers have recently begun to use this sort of modeling to illuminate various questions about free will (e.g., Roskies 2012; Deery and Nahmias 2017). For instance, Jenann Ismael (2013) maintains that agents mentally construct models of this sort when deliberating about what to do. In choosing among options for action, an agent carves off the event of her choice from its actual causal antecedents, and treats it as an exogenous variable in a causal model. By doing so, she is enabled to assess the "downstream" effects of this variable's varying across a range of values, which yields causal information relevant to action-planning.

These are the very hypotheticals that prospectation generates in regulating the agent's interaction with the environment.

Deery maintains that prospectation – together with a causal modeling account of how the hypotheticals generated by prospectation should be modeled – explains why people end up having experiences of free agency that *seem* libertarian. First, when agents generate simulated possibilities for action while deliberating about what to do, the variable representing their choice is treated by prospectation as a free variable, meaning that it is permitted to vary over a range of values. Yet, were the deliberating agent to consider the same choice while assuming determinism, she would instead treat it as having antecedent sufficient causes, and therefore as a variable the values of which are constrained by the wider model of the deterministic system.

In that case, the variable is permitted to take just a single value. This creates an apparent psychological conflict between treating one and the same variable as both free and

constrained. When an agent tries to hold in mind both models of her decision at the same time – for instance, in a forced choice experiment in which she is asked whether her experience of free agency is consistent with determinism (e.g., as in Deery, Bedke, and Nichols 2013) – each model might be experienced as inconsistent with the other. As a result, the experience of one’s choice as possibly taking any of several values might seem inconsistent with determinism, which would permit the choice to take just a single value.

However, while these two models may be experienced as inconsistent, they are not. As Ismael puts it, “there is no more conflict between these models than there is between the view of a building from close-up and the view from a very great distance” (2013, p. 230). In prospection, we see our choice “from close up,” by modeling it as an exogenous variable. Yet, when we are asked to model that choice within a wider deterministic system, we see it “from a very great distance,” since we treat it as an endogenous variable within that system. Thus, even if an experience of free agency *seems* inconsistent with determinism – and therefore libertarian – due to the felt inconsistency of the two models, it does not follow that the experience *is* libertarian, since these models are just different ways of modeling the choice, each of which may be useful for different purposes.

Deery also outlines a second reason why experiences of free agency might seem libertarian. When prospection models a choice, that choice appears more open – perhaps even indeterministically open – than when it is modeled as an endogenous variable, for instance as part of a deterministic system. Deery explains this increased sense of openness in terms of *rich* epistemic possibility.

To maintain that it is epistemically open whether you will choose either of two options is simply to maintain that your choosing either option is consistent with what you know (cf. Kapitan 1986; Pereboom 2008, p. 292–296). Famously, J.J.C. Smart (1961) maintained that this is how we often interpret counterfactuals outside the sphere of action. For instance, when we say, “the plate fell, and it could have broken,” we are not making a claim about determinism. All we are saying is that before the plate completed its fall, for all we knew it would break (1961, p. 298). Similarly, if we say that Lee Harvey Oswald could have done otherwise than shoot President Kennedy, we are saying that before Oswald pulled the trigger, for all we knew he would not. In making claims about epistemic possibility, there is clearly no conflict with determinism. As a result, epistemic possibility seems a poor candidate for explaining the sense of openness that Deery seeks to explain.

However, Deery thinks that the rich epistemic possibility involved in deliberation and choice is liable to be interpreted as inconsistent with determinism – and hence as libertarian – since an agent’s prospection ignores the choice’s prior causes, by treating it as an *exogenous* variable in a causal model. Prospection thus ignores a large part of what the agent actually knows, or might reasonably be expected to bring to mind in other contexts – e.g., that her choice *has* prior (perhaps even sufficient) causes. After all, when we deliberate, we typically think about the *effects* of the various choices that we are considering, and we do not think about all of the causes that might lead us to choose one among various options (much less about the causes of the considerations that come to mind during deliberation). As a result, the epistemic possibilities that are available to the agent in prospection have a restriction on the “for all I know” that yields ordinary epistemic possibility, making the possibilities feel “richer.” This leads the agent to experience her available possibilities for choice as more robustly open than they would otherwise appear to be – even to the point of their seeming (at least implicitly) to be indeterministically open.

On Deery's view, therefore, the suggestion of indeterministic or libertarian openness is built right into ordinary experiences of free agency, as a result of the rich epistemic possibility at work in the causal modeling that *generates* the experiences in prospect. Nevertheless, this suggestiveness does not amount to anything like libertarian content, since the possibilities remain epistemic, and thus entirely consistent with determinism. Furthermore, while the agent is – in a sense – misinterpreting her experience when she judges it as indeterministically open or libertarian, matters are not as straightforward as Horgan makes them out to be when he claims that there is nothing at all in the experiences (as attentively introspected) that is suggestive of such indeterministic openness. Instead, this error theory explains why theorists believe our experiences are libertarian and provide (defeasible) evidence for libertarian free will, but also why they are mistaken since the experiences are consistent with compatibilist theories of free will.

## 6 Conclusion

Some philosophers and scientists appeal to experiences of free agency in support of various positions about free will. Skeptics about free will argue that these experiences suggest conditions that we humans fail to meet, and as a result we live under systematic illusion. Some libertarians argue that such experiences provide evidence that we actually possess libertarian free will. These moves require that (a) we have experiences of free agency and (b) these experiences have content that we tend to introspect as having libertarian veridicality conditions (e.g., indeterminism). Compatibilists *can* argue that their accounts of free will do not conflict with our experiences of free agency by rejecting either one of these two requirements. Here, we have considered what compatibilists might say if they do *not* reject them, but instead concede that experiences of free agency appear to have libertarian content. Even while making this concession, compatibilists can argue that libertarian content has compatibilist veridicality conditions, or they can provide an error theory to explain why our experience of free will might *seem* to have libertarian features, even though, in fact, they do not.

## Notes

- 1 Deery is primary author. For helpful comments we would like to thank Joe Campbell and Terry Horgan.
- 2 In what follows we will often use 'determinism' to stand in for a more general claim about whatever theses conflict with the conditions required for libertarianism, which at a minimum include indeterminism, but typically indeterministically caused events at specific times and places during decision-making (e.g., Kane 1996) and often more metaphysically robust conditions such as agent-causal powers (e.g., O'Connor 1995). Hard incompatibilists or skeptics about free will agree that these libertarian conditions are required for free will, but believe that humans do not satisfy these conditions. Some skeptics motivate the need for libertarian conditions with claims about the experience of free agency or will (e.g., Harris 2012), while others focus on the requirements for desert (e.g., Pereboom 2014). Very few argue that determinism is true; rather, they argue that agent-causation is implausible, that a more general thesis such as physicalism is plausible and rules out libertarianism, or that libertarian conditions are metaphysically impossible or incoherent (e.g., Strawson 1986).

- 3 For representative compatibilist views of this sort, see e.g., Grünbaum (1952), who writes:

Let us carefully examine the content of the feeling that on a certain occasion we could have acted other than the way we did... Does the feeling we have inform us that we could have acted otherwise under exactly the same external and internal motivational conditions? No, ... this feeling simply discloses that we were able to act in accord with our strongest desire at that time, and that we could indeed have acted otherwise if a different motive had prevailed at the time. (1952, p. 672)

More recently, compatibilists have offered analyses of the ability to do or choose otherwise that are compatible with determinism, but without focusing on whether these analyses accurately capture our experiences of choice (e.g., Vihvelin 2004; Fara 2008).

- 4 There is also some debate about what sort of experiences should be picked out as paradigmatic experiences of free agency. Libertarians sometimes focus on “close call” or “torn” choices, for which the reasons are closely balanced even at the moment of choice (Campbell 1951; Strawson 1986; Balaguer 2010), perhaps because such choices seem to allow a role for indeterministic events (van Inwagen 1989; Kane 1996). Some compatibilists, however, suggest that such indecisive choices are experienced as relatively unfree. Instead, paradigm experiences of free agency occur when the agent deliberates to reach a *confident* (rather than a torn) decision about what to do (Nahmias 2006; Lau, Hiemisch, and Baumeister 2015).
- 5 Deery (2015a, 2021a) argues that there is good reason to think that this condition constitutes a genuine compatibilist content for experiences of free agency. He does so by analogy with the view that FREE CHOICE is a natural-kind concept that refers to whatever relevant capacities agents actually exercise when (under normal conditions) they make paradigmatically free choices (cf. Heller 1996). On this view, it is irrelevant to free agency whether determinism is true. We choose freely, unless the relevant capacities fail to constitute a relevant kind. Consequently, we might be free even if determinism is true. Such views are widely held about concepts like WATER (e.g., Putnam 1975).

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