CrossMark

Free Will and Mental Powers

Niels van Miltenburg[1] · Dawa Ometto[2]

Abstract

In this paper, we investigate how contemporary metaphysics of powers can further an understanding of agent-causal theories of free will. The recent upsurge of such ontologies of powers and the understanding of causation it affords promises to demystify the notion of an agent-causal power. However, as we argue *pace* (Mumford and Anjum in Analysis 74:20–25, 2013; Am Philos Q 52:1–12, 2015a), the very ubiquity of powers also poses a challenge to understanding in what sense exercises of an agent's power to act could still be *free*—neither determined by external circumstances, nor random, but self-determined. To overcome this challenge, we must understand what distinguishes the power to act from ordinary powers. We suggest this difference lies in its *rational* nature, and argue that existing agent-causal accounts (e.g., O'Connor in Libertarian views: dualist and agent-causal theories, Oxford University Press, Oxford, 2002; Lowe in Personal agency: the metaphysics of mind and action, Oxford University Press, Oxford, 2013) fail to capture the sense in which the power to act is rational. A proper understanding, we argue, requires us to combine the recent idea that the power to act is a 'two-way power' (e.g., Steward in A metaphysics for freedom, Oxford University Press, Oxford, 2012b; Lowe (in: Groff, Greco (eds) Powers and capacities in philosophy: the new aristotelianism, Routledge, New York, 2013) with the idea that it is intrinsically rational. We sketch the outlines of an original account that promises to do this. On this picture, what distinguishes the power to act is its special *generality*—the power to act, unlike ordinary powers, does not come with any one typical manifestation. We argue that this special generality can be understood to be a feature of the capacity to *reason*. Thus, we argue, an account of agent-causation that can further our understanding of free will requires us to recognize a specifically rational or *mental* variety of power.

1 Introduction

Free will is puzzling. It seems clear that we have the capacity to control our own actions. But it can seem impossible to comprehend exactly how such a capacity can exist. One of the main obstacles to understanding free will is that it seems to make two opposite demands. Free will is often associated with a lack of determination: an agent's movements do not

Niels van Miltenburg and Dawa Ometto have contributed equally to this work.

✉ Niels van Miltenburg
niels.vanmiltenburg@uu.nl

Dawa Ometto
dawa.ometto@uni-leipzig.de

1 Department of Philosophy and Religious Sciences, Utrecht University, Utrecht, The Netherlands

2 Institut für Philosophie, Universität Leipzig, Leipzig, Germany

seem to be up to her if it was already settled long before her birth that she would make them.[1] This intuition undergirds the so-called libertarian view that the existence of free will is not reconcilable with universal determinism. However, undetermined events cannot be up to oneself either, for they would be merely random or accidental.[2] This intuition drives the so-called luck objection to libertarianism. Hence, paradoxically, free will seems to both require and exclude that our actions are necessitated or determined. How can that be?

According to one prominent group of philosophers, the key to answering this question lies with agent-causation.[3] Their idea is that human actions are not part of a long causal

---

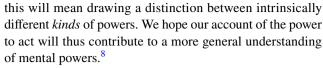1 This is an informal rendering of the Consequence Argument, see (van Inwagen 1986).

2 Of course, compatibilists in the free will debate argue that we must ultimately reject the former intuition and incompatibilists doubt the cogence of the latter. In this paper our concern is not with this dialectic between compatibilism and incompatibilism, but with developing an account that accommodates both intuitions.

3 (e.g., O'Connor 2000; Clarke 2003; Lowe 2008; Steward 2012b; Groff 2013).

chain of events, but are instead caused directly by agents. Free actions are thus determined in the sense that they are caused by their agents, but undetermined in the sense that they are free from determinations by prior natural events.[4] Clarke, for instance, argues that a human agent is therefore 'in a strict and literal sense an originator of her free decisions, an uncaused cause of them' (Clarke 2003, p. 134).[5]

Until recently,[6] agent-causation was often discarded as 'more puzzling than the problem it is supposed to be a solution to' (van Inwagen 1986, p. 151) or as 'obscure and panicky metaphysics' (Strawson 1962, p. 27).

But thanks to recent developments in contemporary metaphysics, it is possible for defenders of agent-causation to argue that this challenge no longer constitutes a serious threat. For they can rely on the emergence of many well-developed accounts of *power* (e.g., Mumford 1998; Ellis 2001; Bird 2007; Marmodoro 2010; Heil 2012). A power, the rough idea is, is a dispositional property of an object or substance that explains why it can exhibit a particular manifestation. Typically such a manifestation comes about when the power is in the right *stimulus* or manifestation conditions.[7] A bit of salt's dissolving is thus causally explained by pointing out that salt is *water soluble*, together with the fact that the salt was placed in water. Substances and powers, on such a view, are ubiquitous and hence, many powers metaphysicians claim that causation *in general* consists in a persisting substance manifesting one of its powers. Therefore, the idea that free human action, too, might be the result of the activity of a substance (the agent) need no longer seem mysterious. Agent-causation would simply be the agent manifesting her power to *act*.

In this paper, we will not be concerned with defending the very idea of agent-causation, or of a metaphysics of powers. Rather, we will ask how we can conceive of the power to act in such a way as to make free action possible. As we will see,

this will mean drawing a distinction between intrinsically different *kinds* of powers. We hope our account of the power to act will thus contribute to a more general understanding of mental powers.[8]

Now according to some philosophers, the move towards a metaphysics of powers is all that is required in order to thread the needle between determination and mere randomness. We start by arguing that this is a mistake (§2). Although the turn towards a powers-based ontology and account of causation is a necessary first step towards making sense of agent causation, we argue, *pace* (Mumford and Anjum 2013, 2015a), that the very ubiquity of powers, on such a view, undermines the ability of agent-causation to explain the idea that a free action must be up to the agent herself. Therefore, we argue, an account is needed of what distinguishes the power to act from ordinary powers.

In section §3, we suggest that the relevant distinction must lie in the rational nature of the power to act. However, we argue, extant agent-causal accounts fail to account for this rationality in the right way. Another fairly recent proposal, that the power to act must be a *two-way* power is, we believe, on the right track. However, we argue that two-wayness by itself will not provide the understanding we seek of what makes the power to act special—unless we *combine* the idea that the power to act is two-way with the idea that it is rational.

In the final section (§4), we therefore sketch the outlines of an understanding of the power to act on which its two-wayness can be seen to be a *consequence* of its intrinsically rational nature. On this picture, what distinguishes the power to act is its special *generality*—the power to act, unlike ordinary powers, does not come with any one typical manifestation. Rather, to what manifestation the power is directed is only determined in an exercise of the power itself. We argue that this special generality can be understood to be a feature of the capacity to *reason* or *infer*, as recent work in the philosophy of mind shows (e.g., Rödl 2007; Boyle 2011a). Hence on the resulting conception, the power to act will not be externally determined, nor random, but truly *self*-determined.

2 Getting Free Will from Powers?

In this paper we argue that agent-causalists must explain what is special about the nature of the power to act in order to make headway in the free will debate. Some philosophers, however, seem to think that the move towards a powers metaphysics by itself already furthers our understanding of free will and the dual demands it seems to make. The

---

[4] The vast majority of agent-causalists are also libertarians. If agent-causation ensures that actions are free from determination by prior events, it hence ensures the falsity of universal determinism (the idea that *every* event is determined by prior events). In this paper we will follow the majority and mainly direct our attention to agent-causal libertarianism. Some philosophers (Markosian 2012; Nelkin 2011) have, however, defended compatibilist versions of agent-causal theory.

[5] According to Clarke, this is because agents, *qua* substances, are 'not the kind of thing that can itself be an effect' (Clarke 2003, p. 134).

[6] The idea of agent-causation is certainly not new. It at least goes back to Reid (1999) and was subsequently defended by Chisholm (1966) and Taylor (1973).

[7] Although some powers, e.g., a radium atom's power to decay, may be special in that they can manifest indeterministically. This means that they do not need a stimulus, or might not manifest even when they are in the right conditions. We will return to this when discussing two-way powers in §3.

[8] Or at least, of the subset of mental powers that are *rational* powers.

most prominent advocates of this idea are Stephen Mumford and Rani Anjum who, in a number of papers (Mumford and Anjum 2013, 2015a), outline how their understanding of powers can positively impact the free will debate.[9] In this section we will therefore consider Mumford and Anjum's account in some detail and argue that it is ultimately unsatisfactory.

According to Mumford and Anjum the failure to understand free will comes from a tacit acceptance of what they call 'modal dualism': the idea that there are only two modal values—necessity on the one hand and possibility, or pure contingency, on the other. If everything is a matter of either necessity or contingency, they argue, no sense can be made of free will. For, as we have seen, an action cannot be free if it is random, nor if it is fully necessitated. Now powers, Mumford and Anjum believe, offer a way out of the dilemma between necessity and contingency, because they, on their view, display a *third* sort of modality. A power does not necessitate its manifestation, because there can be interferences that prevent the manifestation from coming about. A radiator might have the power to heat a room, but might not actually do so because of an open window that lets in a cool night breeze. If the radiator, however, does manage to heat the room, this is not a mere matter of contingency either: a power still has *some* modal strength to produce its manifestation. For this reason, according to Mumford and Anjum, there must be a *sui generis* modal value in between necessity and possibility: the *dispositional modality*.

Although one may of course criticize Mumford and Anjum's approach by questioning the cogency (indeed, the very logical availability) of such an in-between modal notion,[10] for our purposes it is more interesting to consider whether the dispositional modality (assuming that sense can be made of it) can help to strike the kind of balance between indeterminism and self-determination that philosophers of free will have been looking for. So although we do not ourselves believe that a positive accounts of powers, or an account of causation in terms of powers, requires what Mumford and Anjum call the dispositional modality, we will (in this section) assume their specific account of powers in order to scrutinize its potential for furthering an understanding of free will.

Mumford and Anjum think that their account of powers is mainly beneficial to those who want to defend the incompatibilist perspective on free will, for it is supposed to consistently secure two concrete principles often defended (independently or jointly) by libertarian philosophers.[11] The first is the so-called principle of alternate possibilities (AP), which is the idea that an action cannot be free if the agent could not have acted differently. The second is the principle of ultimate authorship (UA): the idea that an agent must be ultimately causally responsible for her actions.[12]

Now, according to Mumford and Anjum AP follows from their account rather simply: if all powers at most *tend* towards their manifestation, there *always* is the alternate possibility that the manifestation fails to come about. Obviously, if the exercise of any power at all entails an alternate possibility, then an agent's exercise of her power to act equally delivers them alternate possibilities. Indeed, they write: 'alternate possibilities become entirely ubiquitous, applying in any case of causation and not just those that are the exercise of an agent's powers' (Mumford and Anjum 2015a, p. 8).

While Mumford and Anjum seem content with this way of securing alternate possibilities for action, we think that the very ubiquity of Mumford and Anjum's alternate possibilities shows that these are not actually the possibilities libertarians are looking for. The alternative possibilities that Mumford and Anjum have to offer are, it seems, the *in principle* possibility of an intervention on the manifestation of a power. Their account captures the conceptual truth that the notion of a power or disposition is not the notion of a property that makes the occurrence of the manifestation inevitable, for indeed, there may always be other objects that, by intervening, can prevent the manifestation from coming about. However, note that this conceptual truth will obtain *even* if in a concrete situation, there is no *actual* possibility of such an intervention. For instance, if there is *in fact* no other object close enough to steer a ball of course, the ball's momentum [it's 'disposition to movement' (Mumford and Anjum 2011, p. 6)] *will* result in its actually moving in a certain direction—even though momentum, as a power, is still the *sort* of thing on which an intervention is always possible.

In short, it seems that Mumford and Anjum mistake the merely conceptual possibility of intervention for the kind of alternative possibilities that are at stake in the debate about free will.[13] For it will be true of *every* exercise of a power

---

[9] Ruth Groff (2016) is another philosopher who seems to believe that the move to a powers metaphysics directly dissolves some of the core problems surrounding free will.

[10] In particular, one might worry that Mumford & Anjum run the risk of confusing causal and logical modalities, and in doing so, confuse what is often called logical with nomological determinism. We thank an anonymous reviewer for pointing this out.

[11] See e.g., Kane (1996) for a joint defence.

[12] These principles signify the concrete way in which the libertarian tries to make sense of the two seemingly opposite intuitions we have about free will. If I have multiple alternative possibilities my action is not determined, and if I am the ultimate source of my action, it is more than a random event.

[13] The relevant alternative possibilities in the free will debate are often described as possibilities 'given the past and the laws of nature' (see e.g., Franklin 2011, p. 204 and Mele 2006, p. 9). These are alternative possibilities *in a particular concrete situation*, in which the prevention of a power may or may not be *actually* feasible. Mumford

that (if circumstances had been different) it was in principle possible to prevent that exercise—even if it was, in the actual case, fully *determined* that the manifestation would occur.[14] Thus the claim that the mere presence of a power makes room for the kind of absence of determination required for free will seems puzzling. And indeed, Mumford and Anjum seem to realize that the kind of 'alternative possibilities' secured by their account are too liberal to suffice for free will *because* they are ubiquitous: 'the very ubiquity of AP shows that it alone is not what free will consists in' (Mumford and Anjum 2015a, p. 9). That is why, they argue, the second requirement of *authorship* (AU) must also be fulfilled.

Now Mumford and Anjum claim that their account is able to secure the relevant sense of authorship. For they understand an agent's action, e.g., her putting of a golf ball, as a *tending* (in the sense of an instance of the 'dispositional modality') towards an outcome of a certain sort: the ball dropping into the hole. If the agent succeeds in sinking the shot, then, despite the alternate possibility of failure, the success was still in virtue of her exercise of her agentive power. And therefore, Mumford and Anjum claim, she is the ultimate author of that act.

However, this is puzzling. If it is correct to call an agent the author of her action simply because the action is a manifestation of her power, then would it not seem that *all* cases of power manifestation are cases of authorship? Indeed, if we think that 'the very ubiquity of AP shows that it alone is not what free will consists in', then how could we suppose that something that is equally ubiquitous (on a powers-based or dispositionalist understanding of causality)—namely, the exercise of a power—*could* secure free will?[15]

This is an instance of a more general problem for agent-causal theories that rely on the ubiquity of powers or substance-causation. As we have argued elsewhere (van Miltenburg & Ometto 2016), the agent-causalist's adoption of contemporary powers metaphysics is a bit of a two edged-sword: on the one hand it enhances the acceptability of agent-causation by describing it as a species of the substance causation that occurs throughout nature, rather than as a uniquely human, unnatural, and mysterious phenomenon. But on the other hand, the very ubiquity of substance-causation destabilizes the appeal to agent-causation as the defining feature of human free will. Consider again Clarke's claim that the agent is 'in a strict and literal sense' the uncaused cause, or originator, of her decisions, because the agent as substance is not 'the kind of thing that itself can be an effect' (Clarke 2003, p. 134). Now the problem is that, if substance causation is ubiquitous, any substance manifesting its power would equally seem to become an uncaused cause. Contrast this with Aristotle, who is the inspiration for much of the contemporary metaphysics of powers:[16]

> The stick moves the stone and is moved by the hand, which again is moved by the man: in the man, however, we have reached a moment that is not so in virtue of being moved by something else. (Aristotle 1996, II.5, 256a6-8)

In Aristotle's description of this causal chain, substances—the stick, the hand, the man—are doing the causal work at each step. However, only one of these substances—the man—is claimed not to be moved by something else: only the man is the uncaused cause. This fact thus does not seem to derive just from the fact that the man is a substance, but rather from the peculiar sort of power that it has, in virtue of being the special kind of substance it is. Analogously, we believe that the most important task for contemporary agent-causalists is to explain what exactly is special about the type or *variety* of substance-causation in which Aristotle's man is engaged. We turn to the question what might constitute this difference in the next section.

Footnote 13 (continued)

and Anjum sometimes seem to admit that their conceptual possibilities are compatible with determinism (2011, p.75). Other times, they deny this (Mumford and Anjum 2013), but only because they *define* determinism not as the absence of possibilities 'given the past and the laws' (as it is in the free will debate), but simply as 'causal necessitarianism': the claim that the *concept* of a cause is the concept of a necessitating condition. We agree that the latter claim is indeed refuted by powers-based or dispositional accounts of causality. Also compare (Anscombe 1971).

[14] So, we should note, Mumford and Anjum's claim that alternative possibilities are ubiquitous should be distinguished from the claim that every power is an *indeterministic* power, like radium's power to decay. It seems that the latter notion can be understood independently from any particular commitments of Mumford and Anjum's account, such as the dispositional modality. We return to the idea of indeterministic powers in §3.

[15] In a more a recent paper Mumford and Anjum (2015b) agree that more needs to be said about authorship, albeit in response to a different (and more limited) problem, namely, that the exercise of an agent's own powers might be unfree due to external influences like subliminal advertising or hypnosis. In short, they suggests that agents can take authorship of their power to act, by means of the power to reflect on that power. Although arguing against this proposal is beyond the scope of this paper, it seems unsatisfactory: if one want to

---

Footnote 15 (continued)

understand how the agential power to act is somehow different from the powers that ubiquitously occur in nature, we do not see how it helps to simply afford the agent more powers of that same ubiquitous kind.

[16] As can be seen from the fact that contemporary realism about powers is sometimes even referred to as 'the new Aristotelianism' (Groff and Greco 2013).

3 The Power to Act

If powers are ubiquitous in nature and free will is not, then agent-causalists have to explain what the distinguishing feature of the power to act is. As a first step towards answering this question, we will discuss a common, and we believe fundamentally correct, suggestion: that the power to act is different from other powers because it is a *rational* power.[17] But what does it mean to say that a power is rational?

A first suggestion is that we have to understand the rationality of a power in terms of the rationality of its *manifestation*. This is the direction in which Timothy O'Connor's account of agent-causation goes. He believes that in order to account for the rationality of the agent-causal power, we need to understand it not as a power to directly produce physical movement, but rather as the power to produce, what he calls, an 'action triggering intention'.[18] This intermediate step between the agent and her action indeed seems to provides O'Connor an easy way to account for rationality. For on his view, the action triggering intention is not just an intention 'to *A*', but its content is rather 'to *A* for reason *R*' (O'Connor 2002, p. 351). Hence the intention is itself intrinsically rational. But does the fact that the manifestation of the power to act is a mental state that mentions a reason explain why the power to act *itself* is rational? We believe that it does not: for it is quite easy to imagine that such mental states could be induced by a non-rational power (i.e the influx of electric current in the brain, or some such). In other words, that the agent-causal power results in a state that may go on to rationalize an action does not mean that the agent-causal power itself is rational. Hence, its manifestation alone cannot account for the rationality of the power to act.

Let us therefore consider a second suggestion: a power might be rational when it is *responsive to* reasons or rational states. O'Connor, for example, stresses that the agent-causal power should not just produce rational states, but should also be responsive to such states: before an agent exercises her agent causal power, she typically deliberates and is aware of the *same* reason that is part of the resulting intention's content (which we discussed above). Which reasons can enter into the content of the intention thus depends on which reasons the agent was aware of beforehand. But how exactly do these reasons influence the agent's exercise of her power to act?

The most obvious candidate for this relation is that the reasons constitute the *stimulus conditions* of the agent-causal power. On such a view, the power is fundamentally the power to do or intend that *A when one considers reasons for A*—in the same way that salt has the power to dissolve *when placed in water*.[19] But then it seems the agent's reasons would simply determine what she does: she would have no choice in the matter. Indeed, O'Connor is (like other agent-causalists) explicit that the agent's reasons cannot bear *this* kind of relation to the exercise of the power.

Instead O'Connor suggests that agent causation is *probabilistically structured* by reasons: 'coming to recognize a reason to act induces or elevates an objective propensity for me to initiate the behavior' (O'Connor 2005, p. 353). However, this seems to leave unanswered the question of *how* the agent's consideration of her reasons relate to or impact on the her power to act. If consideration of the reasons is to 'elevate an objective propensity' for the agent to exercise her power in a certain way, then how *do* they elevate it—if not causally? Moreover, if the reasons would do nothing more than set certain probabilities, then it would seem that the further exercise of the power *itself* is not guided by reasons in any sense: it would seem to be just a matter of luck which of the probabilities materializes. As Pereboom (2014, p.61) notes, it seems an 'unexplained coincidence' that when an agent has more reason to act, she has a higher probability to, of her own accord, to exercise her agent-causal power.

The fundamental problem here seems to be that, as long as we think of the agent's reasons as states existing prior to the manifestation of the power, they appear to be mere *circumstances* under which the power to act is manifested. These circumstances can then be causally connected to the exercise of the power (which leads to the problem of external determination), or not—in which case the power no longer seems *responsive to* the reasons at all.[20]

If we indeed cannot secure the rationality of the power to act by reference to the supposed special characteristics of either that power's typical *manifestations*, or its *triggers*, then how *can* the agent-causalist account for the difference between the power to act and other powers that is required to overcome the problem of ubiquity (§2)? We believe that perhaps this difference may be located not, as it were,

---

[17] See, e.g., (Lowe 2013; O'Connor 2000). One might wonder whether this answer to the ubiquity problem excludes certain actions which do not seem rational in a strong sense (e.g., idly tapping one's fingers) from being free. But it seems to us that if one endorses a sufficiently broad notion of rational action, one can understand such behavior in which one acts 'for no particular reason' as rational in a minimal sense: namely, as an intentional action. Cf. (Anscombe 1957, p. 25).

[18] The power to produce such intentions has to be indeterministic, according to O'Connor (2000), but it is not fully clear to us whether O'Connor believes that the causal chain leading from the intention to movement also needs to be indeterministic.

[19] For ease of exposition, we ignore that for O'Connor, the intention's content also includes the reason for doing *A*.

[20] In the latter case, consideration of the reasons seems to be a mere epiphenomenon, wholly accidental to the exercise of the power. This should remind us of Davidson (1963), who argued that reasons must stand in a causal relation to actions in order to be relevant to the action's explanation.

outside of the power (in its manifestations or the triggering conditions), but in the power *itself*.[21] As we will suggest below (§4), the power to act must be an *intrinsically* rational power. Before we do so, however, it will first be instructive to consider a recent approach that seems to appreciate the point that the required distinguishing feature of an agent's power to act must be a feature of the *kind* of power at issue. This is the idea that the power to act must be a so-called *two-way power* (e.g., Steward 2012b; Lowe 2013; Alvarez 2013). Although we believe there is indeed a close connection between the power to act and the 'two-way' feature that these theorists point to, we argue that there is reason to doubt that this feature indeed ultimately accounts for the intrinsic difference which secures that the power to act is a truly self-determining power.

Let us begin by considering Steward's version of the idea that agency is a two-way power:

> the agent is conceived of [...] as a possessor of what is sometimes called *two-way power*—the power to φ or not to φ. Exactly what will occur is not settled in advance by antecedent states and events...It is settled by the agent at the time of action by means of an exercise of a two-way power. (Steward 2012a, p. 250)

An action, according to Steward, is a *settling* of such an antecedently open possibility. Suppose it is open whether or not someone will φ (say, open the window) at *t*. Then at *t* the agent will manifest her two-way power by either performing φ, or not. Although we do not believe this is false, we doubt that Stewards notion of a two-way power is robust enough: for Steward's notion of a two-way power seems to be too close to the general idea of an indeterministic power.[22] Why can we not say that, e.g., a radium atom *also* possesses a two-way power—the power to decay or not to decay? At any point before *t*, it will not be settled yet whether the atom will decay at *t* or not. When the time comes, this is settled by the radium atom: one way by its decaying, or the other way by its *not* decaying. The bare idea of settling a hitherto open possibility does not allow us to distinguish the power to act from the indeterministic powers of inanimate objects.[23]

Now, there is another way of understanding the suggestion that agency is a two-way power. We should not view the power as one to either perform φ or *not* to perform φ, but rather as a power to *perform* (or decide) to φ or *perform* (or decide) to not-φ (such that, e.g., 'not opening the window' is the description of one's intentional action, or the content of one's decision).[24] As Lowe remarks, that would provide for the relevant contrast between the power to act[25] and other indeterministic powers: 'a radium atom cannot in any coherent sense *refrain* from decaying on any given occasion: at most it can simply *fail* to decay, because it happens not to manifest its power to decay on this particular occasion.' (Lowe 2013, p. 177)

We do not wish to deny that it is the special prerogative of rational agents to sometimes refrain from a certain course of action, in a sense in which a radium atom cannot. But note, first, that it does not in general seem correct to say that whenever an agent does not φ, where φ is in her power, it follows that she engages in action (i.e., manifests the power) of not-φ'ing. When the thought of calling one's friend to congratulate her on her birthday crosses one's mind, but one then decides to water the plants, it does not *have* to be the case that one has decided not to call one's friend, or that one has decided to, at that time, water the plants *rather than* calling one's friend. One can simply decide to water the plans—*thereby in fact* refraining from calling one's friend. But in that case, one's refraining will not constitute the manifestation of a power: it will not consist in anything an agent *does* do.[26]

However that may be, we have a more fundamental worry concerning Lowe's proposal. If we consider φ and not-φ as two distinct, mutually exclusive prospective actions, can we still make sense of the idea that both are possible manifestations of a single power? After all, powers are *directed at* their manifestations. But how can one and the same power be directed, at the same time, at contrary effects?[27]

---

[21] In footnote 15 we already mentioned another proposal, by Mumford and Anjum, that seemed unsatisfactory because it attempted to locate the distinguishing feature of the power to act outside of the power itself.

[22] See fn. 7.

[23] The objection that the notion of settling does not seem powerful enough to deliver free will has also been raised by (Broadie 2013). Steward herself is sometimes aware of this problem, claiming that for an agent's settling to be understood as a free act, it must be a case of so-called top-down causation. However, it is not clear that Steward's notion of top-down causation allows her to evade the problem as top-down causation itself is apparently also instantiated by non-free, non-agent substances. Compare our van Miltenburg & Ometto (2016).

[24] It may appear that this is the notion that Steward, too, wants to adopt, as she sometimes describes a two-way power as a power 'of refrainment' (Steward 2012b, p. 156). However, she later makes it clear that she intends the weaker notion: '...the relevant possibility is merely that [the agent] should not have made the decision [...] that he in fact made at *t*. And this is an omission, not an act' (Steward 2012b, p. 170).

[25] Lowe speaks rather of 'the will', a power whose characteristic manifestations are *volitions* ('the most primitive or basic kind of action that any agent can perform' (Lowe 2013, p. 178)), which may then go on to cause the willed action.

[26] Compare Steward's (2012b, pp. 170–173) account of refraining.

[27] Compare Aristotle's problem about how certain *skills*, which he famously conceived of as two-way powers, can be aimed at contrary effects in *Metaphysics* IX.2, 1046b47. His solution is that the faculty of *choice* provides the two-way power with a direction—but if that is supposed to be a solution, then of course the power of choice *itself* cannot be two-way in the same way (although as we suggest in §4, it may still be two-way in Steward's sense).

Lowe's idea seems to be that this is possible because the agent herself picks out one of the contrary effects—a decision[28] to either perform or refrain from the action—*by* exercising the power. However, at the same time, he claims that decisions are 'mental occurrences or events' (Lowe 2013, p.172) which, it seems, emerge only as the result of the power's exercise—they are the result, or upshot, of an agent's exercising the power to will to do something. But if decisions indeed are the *results* of the power to decide, then how can these decisions *already* play a role in determining which of the contrary effects at which the power aims (i.e., the decision to φ or the decision to not-φ) ensues? Must there then be another secondary power to decide the direction in which one's primary power to decide is going to manifest—and so on? The problem with Lowe's proposal thus seems to be that decisions come to the table at too late a stage.[29]

The problem is related to that concerning the rationality of the power to act (or to decide) that we discussed above in connection to O'Connor's view. For although Lowe agrees that the power in question must be a specifically rational power, it seems that his account offers no way to understand the relation between an agent's consideration of her reasons for action, and her exercise of the two-way power. Lowe claims that the power is exercised 'in the light of reasons':

> when deliberating about how to act, an agent reflects on such reasons and then exercises his or her will in a manner that, typically, corresponds to his or her judgement as to where the weight of reasons for or against any particular course of action falls. (Lowe 2013, p. 177)

But what explains that the exercise of the power 'typically corresponds' to the preceding reflection on reasons?[30] Moreover, it remains unexplained why on Lowe's view there *should* (ever, or typically) be any prior consideration of reasons before the two-way power is exercised. The power's being two-way seems compatible with its exercise occuring completely 'in the dark', as we might say. As long as that is the case, it seems, we fail to understand how such a power can be an intrinsically rational power.

4 Self-Determining Power

In the previous section we have discussed two suggestions concerning the difference between the power to act and other powers. The power to act is (1) a *rational* power, and (2) it is a *two-way* power. However, it turned out to be quite difficult to explain wherein this rationality consists, and how it can help in distinguishing the power to act from other two-way powers (such as radium's power to decay). In this section, we want to sketch the outlines of an approach that promises to vindicate both points. This proposal explores a way to think about the power to act as genuinely free. For if it is a two-way power, then this guarantees that actions are not pre-determined. And if its directedness is rationally controlled, this guarantees that it's exercises are not merely random. In other words, what we hope to offer is a preliminary understanding of how the power to act can be a truly self-determining power.

In brief, our suggestion is that we can understand the specifically rational nature of the power to act, as well as the fact of its being a two-way power, by attending to that power's characteristic *generality*. This generality can be brought into focus by examining an objection to agent-causation that has hitherto received little attention. The objection was originally raised by Clarke (Clarke 2003, pp. 192–193), who worried that, even if we accept a powers-based or substance-causalist conception of causation, an agent's power to act would still appear to have to be a causal power of a different sort—thus undermining the attempt to demystify agent-causation. O'Connor (dubbing it the 'uniformity objection') formulates the relevant disanalogy as follows. Ordinary powers, whether they be deterministic like water's power to dissolve salt or 'two-way' like radium's power to decay, 'are tendencies towards effects, i.e., the powers themselves are disposed to produce effects' (O'Connor 2009, p. 238). In our own parlance: such powers are *directed* at a certain *specific* manifestation. Now, what manifestation is the power to act directed at? The answer appears to be: none. For *action* or *acting* does not name a specific event.[31] But aren't all powers general in this way? The solubility of salt, for instance, is not

---

[28] Or in Lowe's preferred terminology: a volition

[29] Lowe sometimes seems sensitive to this worry. He claims that the power to act—or the *will*, as he calls it—is a 'non-causal power' (Lowe 2013, pp. 174–175). An agent, Lowe submits, does not cause herself to have a certain volition: she just has it, and that *is* her willing it, i.e, it is her directing the power in a certain direction. However, it is not clear how this is supposed to solve the problem. For isn't the volition still an *event* that is the result or upshot of the power's exercise, even if we cannot properly say that the agent causes herself to have it?

[30] As Pereboom (2014, p.61) objected to O'Connor's view, this seems an 'unexplained coincidence'.

[31] It might perhaps be thought that agents do not have one general power to act, but rather have many separate powers, to say, play the piano, bake a cake, or butter some toast. But such a view would still have to explain what common feature these separate powers have that makes all of them powers for rational (and arguably free) action. As we have pointed out above, their rationality cannot reside in these powers being reasons responsive, or productive of rational states. Nor is it sufficient to insist that all of these powers are two-way powers. It is therefore that we suggest precisely that generality, and the possibility of self-determination that comes with it, is the defining feature of rationality. But obviously, such a specific power to, e.g., bake a cake is precisely lacking in this kind of generality. We thank an anonymous referee for raising this issue.

aimed at a specific dissolving either. It does not, by itself, determine, say, how quick the salt dissolves, for that also depends on external factors like temperature of the solvent. Nevertheless, it is important to note that the solubility does determine the *types* of event that can be its manifestation, be they quick or slow. If the salt for instance melts, it is clear that this was no exercise of its solubility, but rather of its meltability. Now the power to act is more general because it does not even delineate particular event-types, such as raising one's arm, or baking a cake. The concept of action, we might say, is more *general* than such event- or action-kinds. If agents possess a power *to act*, it must thus be a power that can in principle be manifested in the performance of a seemingly infinite array of specific action-types. The power itself, it seems, does not favor the occurrence of any of these manifestations: just by *possessing* the power to act, an agent does not exhibit a tendency towards *any* of the specific actions that she could in principle perform.

So it seems that, rather than saying that the power to act is directed at *all* of these action-types—a proposal that would be structurally similar to Lowe's construal of a two-way power as a power that is directed at multiple outcomes at the same time—the right thing to say is that the power to act is, by itself, not directed at *any* specific outcome.[32] When one describes the power to act as 'the power to φ', then, there hence is something curious about this: we do *not* mean that it is a power to perform a specific substitution of the variable φ, e.g., raise one's arm. Rather, we want to suggest, the power to act is a general power in precisely this sense: it is a power to perform *any* possible substitution of φ.[33] Thus the φ does not stand in for particular action types, but rather signifies that all of its instantiation bear a certain form: the form that we call 'intentional action'. The power to act, if it is directed at anything, is directed at producing events of this form.[34]

We thus suggest that the very disanalogy between ordinary powers and the power to act that Clarke and O'Connor notice, and conceive to be a potential problem, in fact constitutes the intrinsic difference between the power to act and other (inanimate) powers. One might wonder, however, whether the power to act still merits the name 'power' if it is so fundamentally different from other powers.[35] How could this so-called power to act, for instance, become manifest in the first place, if it is not aimed at a specific action-type? It seems that for a specific action to count as the manifestation of that power, it would have to be the case that the general power somehow *receives* a particular specification so that it becomes aimed at a specific type of action. But what could that mean? Not, we submit, that circumstances *external* to the power and its exercise direct it in one way or another. For it would then simply be a power to do different things, depending on different circumstances, just as the solubility of salt may result is a quicker or slower dissolving process dependent on the external circumstances such as the solvent's temperature. Hence to say that the power to act needs an external determination would simply be to deny that the power to act is general in the sense we are exploring in this section.[36]

Rather, we want to suggest, the power to act gives *itself* a direction *in* being exercised (or: that the agent gives it that direction by exercising it). As we said, we want to understand the power to act as *self-determining*. But how does this work? Remember that the power to act is a general power that is therefore not aimed at any particular type of manifestation. It follows that the agent, just in virtue of possessing the power to act, does not exhibit a tendency towards any particular (type of) outcome. In order for such a tendency to come about the agent first has to make up her mind about what to do. Now our suggestion is that it is in exercising her power to act (i.e., as we will see, in her *making up her mind*) that an agent determines it to now *be* a power to, say, raise her arm—and thereby acquires the 'tendency' to raise her arm.[37] Hence, because the power to act is not directed at any particular manifestation—since it is a general power—it cannot, so to speak, lie in waiting until its stimulus condition comes about, and then start to manifest. Rather, it seems we

---

[32] In the previous section (3) we argued that it is untenable to suppose that a power could be directed simultaneously at doing φ and not-φ. But now we can see that even if Lowe's proposal is misconceived, he was right that there *is* nevertheless something special about the very directedness of the power to act, which distinguishes it from merely indeterministic powers.

[33] We do not mean, of course, that any agent is, just in virtue of being an agent, capable of any action at all: obviously, being an agent does not suffice for being able to swim. The point, rather, is that of all the actions that an agent *is* able to perform at some time and place, the power to act is not directed at any of them specifically. Moreover, the power to act will of course be a prerequisite of acquiring, say, the skill of swimming (as Aristotle says: 'as regards those things we must learn how to do, we learn by doing them' (*Nichomachean Ethics* 1103a31).).

[34] Although we cannot go into this here, it seems that what it means to be an intentional action—what it is for an event to bear the form which makes it an instance of our variable φ—is at least in part for it to *be* a manifestation of the power to act. Something similar is argued, e.g., by Rödl (2007, chapter 2).

[35] Another worry, which we will discuss further below, is that the fundamental difference from other powers is so large that the power to act again becomes a mysterious power.

[36] We can now see the fundamental flaw in the suggestion, discussed above (3), that the rationality of the power to act is explained by factors external to it such as prior awareness of reasons, or prior deliberation. For rather than distinguishing the power to act, the very dependence on external determination ensures a structural similarity with non-agential powers.

[37] We say, 'tendency' because, as was stressed by Mumford and Anjum (section 2), something can prevent the agent from actually successfully raising her arm.

cannot properly distinguish between activation or triggering of the power, and the power's manifestation—as we do for, e.g., the powers of inanimate objects.[38]

To get clearer on what we are exactly recommending let us consider the difference between our proposal and the existing forms of agent-causalism that we have discussed in this paper. From the perspective we are exploring, it seems that accounts such as, e.g., O'Connor's and Lowe's, are attempts to *explain* what we are taking to be the intrinsic general nature of the *kind* of power at issue *in terms of* certain features of the typical manifestations of the agent-causal power. After all, they claim that the power results in contentful states (or for Lowe, volitions), and this content can be *of* any action whatsoever. But once the power to act has produced such an intention or volition, the latter is, as it were, all on its own: there problematically is no *intrinsic* connection between what it is to be a state with a certain content, and being an exercise of the power to act. By contrast, on our proposal, it is the power *itself* that, in being exercised, acquires a specific direction. And so, as we will shortly explain, we can understand this self-determining character of the power to act as a feature of its intrinsically rational nature. Yet before we do so, it seems that we can already say that, if the power to act is self-determining in the sense we are suggesting, it will be a power that is 'two-way', in Steward's sense (see §3). For before its exercise, that power has no specific direction, and so arguably, nothing external to the power could trigger its manifestation. And therefore the power can also fail to manifest in any given circumstance. Thus our proposal gives content to the idea that free actions cannot be determined by prior events.

Moreover, we suggest, the power to act is two-way in a sense that distinguishes from merely inanimate two-way powers, such as radium's power to decay. To this end, we would like to explain how the characteristic openness of the power to act, on our view, is bound up with rationality. To do so, it will be helpful to consider recent developments in the philosophy of mind on the capacity for inference. Matthew Boyle ([2011a](#), [b](#)), for instance, argues that the capacity for inference (roughly, the power to arrive at beliefs by considering other beliefs) is a capacity that displays precisely the feature we have identified above: when one infers *p* from *q*, then the result (or manifestation) *is not independent from* the activation or triggering of the capacity. We will take a brief look at his argument in order to get in view the analogy between the capacity to infer, or reason, and the power to act that we have in mind.

Boyle begins by considering that, at least in the normal case, someone who infers *p* from *q knows that* she believes that *p* because she believes that *q*. And this knowledge of *why* one believes *p*, it seems, is not just an accidental byproduct of the inference:

> a belief, once formed, doesn't just sit there like a stone.[39] What I believe is what I hold true, and to hold something true is to be in a sustained condition of finding persuasive a certain view about what is the case. [...] inference is not a mere transition from a stimulus to a response; it is a transition of whose terms I am cognizant, and whose occurrence depends on [...] taking there to be an intelligible relation between these terms. (Boyle [2011b](#), p. 231)

That is to say, one's knowledge *that* one believes that *p* because one believes that *q*, and one's actually subscribing to the inference—one's *believing* that *p* on the basis of *q*—are not distinct. Indeed, it seems impossible to believe that *p* follows from *q*, and believe that *q*, without *thereby* coming to believe that *p*.[40] Thus, if we think of inference as a power or capacity, we cannot think of one's *reasons* for believing something as external to the *exercise* of the capacity. Recognizing *q* as a reason for believing *p* (i.e., recognizing that *p* follows from *q*) already *is* to come to believe that *p* because of *q*, and so it *is* to exercise one's capacity to make up one's mind. The *explanation* for why one comes to believe that *p*, on the one hand, and the manifestation of the capacity, on the other, do not come apart.[41] *That* is why, according to Boyle, a subject who makes an inference can normally explain why she possesses the resulting belief.

If this brief sketch of Boyle's account of the power of inference is along the right lines, then it seems that inference—the capacity to make up one's mind about what to believe—is self-determining in a sense similar to that in which we have suggested the power to act must be. For

---

[38] Interestingly, Alvarez ([2017](#)) has recently argued that something similar is true of the powers or dispositions that are our *character traits*. Since for *having* a character trait (courage, say) it is, as Alvarez argues, necessary that one actually displays it, she suggests that the structure of such a power cannot conform to the simple model on which the stimulus conditions, the power itself, and its manifestations are distinct. Although we cannot argue the point here, it may be that this is because such character traits are *instances* of rational powers, as is the power to act on our view.

[39] As we remarked above, it seems that on e.g., O'Connor's account, an intention, once agent-caused, 'sits there like a stone' in precisely Boyle's sense here: it is no longer sustained by the agent's power to act, and hence is not intrinsically *active*.
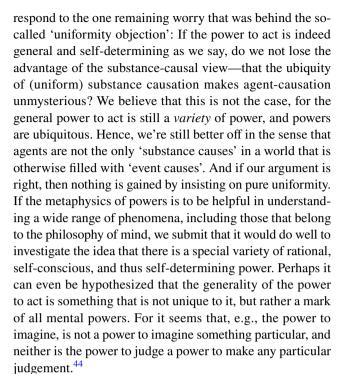
[40] Of course, there can be odd cases, for instance, when someone fails to realize that her belief that *q* refers to the same proposition as the antecedent in her belief that *p* follows from *q*. But at least in the normal case, it appears that the connection holds. And as Boyle argues, this seems to be essential to what it means to be a rational subject.

[41] For a similar account of inference see Rödl ([2007](#), chapter 1), and chapter 2 of that book for an application of this idea to *practical* reasoning.

the power of inference, too, will be *directionless* until the moment that the subject recognizes that her hitherto held belief that *q is a reason* for believing that *p*—and that is, until the moment that the subject makes up her mind that *p*. Until such time as she actually *makes* the inference, the subject will not have a 'tendency' to believe either *p*, or any other belief that may (in fact) follow from *q*. It is only *in* making the inference that the power receives its direction.

Importantly, this parallel between the structural features of the power of inference and the power to act need not be surprising. For there is a philosophical tradition according to which the power to act, or the will, 'is nothing but *practical reason*' (Kant 2002, GMS412). And practical reason, or practical inference, is an agent's capacity to *derive* or *infer* an action from her ends: it is her capacity to *make up her mind* about what to do. So we should expect Boyle's considerations, in so far as they apply to theoretical reasoning, to apply equally to the case of practical reasoning. And indeed, to mention one parallel: just as a believer is, in believing *p*, aware of the reasons for that belief, an agent who is intentionally *φ*'ing is *therein* aware of the reason why she is *φ*'ing.[42]

Our suggestion is thus that the peculiar self-determining character of the power to act is a consequence of its intrinsically rational nature. More precisely, it is a consequence of the fact that *making up one's mind* about what to believe or do is a *self-conscious* activity: an exercise of a power for inference, as we have seen above, is not independent from the agent's knowledge that she exercises it.[43] If this is right, then the power to act is not just a power that is exercised 'in the light of reasons', as on Lowe and O'Connor's accounts— the agent's reasons are not just *circumstances* in which the power is exercised. Instead, an agent's making up her mind in practical reasoning just is her exercising her power to act. In this way we avoid the problem which plagues other agent-causal accounts, namely, that it can seem to be nothing more than an 'unexplained coincidence' (Pereboom 2014, p. 61) that an agent exercises her power in a way correlating with her previous consideration of her reasons. Thus our proposal gives content to the idea that free actions are not random but indeed (self-)determined by reason.

This completes our sketch of the power to act. Although it is obvious that much more work is needed in order to give a full fledged account of this power, we now have to

respond to the one remaining worry that was behind the so-called 'uniformity objection': If the power to act is indeed general and self-determining as we say, do we not lose the advantage of the substance-causal view—that the ubiquity of (uniform) substance causation makes agent-causation unmysterious? We believe that this is not the case, for the general power to act is still a *variety* of power, and powers are ubiquitous. Hence, we're still better off in the sense that agents are not the only 'substance causes' in a world that is otherwise filled with 'event causes'. And if our argument is right, then nothing is gained by insisting on pure uniformity. If the metaphysics of powers is to be helpful in understanding a wide range of phenomena, including those that belong to the philosophy of mind, we submit that it would do well to investigate the idea that there is a special variety of rational, self-conscious, and thus self-determining power. Perhaps it can even be hypothesized that the generality of the power to act is something that is not unique to it, but rather a mark of all mental powers. For it seems that, e.g., the power to imagine, is not a power to imagine something particular, and neither is the power to judge a power to make any particular judgement.[44]

Moreover, if we are correct in thinking that the power to act is a power of inference, then the apparent mystery one might think surrounds this power will further subside once we attain a better understanding of such inference. Indeed, the idea that we possess a power to act that is undetermined and rational in the sense we have explored in this section can thus be investigated further by inquiring into what practical reasoning is. A number of philosophers have already begun this enquiry, arguing that practical reasoning—for reasons similar to Boyle's argument concerning theoretical inference—an intrinsically *rational* kind of cause of action (e.g., Rödl 2007; Marcus 2012). Investigations in the philosophy of mind and action, and in the metaphysics of power, thus seem to have much to learn from each other.

Compliance with Ethical Standards

Conflict of interest Niels van Miltenburg and Dawa Ometto declare that they have no conflict of interest.

---

[42] Such *practical knowledge*, it has been argued, is in fact the distinguishing feature of intentional action. This idea derives originally from Anscombe (1957), but has recently become more prominent due to Rödl (2007), Thompson (2011), Marcus (2012), and Lavin (2015).

[43] Such activity is self-conscious because the recognition that an inference is warranted is, at the same time, the recognition *that one subscribes to the inference*: i.e., it is at the same time a piece of what Boyle calls 'transparent self-knowledge'.

---

[44] (Rödl 2018) convincingly argues for the latter point.

References

Alvarez M (2013) Agency and two-way powers. Proc Aristotelian Soc 113:101–121

Alvarez M (2017) Are character traits dispositions? R Inst Philos Suppl 80:69–86

Anscombe G (1957) Intention. Harvard University Press, Cambridge

Anscombe G (1971) Causality and determination. Metaphysics and the philosophy of mind. Wiley, Oxford, pp 133–47

Aristotle (1996) Physics (trans: Waterfield R). Oxford University Press, Oxford

Aristotle (1998) Metaphysics (trans: Lawson-Tancred H). Penguin Books, London

Aristotle (2012) Nicomachean ethics (trans: Barlett RC, Collins SD). University of Chicago Press, Chicago

Bird A (2007) Nature's metaphysics: laws and properties. Oxford University Press, New York

Boyle M (2011a) 'Making up Your Mind' and the activity of reason. Philos Imprint 11(17):1–24

Boyle M (2011b) Transparent self-knowledge. Aristotelian Soc Suppl 85(1):223–241

Broadie S (2013) Agency and determinism in a metaphysics for freedom. Inquiry 56(6):571–582

Chisholm R (1966) Freedom and action. In: Lehrer K (ed) Freedom and determinism. Random House, New York, pp 11–44

Clarke R (2003) Libertarian accounts of free will. Oxford University Press, New York

Davidson D (1963) Actions, reasons, and causes. J Philos 60(23):685–700

Ellis B (2001) Scientific essentialism. Cambridge University Press, Cambridge

Franklin CE (2011) Farewell to the luck (and mind) argument. Philos Stud 156(2):199–230

Groff R (2013) Ontology revisited: metaphysics in social and political philosophy. Routledge, New York

Groff R (2016) Sublating the free will problematic: powers, agency and causal determination. Synthese, pp 1–22. https://doi.org/10.1007/s11229-016-1124-y

Groff R, Greco J (eds) (2013) Powers and capacities in philosophy: the new aristotelianism. Routledge, New York

Heil J (2012) The universe as we find it. Oxford University Press, Oxford

Kane R (1996) The significance of free will. Oxford University Press, New York

Kant I (2002) Groundwork for the metaphysics of morals, ed. Schneewind J. Yale University Press, 2002.

Lavin D (2015) Action as a form of temporal unity: on anscombe's intention. Can J Philos 45(5–6):609–629

Lowe E (2008) Personal agency: the metaphysics of mind and action. Oxford University Press, Oxford

Lowe E (2013) The will as a rational free power. In: Groff R, Greco J (eds) Powers and capacities in philosophy: the new aristotelianism. Routledge, New York, pp 172–185

Marcus E (2012) Rational causation. Harvard University Press, Cambridge

Markosian N (2012) Agent causation as the solution to all the compatibilist's problems. Philos Stud 157(3):383–398

Marmodoro A (ed) (2010) The metaphysics of powers: their grounding and their manifestations. Routledge, New York

Mele AR (2006) Free will and luck. Oxford University Press, New York

Mumford S (1998) Dispositions. Oxford University Press, New York

Mumford S, Anjum RL (2011) Getting causes from powers. Oxford University Press, New York

Mumford S, Anjum RL (2013) A new argument against compatibilism. Analysis 74(1):20–25

Mumford S, Anjum RL (2015a) Freedom and control: on the modality of free will. Am Philos Q 52(1):1–12

Mumford S, Anjum RL (2015b) Powers, non-consent and freedom. Philos Phenomenol Res 91(1):136–152

Nelkin DK (2011) Making sense of freedom and responsibility. Oxford University Press, Oxford

O'Connor T (2000) Persons and causes: the metaphysics of free will. Oxford University Press, New York

O'Connor T (2002) Libertarian views: dualist and agent-causal theories. Oxford University Press, Oxford, pp 337–356

O'Connor T (2005) Freedom with a human face. Midwest Stud Philos 29(1):207–227

O'Connor T (2009) Agent-causal power. In: Handfield T (ed) Dispositions and causes. Clarendon Press, Oxford

Pereboom D (2014) Free will, agency, and meaning in life. Oxford University Press, Oxford

Reid T (1999) (1st 1994). Essay V: of morals. In: Hamilton WS (eds) The works of Thomas Reid, vol 2, chapter V.VII. Thoemmes Press, Bristol, pp 670–679

Rödl S (2007) Self-consciousness. Harvard University Press, Cambridge

Rödl S (2018) Self-consciousness and objectivity. Harvard University Press, Cambridge

Steward H (2012a) The metaphysical presuppositions of moral responsibility. J Ethics 16(2):241–271

Steward H (2012b) A metaphysics for freedom. Oxford University Press, Oxford

Strawson PF (1962) Freedom and resentment. Proc Br Acad 48:1–25

Taylor R (1973) Action and purpose. Humanities Press, New York

Thompson M (2011) Anscombe's intention and practical knowledge. In: Ford A, Hornsby J, Stoutland F (eds) Essays on Anscombe's intention. Harvard University Press, Cambridge

van Inwagen P (1986) An essay on free will. Oxford University Press, Oxford

van Miltenburg N, Ometto D (2016) The libertarian predicament: a plea for action theory. Synthese. https://doi.org/10.1007/s11229-016-1148-3