Dispositional accounts of abilities¹

Barbara Vetter & Romy Jaster

This is the penultimate version of a paper which has been published in *Philosophy Compass* in 2017. Please refer to the published article when citing it.

Abstract

This paper explores the prospects for dispositional accounts of abilities. According to so-called new dispositionalists, an agent has the ability to Φ iff they have a disposition to Φ when trying (or being otherwise properly motivated) to Φ . We show that the new dispositionalism is beset by some problems that also beset its predecessor, the conditional analysis of abilities, and bring up some further problems. We then turn to a different approach, which links abilities not to motivational states but to the notion of success, and consider ways of implementing that approach.

Introduction

Consider, first, a class of properties that we agents have: abilities. Most of us have the ability to swim and the ability to eat, the ability to see and the ability to hear; some have the ability to speak French or the ability to play the piano; few have the ability to multiply five number digits in their head or the ability to run a marathon. Abilities are of great use: the more abilities we have, the greater our range of options is in a given situation. Abilities tend to remain with us even when we are not exercising them: you retain the ability to swim, say, even when you are not currently swimming.

Consider now a second class of properties that agents share with non-agents: dispositions. The glass is fragile; the sugar cube is water-soluble; toddlers are often gullible while teenagers are more likely to be irritable or irascible. Some of us have a disposition to procrastinate while others are disposed to infatuation with strangers. Like abilities, dispositions remain with their bearers even when they are not exercised: the glass is fragile long before it is broken, the sugar cube remains soluble when it is not dissolved, and one may be gullible, irritable or disposed to procrastinate even when one is not currently being deceived, being irritated, or procrastinating.

Abilities and dispositions look very much alike. Both can be exercised, but both can also be possessed without being exercised. Both look like modal properties: we can describe both with the auxiliary "can", as in "the glass can break" and "I can swim". Both have been subject to very similar attempted analyses in terms of counterfactual conditionals. We will spell out the details in a moment, but the idea is very intuitive: whether you have an ability to swim is a

¹ For helpful discussions, we would like to thank an anonymous referee for *Philosophy Compass*, David Löwenstein, Erasmus Mayr, Christian Nimtz, and the participants of the philosophy research seminar at the University of Erlangen.

matter of whether you *would* swim in certain kinds of situations; whether a substance is soluble is a matter of whether it *would* dissolve in certain kinds of situations.

How, then, are abilities and dispositions related? Certainly, to have an ability to Φ and to have a disposition to Φ are not the same thing. The two can come apart in both directions: one may have the ability to dance a samba while reciting the alphabet without being at all disposed to do so; many of us have a disposition to miss our first deadlines, but we would certainly not call that disposition an ability.

Still, it is possible – and according to many philosophers, very natural and correct – to spell out the truth conditions for ability statements in terms of disposition: not dispositions to do something full stop, but dispositions of a specific kind. According to the most prominent view of this kind, an agent has an ability to Φ iff the agent has a disposition to Φ if they tried to do it. Thus, one who is able to dance a samba while reciting the alphabet may have no disposition to dance a samba while reciting the alphabet, but they do have a disposition to do so if they tried to. This basic idea can be traced back to Moore (1912), but it has recently had a revival in the work of the so-called new dispositionalists (Smith 2003, Vihvelin 2004, 2013, Fara 2008). Others have attempted to spell out abilities in terms of dispositions for success (Ryle 1949, Greco 2010, Sosa 2007, 2015). In this paper, we will examine the relation between abilities and dispositions and argue that all of the existing views come with significant problems.²

Before we start, it needs to be noted that it is generally taken for granted that abilities come in two kinds. On the one hand, there are general abilities: abilities that have to do with what the agent can do across a large range of circumstances. On the other hand, there are specific abilities: abilities that have to do with what the agent can do in a particular situation.³ It is not always entirely clear which kind of abilities those in favor of a dispositionalist account of abilities are targeting. We will therefore evaluate the prospects of dispositionalist accounts with respect to both kinds of abilities.

Primer: abilities, conditionals, dispositions

Once upon a time, it was thought that abilities could be analyzed through a simple counterfactual conditional, along the following lines:

² For a more general introduction to agents' abilities, see Clarke (2015).

The distinction goes by a variety of names. Whittle (2010) speaks of local vs. global abilities, Berofsky (2002) speaks of token vs. type abilities. Vihvelin (2013: 11) distinguishes between narrow abilities (which agents possess in virtue of their intrinsic properties alone) and wide abilities (which in addition require facts about their surroundings). The distinction is related but not identical to ours: by being drunk we lose the narrow, but not the general ability to do a handstand.

(Simple Ability) An agent has an ability to Φ iff the agent would Φ if she tried (intended, chose, wanted...) to Φ .⁴

(Simple Ability) goes back to Moore (1912) and has been very influential in the literature on free will, where many have taken the view to guide the way towards a compatibilist account of freedom and determinism. *Pace* the standard incompatibilist argument (van Inwagen 1983), (Simple Ability) yields that determinism is in fact compatible with the ability to act otherwise. That is because even if an agent is determined to act in a certain way, it may well be true that she would have acted otherwise, had she tried to do so. Hence, the argument goes, agents often could have acted otherwise even if determinism is true.

(Simple Ability) is almost uncontroversially false. Here are two kinds of counterexamples.⁵ The first kind are *masked abilities*. An agent may have an ability, but something may go wrong upon her trying to exercise it (Austin 1956, Fara 2008). One's ability to do a handstand does not vanish every time one is drunk or on a shaky boat, for instance. But in such situations, it is not true that one would do a handstand, if one tried to do so. Hence (Simple Ability) does not state a *necessary* condition for the truth of an ability ascription.

This is particularly obvious in the case of general abilities. General abilities are a matter primarily of the agent's stable and largely intrinsic properties; thus one's ability to do a handstand, once acquired, is not affected by such temporary impediments as being drunk or such external factors as being on a boat. The counterfactual on the right-hand side of (Simple Ability), on the other hand, is as sensitive to those temporary and external factors as it is to the stable intrinsic features of the agent in question.

In the case of specific abilities, there is some wiggle room. Perhaps what qualifies as a mask in the case of a general ability really deprives the agent of her specific ability? Note, however, that the counterfactual fails to be met whenever the agent *actually* tries to do something and fails. To defend the conditional analysis for specific abilities, one will have to be prepared to defend a view of specific abilities, according to which the having of a specific ability is incompatible with failure. You try to pick up a coin. It slips. Did you therefore lack the specific ability to pick it up in the situation you were in? To avoid problems with masks a defender of (Simple Ability) will have to be prepared to answer in the affirmative.

The second kind of counterexample are cases of *averted attempts*. Suppose Betty is in a coma (van Inwagen 1983: 119) and hence unable to raise her arm. This case poses a problem for (Simple Ability), because the counterfactual "If Betty tried to raise her arm, then Betty would raise her arm" is in fact true. The coma is an impediment not only to Betty's raising her arm but also to Betty's trying to raise her arm in the first place. Thus, the antecedent specifies a state that can only obtain when Betty is not in a coma. And there is no reason why she should not raise her arm in such a case.

Different versions of this view differ on the motivational state in the antecedent of the counterfactual. For simplicity, we will work with one exemplary version of the view. Everything we say should apply, *mutatis mutandis*, for the other versions of the view.

⁵ Apart from these, there is an abundance of other problems with (Simple Ability); see Jaster 2016: ch.2.

The same goes for a phobic, who cannot bring himself even to try to touch a spider, let alone actually do the deed (Lehrer 1976). Such a phobic lacks the ability to touch a spider. But were he to try, he would touch it. After all, he would only try to touch it, if he were not a phobic. Hence there is no reason why he would not touch the spider in such a case.

Whether we focus on general or specific abilities does not make a difference in this case. A phobic not only lacks the general ability to touch a spider, she also lacks the specific ability to touch a spider in a particular situation. Cases of averted attempts show that (Simple Ability) does not state a sufficient condition for the truth of an ability ascription on either interpretation.^{6 7}

For quite some time, philosophers took (Simple Ability) to be a non-starter due to these and related counterexamples. This changed with more recent developments in the discussion of dispositions; so let us turn to dispositions next.

Once upon a time, it was thought that dispositions could be analyzed through a simple counterfactual conditional, along the following lines:

(Simple Disposition) x is fragile iff x would break if x were struck.

According to (Simple Disposition), a disposition such as fragility comes with a characteristic *stimulus* (in this case, being struck) and *manifestation* (in this case, breaking), and to have a disposition is to be such that one would show the manifestation if one were subject to the stimulus.

However, counterexamples to (Simple Disposition) are well rehearsed in the literature on dispositions. A disposition may be *finkish* if its bearer is such that, were the stimulus to occur, it would lose its disposition. Thus a live wire is disposed to conduct electricity when touched, but its disposition may be finkish because the wire is attached to a safety device that would turn it off as soon as it is touched. Conversely, an object may *finkishly lack* a disposition if it would acquire the disposition were the stimulus to occur; for an example, imagine an unsafety device that would turn a dead wire on if it were touched (Martin 1994, Lewis 1997). More commonly, dispositions may be *masked*: a fragile glass may be so nicely packed that even if were struck, it would not break. And an object lacking a disposition may yet *mimic* that disposition: a concrete block might, for instance, be such that it would break if were struck, because it is attached to an explosive device that would go off in the event of striking; yet the block remains sturdy rather than fragile (Johnston 1992, Bird 2005, Manley and Wasserman 2008).

More complex versions of (Simple Disposition) have been introduced and subjected to new counterexamples, the most famous such analysis being Lewis's "reformed conditional analysis" (Lewis 1997). Some think that an appropriately complex analysis will do the job

⁶ An analogous point is also made in Moore (1912: ch.6), Chisholm (1966), and Whittle (2010).

⁷ That is not to say that there is no good sense in which Betty can be said to *have* the ability to raise her arm, despite the coma. The point is just that there is a very good sense in which Betty is unable to raise her arm, due to her coma, and that this sense fails to be captured by (Simple Ability).

(Lewis 1997, Manley and Wasserman 2008, Vihvelin 2004, 2013, Hauska 2009, Steinberg 2010), or even that (Simple Disposition) can be salvaged (Choi 2008); others think that we need to look for an alternative analysis (Fara 2005, Vetter 2014), and yet others think that such counterexamples show that dispositions are unanalyzable (Martin 1994, Jacobs 2010).

Whichever way one goes, one lesson to adopt from the counterexamples is that disposition ascriptions differ from the counterfactual conditionals of (Simple Disposition) in a crucial respect: dispositions are a matter primarily of the object's stable and intrinsic properties; the glass's or the block's intrinsic make-up, for example, but not their being packed or attached to an explosive.⁸ Hence the glass remains fragile, and the block non-fragile, even when the former is packed and the latter linked up with the explosive. The counterfactual on the right-hand side of (Simple Disposition), however, is sensitive to all kinds of factors, from the glass's molecular structure to its packing, from a block being made of concrete to its being attached to an explosive, etc.

The New Dispositionalism

The basic idea of the new dispositionalism is just this: abilities are a kind of dispositions, and so the failure of a simple conditional analysis for abilities is just a special case of the failure of the simple conditional analysis for dispositions. Whatever explains the failure in the case of dispositions – Fara prefers a non-conditional analysis, Vihvelin (2013) a supplemented version of Lewis's reformed conditional analysis – may also be used to explain the counterexamples in the case of abilities. As an analysis of abilities, the new dispositionalism may remain silent on an analysis of dispositions; what matters is that we can understand abilities as a kind of dispositions. What kind of dispositions are abilities? The official statement of the new dispositionalism might be as follows:

(ND) An agent has the ability to Φ iff she has the disposition to Φ when she tries (intends, chooses, or wants) to Φ .

The official statement is a bit of an oversimplification. For Vihvelin, in particular, it captures "a highly interesting subset of our narrow [see fn.2] abilities" (2013: 175). More precisely, her view is that "[t]o have an ability to act is to have a disposition or bundle of dispositions" (Vihvelin 2013: 171, cf. also 2004: 431). We will return to this in a moment; for the time being, let us concentrate on ND.

Note that you can still see the main ingredient of (Simple Ability) shining through here. Just like (Simple Ability), ND analyses abilities in terms of a modal tie between attempts (intentions, choosings, etc.) and performances. However, the new dispositionalists make it

⁸ This is the paradigmatic case, but there are exceptions: as McKitrick (2003) has shown, disposition ascriptions are sometimes sensitive to extrinsic factors.

⁹ Cp. Fara 2008: 848; Vihvelin 2004: 438; Vihvelin 2013: 175.

very clear that they do not want this tie to be understood in terms of a simple counterfactual conditional.

Following up on Moore's original analysis, ND has been primarily put forward as a compatibilist contribution to the free will debate. According to ND, the ability to act otherwise turns out to be the disposition to act otherwise upon trying to do so, and that disposition is compatible with it being determined that the agent will not actually try to act otherwise or act otherwise. Compare: the lump of sugar's disposition to dissolve upon being placed in a liquid is compatible with its being determined that the sugar will not actually be placed in a liquid or dissolve. New dispositionalists are first and foremost compatibilists about freedom and determinism. Incompatibilists typically reject the dispositionalist analysis. Steward (2012), for instance, argues that abilities are two-way powers, which is to say that they are powers to do or to refrain from performing a particular act. 10

Our focus in this paper, however, is on ND as a view of abilities in its own right. And as an account of abilities in its own right, one of the main motivations for ND is that it solves the problem of masks. Masked abilities, like masked dispositions, are cases where the intrinsic mechanism responsible for the subject's behaviour (be it swimming or breaking) stays in place but is temporarily prevented from exercising by factors that are extrinsic to the subject (shaky boats or styrofoam packaging), or at least to the mechanism itself (being drunk). If dispositions can be masked, then the fact that abilities can be masked is no objection to the view that abilities are dispositions. So far, all seems well.

However, it is not clear how ND deals with averted attempts. It may well be claimed that Betty *does* have the disposition to raise her arm when trying to raise it and that the phobic *does* have the disposition to touch a spider when trying to do so. In response, the new dispositionalists offer two alternative strategies.

Fara (2008) makes a very basic point. He argues that no object ever has a disposition to M when C unless it is possible for the object to C:

if a rubber ball is nailed to the wall, and so cannot (in the relevant sense of "cannot") be dropped onto the floor, it is no more disposed to bounce when it is dropped than it is disposed to melt when it is dropped; it simply lacks any dispositions to behave one way or the other when it is placed in conditions that it cannot be placed in. (2008: 852).

Accordingly, Betty lacks the ability to raise her arm because it is impossible for her to try to do so. (And likewise for the phobic.)

¹⁰ See Clarke (2009) and Whittle (2010) for criticism of ND *qua* compatibilist project. Clarke and Whittle argue thatr ND is plausible at best for so-called general abilities – stable, relatively intrinsic features of an agent that are retained independently of her specific situation. But freedom of the will may require the more specific ability to act otherwise given the agent's situation. Our arguments in what follows are independent of whether ND is taken as an account of general or specific abilities.

However, the principle that no object ever has a disposition to M when C unless it is possible for the object to C is highly questionable. As Clarke (2009) points out, it yields the implausible result that the having of a seemingly intrinsic disposition - such as the bounciness of a rubber ball or the solubility of salt - should depend on extrinsic features of the object's situation - such as the ball's being nailed to the wall or the salt's being enclosed in an unbreakable container. This is not to say that dispositions cannot depend on extrinsic factors, and thus be themselves extrinsic (see McKitrick 2003); but Fara's response would leave hardly any dispositions intrinsic. Thus, Fara's argument seems dubious as it stands.

Vihvelin tells a more complex story (which we will have to compress and rearrange a little for reasons of space; for the sake of readability we will apply Vihvelin's remarks on different but clearly parallel cases to our own case of comatose Betty). We can get into the story by noting, first, that Betty's case is underdescribed. If Betty were to try to raise her arm, she would do so; but does this conditional correspond to a disposition? Only if the conditional is a causal, as opposed to backtracking, counterfactual; and only if its truth is guaranteed by some mechanism that is intrinsic to Betty and forms the basis of the disposition. (Cp. Vihvelin 2013:207f.) Now, the coma in our example might work in two different ways: by disabling the very mechanism that underlies Betty's (pre-coma) disposition to raise her arm if she tries to do so; or by leaving the mechanism intact but preventing Betty from trying. In the first case, Vihvelin's view renders the verdict that Betty is unable to raise her arm: she simply has no disposition to raise her arm when she tries to do so. The more interesting case is the second. Here Betty does have a disposition to raise her arm if she so tries. But does she have the ability to raise her arm? Vihvelin says: yes and no. Ability ascriptions are context-sensitive: in some contexts, we might describe her state precisely by saying that while she is able to raise her arm, she is unable to try it. In others, we may ignore such fine distinctions and simply say that Betty lacks the ability to raise her arm. (Cp. Vihvelin 2004: 444, and for a similar line of argument 2013: 205f.)

It is clear how Vihvelin can make sense of contexts where we want to say that Betty *is* able to raise her arm: in such contexts, it is precisely the disposition picked out by (ND) that we are ascribing to Betty. But what about contexts where we do not want to say so? It is here that the added complexity of Vihvelin's account pays off: to have an ability, she said, is to have a disposition *or a bundle of dispositions*. Betty has one disposition relevant to her ability to raise her arm, but she lacks others. Which dispositions belong into the bundle? That may vary with context, but Vihvelin gives us some clues. What Betty lacks, she says, is "the ability to choose, on the basis of reasons," to raise her arm (2004: 444; again, note that Vihvelin discusses a different but parallel case). And that ability, in turn, is a complex bundle of dispositions including "the disposition to form intentions (...) in response to her desires (...) and beliefs about how to achieve those desires; the disposition to engage in practical reasoning in response to her intention to make a rational (...) decision about what to do and

¹¹ Note that the possibility in question must be weaker than metaphysical possibility; otherwise the principle might look more plausible.

her belief that by engaging in practical reasoning she will succeed in making such a decision"; and other similar dispositions (Vihvelin 2004: 439).

We believe that this merely shifts the problem. For the coma may well work in the same way on the dispositions just mentioned (and any others that may be added to them): by leaving the underlying mechanism intact, but preventing their stimulus (desires, beliefs, intentions). This points, we believe, to an important disanalogy between dispositions and abilities. Dispositions, as we have argued against Fara, can be retained even if their stimulus is systematically blocked. To have a disposition is to have an intrinsic mechanism that would lead from an input (stimulus) to an output (manifestation), and such a mechanism may continue to exist without ever getting any actual input to work on. But to have an ability, at least in one important sense of "ability", an agent must be able to initiate the action in question. Merely having the relevant mechanisms in place is not enough; we must be able to supply it with some input.

To dramatize the point somewhat, imagine Betty's coma to work in exactly this way: it prevents her from having any mental states at all, but it leaves intact all the mechanisms that cause her to go from one mental state to another. In addition, let us switch the example to one where all the required inputs are plausibly mental states: say, the ability to add 279 and 315 in her head. There is a very good sense of "ability" in which comatose Betty lacks that ability. But by stipulation, all her relevant dispositions are intact.

We do not presume that the case is closed with these remarks; but we conclude that averted attempts are not just a far-fetched counterexample to ND but point to a disanalogy between abilities and dispositions that ND, even in its sophisticated Vihvelinian form, cannot so far capture.

Given ND's trouble to account for cases of averted attempts, we remain doubtful that ND states a sufficient condition for the truth of ability ascriptions quite generally. In the next section, we want to raise some considerations that suggest that ND might not state a necessary condition either.

New Problems for the New Dispositionalism

Our first consideration is linked with the fact that the new dispositionalists are, as we have stressed, first and foremost compatibilists about free will. Accordingly, their analysis is tailored to the abilities relevant for free will: abilities to perform intentional actions (Fara 2008:849). Let us call such abilities *agentive*. But it is not clear how the analysis should incorporate abilities of other kinds. Obviously, the view is not particularly well-suited to account for cognitive abilities, like the ability to form a judgment, draw an inference or reason from evidence, or indeed for perceptual abilities, like the ability to see, smell, or hear. The exercise of those abilities, unlike that of abilities for intentional action, depends not on our trying to exercise them but on the presence of stimuli to which our cognitive systems respond – whether or not we try to exercise them. (Consider: the ability to understand French or read written text may be exercised even against the agent's intentions, as when she is trying not to

listen in to a conversation or trying to ignore the advertisements she is passing by.¹²) Abilities like these do not seem to be properly accounted for in terms of a tie between attempts and performances that is postulated by ND.¹³

Since ND is a claim about abilities for intentional actions, these are not strictly counterexamples to the account. But if we are interested in abilities not just for the sake of compatibilism, we may well want to take a broader view. It appears that there is a notion of ability that includes both agentive and non-agentive abilities;¹⁴ and ND does not, it seems, provide us with the means to capture that notion.

But there are cases even of agentive abilities where the relevant factor appears not to be a (dispositional) tie between attempt and action. Agents may have abilities that they are not disposed to exercise, even when trying to do so. This may be so for one (or both) of two reasons: because attempts just aren't the kind of triggers that trigger the ability's exercise; or because they are the right kind of triggers, but they do not *reliably* trigger the ability's exercise.

As an example for the first kind of case, consider creative abilities. The ability to write great poems, to compose beautiful music or to produce innovative art may not be reliably triggered by the artist's trying to do these things. In fact, trying may be counter-productive. What is needed may, rather, be inspiration, a spur of the moment; the artist may feel "overcome" with an idea over lunch, or while taking a shower, after days, months or years of unproductive trying. In such cases, it does not seem to be the case that the artist is disposed to produce the creative feat upon trying to do so.¹⁵

But even when trying is the right kind of trigger, an agent may possess an ability to Φ without having the disposition to Φ when trying to do so. Dispositions come with a particular modal profile: if one is disposed to M when C, one will M across a relatively wide range of possible circumstances where one is in C (Manley and Wasserman 2008). In other words: a

¹² This last example is from Löwenstein forthcoming. Van Inwagen (1983: 10-12) draws a distinction between these cases, which he calls "capacities", on the one hand and "abilities" on the other. But his use of the term "ability" is in any case much more restrictive than ours (excluding also what he calls "skills" and what we have called general abilities).

¹³ Vihvelin (2013: 180) acknowledges that some abilities are not properly accounted for in terms of a tie between tryings and performances, but she does not offer an alternative general characterization. Sosa (2015: 95) characterizes abilities (or "competences"), including cognitive ones, as dispositions "to succeed when one tries". But first, there are some abilities that resist characterization in terms of trying, such as the abilities to read unintentionally or without trying (see Löwenstein forthcoming). And second, it would seem that with perceptual abilities, for instance, trying (in some very broad sense) is at best the background condition, while the relevant stimulus to the ability's exercise is the presence of the right kind of perceptible object.

¹⁴ In fact, this is presupposed whenever arguments run from agential to cognitive abilities, as for instance in virtue epistemology (see the next section), or in an ability-based account of concepts, cf. Millikan (2000).

Actually, on some conceptions of trying, any intentional action includes an act of trying (see Hornsby 1980, O'Shaughnessy 1980). On such views, the artist will have attempted to produce the work of art, so long as we can count her creation as an intentional action. However, it does not follow that she was *disposed* to produce the work upon trying to do so – for that, trying is still far too unreliable a way of bringing about the creative feat. If anything, we might say that she is disposed to produce the work of art upon being inspired. – The example, and a more nuanced reaction to different conceptions of trying, can be found in Vetter forthcoming.

disposition may not always manifest in the right kind of circumstances, but at least in non-masked and non-finkish cases, it must do so with reasonable reliability. However, the degree of reliability that is required of an ability can vary widely, and there are some clear cases where reliability is not required at all. Creative abilities provide a case in point again. An innovative artist may not be *disposed* to produce innovative art under any conditions; it may be a once- or twice-in-a-lifetime achievement.

Nor is the phenomenon limited to the creative realm. Usain Bolt has the ability to run 100m in under 9.58 seconds, but he does not have a disposition to do so when trying to do so. After all, he almost always fails to exercise the ability when trying to do so. The disposition to run 100m in 9.58 seconds when trying to do so requires a certain degree of reliability, though the exact degree may vary between contexts (Manley & Wasserman 2008). But we are often quite willing to ascribe the ability on the basis of very few performances. (Some think that even one single performance may be enough in exceptional cases. Kenny (1976: 214) gives the example of "pushing one's wife in a wheelbarrow along a tightrope stretched across Niagara Falls" as one where, he holds, a "single performance may suffice" to establish an agent's ability.) Hence, ND fails to account for abilities whenever the degree of reliability required for the ascription of that ability is lower than for the corresponding disposition. Taken together, these cases cast doubt upon the new dispositionalist's claim that abilities are dispositions to Φ when trying to Φ .

What these cases have in common, though, is that the exercise of the relevant ability constitutes an *achievement*. Both Bolt and the innovative artist are exceptionally *good at* what they are doing. Even where we are not dealing with exceptional accomplishments, it appears that abilities often bear some relation to such notions as achievement and success. Witness the comparatives for ordinary dispositions and abilities: we say that one glass is *more* fragile than another, but that one person is *better* able to play the piano or hit the bull's eye than another. Even the simple cognitive and perceptual abilities are a matter of our relevant mechanisms, biological and cognitive, functioning *well*.

The new dispositionalists are not oblivious to the role of success. Doing what one tries to do is, after all, a kind of success. But maybe the notions of success and achievement hold the key to a more general understanding of abilities, one which accommodates even the cases where attempts do not seem to play the role stipulated by ND? We turn now to a less prominent understanding of abilities in terms of dispositions that looks promising in just this way.

Abilities and success

The link between abilities and success has been stressed by philosophers coming from a number of different directions. Ryle, in writing about knowing how, stresses the importance of a performance "com[ing] up to certain standards, or satisfy[ing] certain criteria" (Ryle 1949:28). Millikan, in discussing cognitive abilities, argues that an ability must be identified

by its evolutionary function (Millikan 2000:ch. 4.6).¹⁶ Most prominently, perhaps, virtue reliabilists such as Greco (2007, 2010, 2012) and Sosa (2007, 2015) have stressed the idea that abilities are "dispositions to succeed" (Sosa 2015: 95), and used this idea to account for the evaluative dimensions of epistemology.

But how exactly is success to be incorporated into a characterization of abilities? One option appears to be suggested by Ryle:

What is involved in our descriptions of people as knowing how to make and appreciate jokes, to talk grammatically, to play chess, to fish, or to argue? Part of what is meant is that, when they perform these operations, they tend to perform them well, i.e. correctly or efficiently or successfully. (Ryle 1949:29)¹⁷

On such a view, we do not characterize an ability in terms of the conditions under which an agent is disposed to exercise it, as with ND. Rather, we characterize it in terms of *how* it is exercised, when it is exercised at all:

(Success) An ability to Φ is a disposition to Φ well or successfully, when Φ ing at all.

We can read a view of this sort into (or out of) a version of virtue epistemology which is sometimes called "virtue reliabilism". According to virtue reliabilism, to know is to have a true belief whose truth is owed to the exercise of one's cognitive abilities (Greco 2010, Sosa 2007). When virtue reliabilists spell out what it is to have such an ability, they tend to refer to success and achievement, and can be interpreted along the lines of (Success). This is a crucial part of their epistemological project, allowing, for instance, a virtue reliabilist answer to the *Meno* question: why is knowledge better than mere true belief? The answer is that, *qua* exercise of an ability, knowledge is an *achievement*. (Greco 2010, Riggs 2007, Sosa 2015)

(Success) seems tailored to the cases that motivated our focus on success and achievement: an artist is an able artist, and a runner is an able runner, because if they were to produce a work of art or run a given distance, they would (generally) do so well: that's what it is to be a great artist or a great runner. Moreover, because intending or trying play no role in (Success), we should expect it to avoid the problems of ND that were related to those notions.

Millikan explicitly denies that abilities *are* dispositions, claiming that abilities "are distinct from dispositions in having a necessary involvement in the purposive and nonaccidental order" (Millikan 2000: 58). But she also holds that "[t]o an ability there always corresponds a disposition" (61). We do not discuss Millikan's proposal here because it is not strictly a dispositional one-

¹⁷ Ryle goes on to stress that this is only part of what is meant, but for reasons different from the ones we are about to give.

Here are two examples: "A competence is a disposition, with a basis resident in the competent agent, one that would in appropriately normal conditions ensure (or make highly likely) the success of any relevant performance issued by it." (Sosa 2007: 29) "S has an ability A(R/C) relative to environment E = Across the set of relevantly close worlds W where S is in C and in E, S has a high rate of success in achieving R." (Greco 2010: 77) As mentioned in footnote 12, in more recent work Sosa can be read as subscribing to (ND).

But let us take a closer look at our cases of impeded intention. Consider Betty again: she is in a coma and unable to raise her arm. (Success) need not be bothered by the fact that Betty would not be in a coma if she intended to raise her arm, but the problem rears its head in the form of our new stimulus condition: if Betty were to raise her arm at all, she would be out of her coma, and so presumably she would succeed in raising her arm.

And in fact, this kind of triviality looms even with the paradigmatically success-related cases of artists and runners. Consider: in the case of Usain Bolt, we get the positive verdict that we wanted, but we get it too cheaply. Of course, if he were to run 100m in less than 9.58 seconds, he would do so successfully. But the same is true of his running 100m in less than 5 seconds, a feat of which even Bolt is presumably incapable. The problem here is that the description of the action *already includes* its success: "raising one's arm" and "running 100m in 9.58 seconds" are success verbs. Likewise for "writing a brilliant poem" or "composing beautiful music": there is no way to do the thing without succeeding at it.

The point is not merely verbal. For some activities, doing the thing and doing it successfully are simply not separable. If you raise your hand or move your eyes, then you have automatically reached the standard of success for raising your hand (your hand is up) or moving your eye (your eye is now in a different position). If you do not meet that standard of success, you simply have not raised your hand or moved your eye. But that makes the corresponding dispositions à la (Success) trivial: everyone is disposed to raise their hand successfully if they raised their hand, given that successful hand-raising *just is* hand-raising *simpliciter*.¹⁹

While voicing a promising idea, (Success) therefore does not seem convincing. The problem with averted attempts remains. And some of the cases that raised doubts about the new dispositionalism turn out to be a problem for (Success) as well. In the case of the new dispositionalism, these cases were problematic because the agents had a too low quota of success in order to count as having the disposition in question. In the caes of (Success), the same cases are problematic because they show that the success condition is too easily met.

Conclusion

In this paper, we have distinguished two dispositionalist views of abilities. According to the new dispositionalism, an agent has an ability to Φ iff they have a disposition to Φ when trying to Φ . According to (Success), an agent has an ability to Φ iff they have a disposition to Φ successfully when Φ ing at all. We then argued that while both views have the merit of accounting for masked abilities, they come with a variety of problems which ultimately cast doubt upon the project of accounting for abilities in dispositionalist terms.

Both views failed, or at least had significant trouble, to account for cases of averted attemps. The coma patient does seem to have the disposition to raise her hand when trying to do so, as well as the disposition to raise her hand successfully when raising it at all.

¹⁹ See Vetter forthcoming for a more detailed version of this argument.

Moreover, each view comes with its own set of problems. The new dispositionalism has problems with abilities whose exercises have a stimulus other than trying (or some other motivational state on the agent's part). Creative abilities were a case in point. It also runs into the problem of reliability. Dispositions require a comparably high quota of manifestations across the stimulus-worlds. Some abilities, however, require a rather low quota of exercises across worlds where the attempt is made. This is a problem for the new dispositionalism, because it seems as though an agent can have an ability without having the relevant disposition.

(Success) does not have these problems. It does not have the problem of the wrong stimulus, because it does not emphasize the stimulus in the first place. And it does not have the problem of reliability, because it has the reverse problem of triviality: *whenever* Usain Bolt runs 100m in less than 5 seconds, he does it successfully. Thus, (Success) predicts for agents to have all kinds of abilities which they actually lack.

Note that the problem of the wrong stimulus and the problem of triviality result from the way the new dispositionalism and (Success) spell out the dispositionalist scheme. This may invite the suggestion to try and tinker with the details of the views to get rid of the problems. One idea would be to circumvent both problems by integrating the core idea of each view as follows:

NEW. An agent S has an ability to Φ iff S has a disposition to Φ in situations in which Φ ing is a success.

NEW avoids the problem of the wrong stimulus because it is neutral with respect to the exact stimulus (different kinds of situations may be such that Φ ing is a success). Moreover, it does not yield that Usain Bolt has the ability to run 100m in any given time span whatsoever.

Regardless of whether this strategy is successful or not, however, the problem of averted attempts and the problem of reliability remain in place. And that is because these problems seem to have to do, not so much with the details of a *specific* dispositionalist view of abilities, but rather with the project of accounting for abilities in terms of dispositions as such. For what these two problems suggest is that dispositions and abilities, similar as they may be, seem to have a slightly different modal structure after all. And if that is true, abilities are not simply a specific kind of dispositions, no matter the details of the account.

References

Austin, John Langshaw. 'Ifs and Cans.' *Proceedings of the British Academy* 42 (1956): 109–32.

Berofsky, Bernard. 'Ifs, cans, and free will: The issues.' *The Oxford Handbook of Free Will*. Ed. Robert Kane. Oxford: Oxford University Press, 2002. 181-201.

Chisholm, Roderick. 'Freedom and Action.' *Freedom and Determinism*. Ed. Keith Lehrer. New York: Random House, 1966. Reprinted in: *The Nature of Human Action*. Ed. Myles Brand. Glenview, IL: Scott Foresman and Company, 1970. 283–292.

Choi, Sungho. 'Dispositional Properties and Counterfactual Conditionals.' *Mind* 117 (2008): 795–841.

Clarke, Randolph. 'Abilities to Act.' *Philosophy Compass* 10 (2015): 893–904.

Clarke, Randolph. 'Dispositions, Abilities to Act, and Free Will: The New Dispositionalism.' *Mind* 118 (2009): 323–351.

Fara, Michael. 'Dispositions and Habituals.' Noûs 39 (2005): 43-82.

Fara, Michael. 'Masked Abilities and Compatibilism.' Mind 117 (2008): 843–865.

Greco, John. 'The Nature of Ability and the Purpose of Knowledge.' *Philosophical Issues* 17 (2007): 57-69.

Greco, John. Achieving Knowledge. Cambridge: Cambridge University Press, 2010.

Greco, John. 'A (Different) Virtue Epistemology.' *Philosophy and Phenomenological Research* 85 (2012): 1–26.

Hauska, Jan. 'Dispositions Unmasked.' Theoria 75 (2009): 304-335.

Jacobs, Jonathan. 'A powers theory of modality: or, how I learned to stop worrying and reject possible worlds.' *Philosophical Studies* 151 (2010): 227-248.

Jaster, Romy. Agents' Abilities. Dissertation, Humboldt-Universität zu Berlin (2016).

Johnston, Mark. 'How to Speak of the Colors.' Philosophical Studies 68 (1992): 221-263.

Kenny, A. 'Human Abilities and Dynamic Modalities.' *Essays on Explanationa nd Understanding*. Ed. Juha Manninen and Raimo Tuomela. Dordrecht: Reidel, 1976. 209-232.

Lehrer, Keith. "Can' in Theory and Practice: A Possible World Analysis." *Action Theory*. Ed. Myles Brand and Douglas Walton. Dordrecht: D. Reidel, 1976. 241–270.

Lewis, David. 'Finkish Dispositions.' *The Philosophical Quarterly* 47 (1997): 143–158.

Löwenstein, David. *The Concept of Competence - A Rylean Responsibilist Account of Know-how*. Frankfurt am Main: Vittorio Klostermann, fortchoming.

Manley, David, and Ryan Wasserman: 'On Linking Dispositions and Conditionals.' *Mind* 117 (2008): 59-84.

Martin, C.B. 'Dispositions and Conditionals.' The Philosophical Quarterly 44 (1994): 1-8.

McKitrick, Jennifer. 'A Case for Extrinsic Dispositions.' *Australasian Journal of Philosophy* 81 (2003): 155–74.

Millikan, Ruth. On Clear and Confused Ideas. Cambridge: Cambridge University Press, 2000.

Moore, George Edward. Ethics. London: Williams & Norgate. 1912.

Ryle, Gilbert. The Concept of Mind, London: Hutchinson, 1949.

Sosa, Ernest. *Apt Belief and Reflective Knowledge, vol. I: A Virtue Epistemology.* Oxford: Oxford University Press, 2007.

Sosa, Ernest. *Judgment and Agency*, Oxford: Oxford University Press, 2015.

Smith, Michael. 'Rational Capacities.' *Weakness of Will and Practical Irrationality*. Ed. Sarah Stroud and Christine Tappolet. Oxford: Oxford University Press, 2003. 17–38.

Steinberg, Jesse. 'Dispositions and Subjunctives.' *Philosophical Studies* 148 (2010):323-341. van Inwagen, Peter. *An Essay on Free Will*. Oxford: Oxford University Press, 1983.

Vetter, Barbara. 'Dispositions without Conditionals.' Mind 123 (2014): 129-156.

Vetter, Barbara. 'Are Abilities Dispositions?' Synthese (forthcoming).

Vihvelin, Kadri. 'Free Will Demystified: A Dispositionalist Account.' *Philosophical Topics* 32 (2004): 427–450.

Vihvelin, Kadri. Causes, Laws, and Free Will: Why Determinism Doesn't Matter. Oxford: Oxford University Press, 2013.

Whittle, Ann. 'Dispositional Abilities.' Philosophers' Imprint 10 (2010): 1–23.