Know How and Skill: The Puzzles of Priority and Equivalence

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1. Introduction

My subject is the relationship between knowledge-how and a family of notions tied to success in action—including skills, dispositions, and intentional actions. The nature of this relationship is puzzling. One reason for this is that while some considerations suggest that knowledge-how is the explanatorily basic notion—that can be used to explain success in action—other considerations suggest exactly the opposite.

It can be natural, for example, to explain Ish Sodhi's haul of five wickets in a cricket match, or his ability to bowl out tailenders, by noting that he knows how to bowl a wrong-un. However, when we ask 'What does Sodhi's knowledge how to bowl a wrong-un consist in?' it seems equally natural to reach for one of these success-in-action notions—suggesting that any explanatory priority here runs in the other direction. More generally, one often finds claims that a given type of knowledge-how is *grounded* or *embodied* in skills, dispositions, or abilities. For example, Sayre-McCord (1996: 137) claims that moral know-how is "embodied in a range of capacities, abilities, and skills".

Another reason why this relationship is puzzling has to do with certain equivalence theses linking knowledge-how and success in action. That there are significant connections, of some kind, between knowing-how and intentional action is uncontroversial. Furthermore, there is, I think, an emerging consensus that, when interpreted in the right way, both of the following principles are correct:

(AB \rightarrow KH): If S has the ability to Φ intentionally then S knows how to Φ .

(KH \rightarrow AB): If S knows how to Φ then S has the ability to Φ intentionally

In which case, we can derive the following equivalence thesis:

(KH \equiv AB) *S* knows how to Φ if and only if *S* has the ability to Φ intentionally Similarly, Pavese (2016b) has identified the following plausible equivalence theses linking knowledge-how with skill:

(KH \equiv SK₁): *S* knows how to Φ if and only if *S* has the skill to Φ .

(KH \equiv SK₂): S knows how to Φ sufficiently well if and only if S is skilled at Φ -ing

I will simply defer here to existing defences of $(AB \rightarrow KH)$ and $(KH \rightarrow AB)$, and to Pavese's case for $(KH \equiv SK_1)$ and $(KH \equiv SK_2)$. For my interest is in what follows if we assume that these theses are true.

One issue here is that it is not easy to see how these equivalence theses can be reconciled with the kinds of *asymmetric* explanations mentioned above, whichever direction they

run in. Similarly, these equivalence theses are puzzling for *intellectualists* who not only want to claim that knowledge-how is a kind of knowledge-that, but also that states of knowing-how are explanatorily prior to abilities or skills (e.g. Stanley and Krakauer (2013)). And these equivalence theses are also puzzling for theorists who hold that skills are explanatorily prior to knowledge-how (e.g. Dickie (2012) and Weatherson (2017)). The worry, in both cases, is that these equivalence theses might push us towards simply identifying knowing-how with skills or abilities, in which case neither is prior to the other.

My aim in this chapter is to explore one interesting way in which these issues—concerning equivalence and priority—might be solved by someone who is minimally committed to some form of "weak" (Glick 2011) or "revisionary" intellectualism (Cath 2015), such that knowledge-how is at least some kind of propositional attitude state. In §2 I will identify certain prima facie concerns one might have with existing ideas that an intellectualist might appeal to in trying to accommodate (KH≡AB). In §3 I will sketch a novel version of intellectualism—practical attitude intellectualism—and I show how this view can explain (KH≡AB), and also (KH≡SK₁) and (KH≡SK₂), without encountering these same difficulties. And in §4 I consider how PA-intellectualism might help us to make sense of the priority issues.

2. Intellectualism and (KH≡AB)

If $(KH\equiv AB)$ is correct, what does this show us about knowledge-how? An antiintellectualist might conclude that knowing-how to Φ is nothing more than the ability to Φ intentionally, and not any kind of knowledge-that. The mere assumption that $(KH\equiv AB)$ is true does not force us to accept such a position. But, nonetheless, an intellectualist needs to explain how their view can accommodate $(KH\equiv AB)$. And this is challenging with respect to both directions of $(KH\equiv AB)$.

2.1 Intellectualism and $(KH \rightarrow AB)$

Starting with (KH \rightarrow AB), how might an intellectualist account for the assumption that the ability to Φ is a precondition of knowing how to Φ ? One approach would be to endorse the following view from Stanley and Williamson (2001):

<u>Practical Mode (PM) Intellectualism</u>: S knows how to Φ iff for some way w, (i) S knows that w is a way for S to Φ , and (ii) in possessing this knowledge, S entertains w under a practical mode of presentation.

Stanley and Williamson (henceforth 'S&W') (2001: 429) suggest that: "thinking of a way under a practical mode of presentation undoubtedly entails the possession of certain complex dispositions." This is not the same thing as saying that it entails the ability to Φ intentionally. But one might hope that, when suitably characterised, this complex of dispositions will be such that possessing it entails that ability.

What exactly is a PMP? S&W themselves (2001) offered a "Russellian" account on which it is a special way of being related to the coarse-grained proposition that is the content of one's knowledge. More recently, Stanley (2011) and Pavese (2013; 2015) have developed different "Fregean" accounts on which a PMP is a special constituent of a fine-grained proposition that is the object of one's knowledge.

This is not the place for a proper evaluation of PM-intellectualism, so I will merely make note of some prima facie concerns. A standard worry about S&W's (2001)

account is that it leaves the nature of PMPs mysterious or unmotivated (Glick (2015), Schiffer (2002), Noë (2005)). This is because S&W tell us little about the exact natural of the PMPs that they appeal to, beyond a not very filled out analogy with indexical modes of presentation.

One concern about Fregean accounts is that when PMPs are understood in this way it is not clear that a PMP condition would be a genuinely necessary condition on knowing how to Φ . Consider someone who merely knows lots of true propositions about ways for Φ -ing but does not know how to Φ . Hannah might have had studied lots of books about riding bicycles, and observed people riding bicycles etc., but if she has never tried to ride a bicycle she won't know how to do so. The Fregean holds that whenever someone makes the transition from mere knowledge-that to knowing how to Φ there must be a *practical proposition* (Pavese 2015)—which has a PMP as a constituent—that the subject now knows for the very first time. But often the only changes one can clearly point to after a subject makes such a transition is that they have new dispositions related to Φ -ing (to e.g. succeed in Φ -ing when they intend to Φ). The special contents that the Fregean posits might explain the possession of such dispositions in some cases, but are they really necessary for knowing how to Φ ? Suppose Hannah merely acquired the new dispositions in some way that didn't involve a PMP, wouldn't she still come to know how to Φ ?

There are, of course, lots of things that a PM-intellectualist might say in response to such concerns.² My aim here is *not* to try to provide definitive arguments against PM-intellectualism, and the view I will go on to offer is consistent with PM-intellectualism. But I do think the worries that have been raised in the literature about PMPs³ should at least motivate intellectualists to consider other ways of explaining (KH \rightarrow AB). In §3 I will offer my own way of explaining (KH \rightarrow AB) which does not appeal to PMPs. However, another alternative (suggested by ideas in Brogaard (2009) and Stanley (2011)) is worth considering first.

Intellectualists hold that only one of the four legitimate disambiguations of a 'S knows how to Φ ' ascription attributes the practical knowledge that is at stake in the "knowing how" debates. On this disambiguation, a 'S knows how to Φ ' ascription is, roughly, equivalent to the claim 'For some way w, S knows that w is a way that S can Φ in circumstances C'. In which case, given the factivity of knowledge, an 'S knows how to Φ ' ascription entails a corresponding 'S can Φ in circumstances C' ascription. This is not the same thing as saying that it entails 'S has the ability to Φ intentionally', but it is close. And an intellectualist might maintain that, rightly interpreted, the relevant 'S can Φ ' ascription will entail an 'S has the ability to Φ intentionally' ascription. Could an intellectualist feel satisfied with this explanation of (KH \to AB)?

Intellectualism is just the thesis that knowing-how is a kind of knowing-that. However, many intellectualists also want to claim that knowledge-how has some kind of explanatory priority over abilities, or at least deny that the reverse is true. And the ideas just described might seem to be in tension with those assumptions. For the suggestion is that knowledge-how is, roughly, a matter of knowing that one has a certain kind of ability. But then wouldn't one have to, *first*, have this ability in order for one to then, *subsequently*, come to know that one has it? In which case, it would appear that it is abilities that are explanatorily prior to knowledge-how.

The intellectualist seems to face a dilemma. Either the relevant entailed 'S can Φ ' ascription is one that itself entails 'S has the ability to Φ intentionally' or it does not. If the latter is true, then the entailment fact cannot explain (KH \rightarrow AB). On the other hand,

if the former is true then the entailment fact can explain (KH \rightarrow AB) but this explanation seems to commit one to the claim that the ability to Φ intentionally is explanatorily prior to knowing how to Φ , a claim which most intellectualists would reject.

2.2 Intellectualism and $(AB \rightarrow KH)$

What about (AB \rightarrow KH)? Why is knowing how to Φ a precondition for having the ability to Φ intentionally? Like Kumar (2009), I don't think the role of knowledge-how is to do with the *initiation* of actions. Rather, the role of knowledge-how has to do with actions being under one's or *control* or *guidance*. More precisely, (AB \rightarrow KH) is true because: (i) intentional actions are under one's control or guidance, and (ii) an action is under one's control or guidance only if one knows how to perform it (Cath (2015), Gibbons (2001), Pavese (2015; 2018)).

Intellectualists and anti-intellectualists alike can accept these points. Furthermore, an intellectualist can claim that their view offers us a promising explanation of why it is the case that an action is under one's control or guidance only if one knows how to perform it. It is common in the philosophy of action to hold that it is a necessary condition of Φ -ing intentionally that one possess an *action plan* for Φ -ing. And, as Pavese (2018) has shown, an intellectualist can make a reasonable argument that possessing such a plan is a matter of possessing a relevant intellectualist belief of the form 'w is a way for me to Φ '.

Intellectualists can appeal to an attractive package of views then to help explain (AB \rightarrow KH). But (AB \rightarrow KH) is also deeply problematic for intellectualists because, as Cath (2009; 2011) discusses, this thesis can be used to support putative counterexamples to their view. For example, Cath presents three different scenarios each of which is meant to be a case where, intuitively, a subject knows how to Φ but does not know, of the relevant way w, that w is a way for themselves to Φ . With respect to each case, the denial of knowledge-that is based on the claim that the subjects fails to satisfy one of three orthodox constraints on knowledge-that: the anti-luck or 'Gettier' condition, the justified belief condition, or the belief condition. The knowledge-how attribution is based on an appeal to intuition but, as Cath discusses, it can also be supported by (AB \rightarrow KH). The reason being that, for each scenario, there is a strong case to be made that the subject still has the ability to Φ intentionally on the grounds that they would still succeed in Φ -ing in a controlled manner if they were to try to Φ in the relevant way. And if the subject has the ability to Φ intentionally, and (AB \rightarrow KH) is true, then it follows that they know how to Φ .

3. PA-Intellectualism and (KH≡AB)

There are two main theses associated with 'Rylean' or 'anti-intellectualist' views of knowledge-how, one negative and one positive. The negative thesis is that knowledge-how is not a kind of knowledge-that. The positive thesis is that it is a complex dispositional state. The negative thesis is just the denial of intellectualism and, hence, is well deserving of the label 'anti-intellectualism'. But the positive thesis is also associated with 'anti-intellectualism', reflecting the fact that philosophers often assume that intellectualism is inconsistent with the positive thesis.

This assumption is mistaken. An easy way to see this, is to note that the thesis that knowing-how is a kind of knowing-that, is perfectly compatible with a dispositional

account of the nature of propositional attitudes themselves, including the knowledge-that relation. This point has been noted before (see e.g. Cath (2009; 2015), Stanley (2011b), and Weatherson (2017)) but I think its importance has not been fully appreciated, and it is still easy to find statements of this mistaken assumption. What I want to show now is how an intellectualist can use a dispositional theory of the propositional attitudes to account for (KH=AB) in ways that avoid the problems identified in §1.

3.1 Dispositional Attitudes

There have been many dispositional accounts of different propositional attitudes, including, of course, Ryle (1949). I will follow Schwitzgebel's (2002; 2010; 2013) "liberal" or "phenomenal" view. On Schwitzgebel's account, every propositional attitude towards a given proposition P is associated with a stereotype consisting of a set of different dispositional properties commonly associated with that attitude, and to stand in that attitude to P is for one to have a "dispositional profile" (that is, a cluster of dispositions) which matches that stereotype to some appropriate degree. And this view is non-reductive, in the sense that the relevant dispositions can include not only behaviourial dispositions but also dispositions to enter phenomenal and cognitive states.

Turning to beliefs specifically, a standard suggestion is that to believe that P is to be disposed to act and react as if P is the case. But, of course, there can be many different ways of acting and reacting as if P is the case. And, if we follow Schwitzgebel, the stereotype for believing that P can include not only dispositions to perform, or manifest, externally observable actions and reactions, but also internal actions and reactions (e.g. affirming in one's mind that P is the case). On a dispositionalist view then it is natural to think that there will be many different ways of believing that P, related to different subsets of this cluster of dispositions (Hunter (2011: 909)).

One kind of distinction we can make of this kind is between more "intellectual" versus more "practical" ways of believing that P. For example, the stereotype for believing that the ice on the pond is thin—to borrow a well-known example from Ryle (1949: 134–135)—will include more intellectual or cognitive dispositions (e.g. being disposed to say or think that the ice is thin), but also more action-orientated dispositions (e.g. being disposed to skate warily.). Furthermore, on Schwitzgebel's view, our background interests and values can result in one of these subsets of dispositions being more relevant than the other when making an attitude ascription:

Depending on our interests and values, we might, in attitude ascription, choose to emphasize one aspect of a stereotype relatively more than another. For example, we might be more concerned about a person's patterns of explicit endorsement than about the person's in-the-world lived behavior or vice versa. (Schwitzgebel 2013: 80)

With these ideas in mind, consider the following analysis of knowing-how:

S knows how to Φ iff there is some way w such that (i) S knows that w is a way for S to Φ , and (ii) S possesses that knowledge in a practical way.

What is involved in knowing, in a practical way, that w is a way for oneself to Φ ? A PM-intellectualist could endorse this analysis and say that it is a matter of one's knowledge involving a PMP. But the suggestion I want to make is that it is a matter of the dispositions, in virtue of which one believes that w is a way for oneself to Φ ,

including certain "practical" dispositions. The most straightforward way to develop this view would then be to build that requirement into the belief constraint on knowledge-that, like so:

<u>Practical Attitude (PA) Intellectualism</u>: S knows how to Φ iff for some way w, (i) S knows that w is a way for S to Φ , and (ii) in possessing this knowledge, S believes, in a practical way, that w is a way for S to Φ .

An intellectual way of possessing the belief that w is a way for oneself to Φ would be, for example, to possess a disposition to verbally affirm such a proposition when asked 'How can you Φ ?', or to affirm it in one's head, etc. On the other hand, I will say that to truly believe, in a practical way, that w is a way for oneself to Φ is for one's dispositional profile, in virtue of which one possesses this belief, to include some mix of *success* dispositions (e.g. being disposed to Φ in way Φ when one intends to Φ in that way) and *guidance* dispositions (e.g. being disposed to make adjustments when faced with obstacles when Φ -ing in way Φ , and being disposed to perform the next phase of an action of Φ -ing in way Φ at the right time). And the suggestion is that when we make a knowledge-how attribution we are typically interested in whether the subject has a belief state grounded in these practical dispositions.

3.2 PA-Intellectualism and $(KH \rightarrow AB)$

According to PA-intellectualism, knowing how to Φ is, at least partly, a matter of possessing success and guidance dispositions. In which case, PA-intellectualism can appeal to the practical belief condition to explain why (KH \rightarrow AB) is true. For the possessing of such dispositions is plausibly a sufficient condition for possessing the ability to Φ intentionally.⁶

PA-intellectualism is consistent with PM-intellectualism but it does not appeal to the notion of a PMP. Furthermore, PA-intellectualism avoids the worries raised for PMP views in $\S 2$. Unlike S&W's (2001) Russellian view, PA-intellectualism avoids the mystery worry because it appeals only to ordinary dispositions that we already have reason to accept, and a well-known theory of the propositional attitudes. And, unlike the Fregean forms of PM-intellectualism, PA-intellectualism does not commit one to the idea that the transition from mere knowledge-that to knowledge-how must always involve some newly known practical proposition. For the PA-intellectualist can account for that transition by appealing just to the new dispositions one acquires when one learns how to Φ , without the involvement of any special constituents of Fregean propositions.

PA-intellectualism can also help us to defuse the priority worries we identified for content-based approaches to explaining (KH \rightarrow AB). The worry was that if knowledge-how is knowledge of a certain ability, then wouldn't one have to, *first*, have this ability in order for one to then, *subsequently*, come to know that one has it? PA-intellectualism shows how one could block this concern whilst still maintaining that knowledge-how is a matter of knowing (in a practical way) that one has such an ability. For PA-intellectualism offers us a view on which the very same set of practical dispositions which ground one's state of knowing how to Φ will also ground one's ability to Φ intentionally. In which case, the ability to Φ intentionally would not exist prior to the state of knowing how to Φ and, hence, there would be no pressure to say that the former is explanatorily prior to the latter. (There are more questions to be asked about priority but I will forestall those until §4.)

3.3 PA-Intellectualism and $(AB \rightarrow KH)$

With respect to (AB \rightarrow KH), PA-intellectualism also provides us with a promising explanation of why knowing how to Φ is a precondition of having the ability to Φ intentionally. Following Hunter (2012), it is plausible that one Φ 's intentionally only if one possesses guidance dispositions when one Φ 's of the kind appealed to earlier. In which case, having the ability to Φ intentionally will plausibly entail having these guidance dispositions. Furthermore, having the ability to Φ intentionally plausibly entails being disposed to Φ in some way w when one intends to Φ in that way.

These points together suggest that having the ability to Φ intentionally entails believing, in a practical way, that w is a way for oneself to Φ (for some way w that actually is a way for oneself to Φ). For the very nature of intentional actions themselves is such that the dispositions involved in having the ability to Φ intentionally are the same dispositions involved in possessing such a belief. And, given this belief-entailment, the PA-intellectualist can reasonably claim that their view at least supports a form of weak or revisionary intellectualism according to which knowledge-how is, at least partly, a matter of possessing a true belief of this form.

Furthermore, I think the PA-intellectualist can appeal to these same resources to diagnose what is going on in the supposed counterexamples centred on the belief condition. Cath's (2009; 2011) case is an example where a subject, Jodie, knows how to juggle but then loses her relevant belief of the form 'w is a way for me to juggle' after she becomes aware of strong (albeit misleading) evidence that her genuine memories of juggling are merely apparent memories that misrepresent the way to juggle. Cath claims that, intuitively, Jodie would not thereby lose her knowledge how to juggle, a claim supported by the fact that if she were to try to juggle in that way, she would still succeed. And Cath notes that (AB→KH) can be used to support this knowledge-how attribution.

In reply, the PA-intellectualist could maintain that, yes, Jodie does not believe, *in an intellectual way*, that *w* is a way for her to juggle, but she does believe, *in a practical way*, that *w* is way for her to juggle. The suggestion would be that any inclination we have to say that Jodie lacks the relevant belief is driven by our awareness that she lacks the relevant intellectual dispositions (i.e. she is no longer disposed to endorse that proposition in words or thoughts), and the fact that an interest in intellectual dispositions often predominates when we consider bare belief ascriptions. But we are also aware that Jodie still has the relevant success and guidance dispositions, ⁸ and when we make knowledge-how attributions we are usually interested in whether the subject has a belief based in these practical dispositions. More would need to be said to fully develop this diagnosis of the Jodie case. But I think these points indicate the flexibility that the PA-intellectualist has in replying to examples like this. ⁹

What about the supposed counterexamples based on the anti-luck and justified belief conditions? An intellectualist could argue that, despite initial appearances to the contrary, the ability to Φ intentionally is subject to anti-luck and justified belief conditions (Stanley (2011), Pavese (2018)). That is, that one has the ability to Φ intentionally only if, for some way w, one has a non-Getterized and justified true belief that w is a way for oneself to Φ . My own view, following Cath (2015), is that intellectualists should instead embrace a form of revisionary intellectualism according

to which knowledge-how is a true belief state that is not subject to the standard antiluck and justified belief conditions.

3.4 PA-Intellectualism and $(KH = SK_1)$ and $(KH = SK_2)$

Turning to $(KH \equiv SK_1)$ and $(KH \equiv SK_2)$, I think the PA-intellectualist can account for these equivalence theses in the same way as $(KH \equiv AB)$. This is because I take it that skilled actions are a species of intentional action (Fridland (2010), S&W (2001), Noë (2005)). And, likewise, skills are simply a species of the ability to perform an action intentionally.

What distinguishes a skilled action from a merely intentional action? The key difference is that a skilled action meets a salient threshold of some normative standard of success. As Pavese (2016b) discusses, one can know how to Φ without being skilled at Φ -ing but knowing how to Φ sufficiently well (i.e. Φ -ing above some contextually salient threshold of success) does plausibly entail being skilled at Φ -ing (with respect to that same threshold). And merely knowing how to Φ still entails having some kind of minimal skill at Φ -ing, even if it is not correct to say that one is skilled at Φ -ing.

With these points in place, the PA-intellectualist can account for $(KH \equiv SK_1)$ and $(KH \equiv SK_2)$. Starting with the left-to-right directions, the PA-intellectualist will appeal, again, to the idea that knowing how to Φ requires the possession of success and guidance dispositions. For the possession of such dispositions will plausibly entail having some minimal skill at Φ -ing, thereby, accounting for $(KH \rightarrow SK_1)$. And if one knows how to Φ sufficiently well, then one will possess success and guidance dispositions with respect to the action of Φ -ing sufficiently well. And the possession of those dispositions will entail being skilled at Φ -ing, thereby accounting for $(KH \rightarrow SK_2)$.

If we take the right-to-left directions the intellectualist will face challenges and choices of the same kind as those raised by (AB \rightarrow KH). That is, intellectualism seems to conflict with (SK₁ \rightarrow KH) and (SK₂ \rightarrow KH) if one assumes that one can have a skill at Φ , or be skilled at Φ -ing, without meeting one or more of the standard anti-luck, justification, and belief conditions on knowledge-that. As with (AB \rightarrow KH), the intellectualist needs to choose between either arguing that skills are actually subject to the relevant condition, or conceding that they are not, but arguing that this assumption is still compatible with some form of revisionary intellectualism.

4. PA-Intellectualism and Priority

The aim now is to show how PA-intellectualism can help us to untangle some of the issues around apparently competing priority claims. Consider, first, the idea that knowing-how is grounded in dispositions, skills, or abilities. The PA-intellectualist can straightforwardly endorse at least one interpretation of this idea—namely, that knowledge-how is grounded in dispositions—given their commitment to a dispositional analysis of belief.

What about abilities and skills? As noted already, PA-intellectualism offer us a view on which one and the same set of dispositions can ground both one's state of knowing how to Φ , and one's ability to Φ intentionally. I think this suggests that we should adopt a 'no priority view' with regards to the relationship between knowledge-how and abilities. Rather, knowing how to Φ and possessing the ability to Φ intentionally might

be viewed more like two different aspects of one set of dispositions.¹¹ And the parallel position could be taken with respect to knowing how to Φ sufficiently well and being skilled at Φ -ing.

This is *not* to say though that we should identify knowledge-how with ability. PA-intellectualism tells us that if one knows how to Φ then the set of dispositions in virtue of which one believes that w is a way for oneself to Φ must include some success and guidance dispositions. But that requirement does not preclude other kinds of dispositions from forming part of the basis for that belief. It is true that PA-intellectualism also holds that one would know how to Φ even if one only possessed the action and guidance dispositions. But, even so, in most actual cases many other dispositions will be present in the dispositional profile in virtue of which one counts as believing that w is a way for oneself to Φ . And these other dispositions may sometimes play a key role in explaining successful and skilled actions.

Back in my glory days of backyard cricket, I used to sometimes struggle to bowl a wrong-un, and would instead end up bowling a standard leg spin delivery. When this happened, I would try to consciously recall the fact that a wrong-un should come out more from the back of one's hand with one's hand pointing towards fine leg, or I would try to visualise an action of bowling a wrong-un. And this would often help me to succeed the next time I tried to bowl a wrong-un.

On the liberal dispositional view, my dispositions to contemplate such propositions, or engage in such imaginings, can constitute part of the dispositional basis for my relevant belief of the form 'w is a way for me to bowl a wrong-un'. In which case, a PA-intellectualist can still say that my action of bowling a wrong-un is guided by my knowledge of how to bowl a wrong-un, even in these cases where my success is attributable to these more intellectual or cognitive dispositions. And one might also appeal to this point in explaining why it can sometimes be more appropriate, or informative, to explain someone's success in Φ -ing by citing their knowledge-how to Φ , rather than their abilities or skills.

Furthermore, even if we endorse the no-priority idea, we can still allow that there can be lots of true asymmetric explanations of knowledge-how in terms of abilities or skills, or vice versa. For whenever Φ is a non-basic action then there could still be legitimate explanations of S's knowing how to Φ in terms of S's ability to ψ , or S's ability to Φ in terms of S's knowing how to ψ , etc. And this is why we can explain, say, Sodhi's skill at bowling out tailenders in terms of his knowing how to bowl a wrong-un. The no-priority idea does suggest that often it will make little difference whether we explain Sodhi's skill by citing his knowledge how to bowl a wrong or, instead, his ability. But that seems to me to be a desirable consequence, because often it seems to make little difference which notion we appeal to when making such explanations.

5. Conclusions

I have explored PA-intellectualism, in part, because I think a lot can also be said in support of a dispositional approach to belief. However, I take it to be an open question what the best view of belief is and, hence, on those grounds alone I am unsure myself whether PA-intellectualism is true. That said, I hope to have shown how *if* a dispositional account of belief is correct then that fact might help us to unravel some of the tangled interconnections between knowledge-how and the different success in action notions.

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² Pavese (2015; fn. 4) suggests that her Fregean view could be reformulated in a Russellian framework, in which case neither of the above objections would apply to that version of her view. See also Pavese (2019).

¹ For a defence of both theses together see Pavese (2018). For discussions that support (AB→KH), see e.g. Cath (2009; 2011; 2015), Constantin (2017), Hawley (2003), Löwenstein (2017), and Setiya (2012). For discussions that support (KH→AB), see e.g. Cath (2015a), Glick (2012), Hawley (2003), Löwenstein (2017); Noë (2005); and Pavese (2015).

³ See Glick (2015) and Mosdell (2018) for further criticisms.

⁴ On this point see Stanley (2011: 126–128) who appeals to a reading of Hawley's (2003) notion of "counterfactual success". For discussion see Cath (2017) and Glick (2015).

⁵ For related arguments see Brownstein and Michaelson (2016), Carter and Ptichard (2015), Poston (2009), Wallis (2008), and Setiya (2008).

⁶ On one prominent views of abilities—the so-called 'simple view'—the ability to Φ is just identified with the disposition to Φ when one intends to Φ .

⁷ Given the lack of details built into S&W's (2001) notion of a PMP perhaps one could even regard PA-intellectualism as being a version of Russellian PM-intellectualism. But I don't think this is very important (cf. Bengson and Moffett (2007; fn. 32)).

⁸ And Jodie still has dispositions related to the *seeming analysis* of knowing-how that Cath (2011) discuses.

⁹ PA-intellectualists could also appeal to Schwitzgebel's (2001) work on "in-between" beliefs, or Brogaard's (2011) suggestion that knowledge-that, in general, does not entail belief.

¹⁰ See Pavese (2016b) for a different kind of 'no priority view'.

¹¹ Cf. Hunter's (2012) views on "practical knowledge" in Anscombe's sense.