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A Solution to the General Epistemic Problem for Anti-Intellectualism

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Abstract

Some authors maintain that anti-intellectualism faces a general epistemic problem of explaining the cognitive aspect of know-how, and answering the question of why know-how as a kind of disposition is to be considered a distinct kind of knowledge. In the present paper, I argue for a solution to this problem, the central idea of which is that there is a broader sense of knowledge to which both knowledge-that and knowledge-how belong. I present two versions of this solution. According to the first version, know-how is a distinct kind of knowledge since there is a general analyzable category of knowledge under which both know-how and know-that fall. This general category is analyzed into three components: a success component, an externalist anti-luck component, and an internalist anti-luck component. According to the second version of the solution, know-how is a distinct kind of knowledge since there is an unanalyzable analogical conception of knowledge that comes first in both the theoretical realm (as propositional knowledge) and the practical realm (as know-how). Both versions of the solution are plausible since they distinguish between know-how and knacks in an anti-intellectualist manner by positing that there is an internal relation between know-how and non-propositional intentionality.

1. Introduction

It is a platitude that knowledge-how is a kind of knowledge. Anti-intellectualism about knowledge-how, therefore, seems to face a difficulty, since it is not clear how it can accommodate this platitude. Contrary to intellectualists, anti-intellectualists do not think that knowledge-how (know-how, for short) is reducible to a kind of knowledge-that. Instead, based on their view, it is often assumed that know-how is best explained in terms of a kind of reliable disposition or ability. Why is it plausible, the intellectualist then asks, to think of a mere disposition as a kind of knowledge? How, indeed, can the anti-intellectualist distinguish know-how from mere dispositions such as knacks? Bengson and Moffett (2011*a*: 34) articulate the problem as follows:

A third argument against anti-intellectualism highlights an intuitive distinction between practical knowledge and various other practical phenomena, such as knacks, which do not involve the same type of rational, epistemic achievement.

Let us call this the *knowledge-knacks problem*. If anti-intellectualism fails to provide a convincing solution to this problem, it would be fair to conclude that it cannot account for why we think of know-how as a distinct kind of knowledge. In Bengson and Moffett's words:

> Yet, insofar as *anti-intellectualist* theses narrowly tie knowing how to mere behavioral-dispositional states or powers, they have a tendency to falter on – or render mysterious – … [the fact that] Knowing how is a cognitive achievement: its status as a piece of practical *knowledge* is not merely coincidental. (2011*b*: 164–5)

There is, therefore, a general problem for anti-intellectualism in explaining the cognitive aspect of know-how and answering the question of why know-how is a distinct kind of knowledge. Let us call this second problem the *general epistemic problem* for anti-intellectualism. The present paper therefore discusses two related problems.

> *The general epistemic problem for anti-intellectualism about know-how*: How can anti-intellectualism explain that know-how is a distinct kind of knowledge? (Hereafter, I call this the "general epistemic problem.")
> *The knowledge-knacks problem for anti-intellectualism about know-how*: How can anti-intellectualism explain that while a knack as a kind of disposition is not knowledge, know-how as another kind of disposition is knowledge? (Hereafter, I call this the "knowledge-knacks problem.")

The present paper is devoted to finding a solution for the general epistemic problem. However, based on my view, an anti-intellectualist account can be regarded as a plausible solution for the general epistemic problem only if it responds to, or explains away, the knowledge-knacks problem too. Thus, I also investigate whether the anti-intellectualist account considered can solve the knowledge-knacks problem.

   The central idea of my solution is that there is a broader sense of knowledge to which both knowledge-that and knowledge-how belong. Given that this broader sense of knowledge can be fleshed out in two different ways, my solution has two different versions. The core idea of the first version is inspired by Hawley's account, according to which there is an analyzable general category of knowledge under which both knowledge-how and knowledge-that fall. I seek to improve Hawley's original insight in several respects. To this end, section 2.1 shows why anti-intellectualists who follow Hawley face a dilemma in responding to the general epistemic problem. Then in section 2.2, I try to resolve the dilemma by appealing to the notion of non-propositional intentionality. In section 3, I introduce three objections that lead us to a different version of the solution, which I call the know-how-first version. According to this version, the broader sense of knowledge is an unanalyzable analogical notion that comes first in both the theoretical and practical realms. The paper thus provides anti-intellectualists with two versions of the solution to the general epistemic problem: the first on the basis of an analyzable conception of knowledge, and the second on the basis of an unanalyzable analogical conception of knowledge.

Before making my case, it will help to take a brief look at some solutions to the general epistemic problem suggested by anti-intellectualists in the literature. One solution which has found popularity among anti-intellectualists is to claim that know-how is vague, and in particular that the collocation of the verb "know" with "how" produces a term with two senses, one of which concerns ability and other propositional knowledge.[1] I am doubtful that this line of argument, even if it is on the right track, can settle the dispute over the cognitive aspect of know-how. One difficulty for this view is that there are several pieces of linguistic evidence to the effect that "knows how to" is not ambiguous (Bengson and Moffett 2007: 38–40; Stanley and Williamson 2001: 437). As some philosophers have argued (Kremer 2016: 5–7; Löwenstein 2017: 229–34), these pieces of evidence make clear that the words "knowledge-how" and "knowledge-that" are at least polysemous. However, the simple thesis that "knows how to" is vague does not explain this fact. In other words, it is not clear what the relation is between having an ability (as one sense of "knows how to") and having propositional knowledge (as another sense of it). Moreover, since the mere thesis that "knows how to" is ambiguous does not distinguish between know-how as a kind of ability and knacks as another kind, it cannot solve the knowledge-knacks problem. Thus, it may not be a convincing solution to the general epistemic problem.

More recently, Setiya has developed a more sophisticated solution:

> In the Anscombean picture, the disposition to act on one's intention does epistemic work. If knowing how to perform a basic action is a disposition of this kind, it is at the same time an epistemic capacity. It is a determination of the capacity for practical knowledge, that is, the will. Although its epistemic role is quite different from that of knowing a proposition, knowing how to perform a basic action makes practical knowledge possible, and in that way counts as knowledge too. (2012: 304)

To my understanding, this argument at best establishes that know-how is an epistemic capacity: but since it is not clear that every epistemic capacity would be an instance of knowledge, a further argument is needed to justify the ascription of knowledge to this capacity. Moreover, this way of explaining the cognitive aspect of know-how is worrisome, since it is not clear that it can resolve the knowledge-knacks problem. Why should not we think of the disposition to have Anscombean practical knowledge as a mere disposition and knack? Is there any reason why a mere disposition cannot play this epistemic role? The burden is on Setiya to provide such a reason.

A more modest strategy for explaining away the general epistemic problem, which is followed by Markie (2015), is to claim that while know-how is not a kind of knowledge, the possession of know-how improves our epistemic standing. In particular, if someone knows how to do F, norms of doing F are propositionally justified for her. For instance, if you know how to drive a car, your know-how *propositionally justifies* norms like "if the driver turns the steering wheel clockwise, the car turns to right." I do agree with Markie that the acquisition of know-how can improve our epistemic state in this way; however, there are worries about whether this can be thought of as an adequate solution to the general epistemic problem. For example, Markie (2015: 3200) himself writes that his response "may seem thin to some. Shouldn't the epistemic dimension

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[1]For a list of proponents of this view, see Bengson and Moffett, ft13.

of knowledge-how involve something more robust than propositional justification?"[2] Markie thinks that this does not pose a problem for his explanation, since alternative accounts do not provide a more robust epistemic dimension for know-how. Contrary to him, I think that there is an alternative account of the epistemic aspect of knowing-how which regards know-how as a distinct kind of knowledge and thus attributes a more robust epistemic dimension to it. This alternative account is discussed in the next sections.[3,4]

2. Hawley's insight as the leading idea of the solution

Hawley puts forward a counterfactual analysis of know-how which is employed by both anti-intellectualists and intellectualists.[5] Surprisingly, however, her solution to the general epistemic problem is virtually ignored by both sides of the debate, despite the fact that one of her main concerns in providing her account was to provide such a solution. The basic idea of her solution is this:

> Even if knowledge how is distinct from propositional knowledge, both fall under the broader category of knowledge, and can be expected therefore to have some common features. (Hawley 2010: 403–4)

As discussed above, the general epistemic problem is a challenge to the anti-intellectualist to explain why know-how is a distinct kind of knowledge. In reply, Hawley says that while know-how is not reducible to knowledge-that, there is a general category of knowledge under which both knowledge-that and know-how fall.[6] According to Hawley (2003), this general category of knowledge can be *analyzed* into two components: (1) a success component, and (2) an anti-luck component: "knowledge-how shares general structural features with propositional knowledge, … [in particular] our notion of knowledge combines ideas of success with ideas of non-accidentality" (2003: 30).

The success component of knowledge-that is *true belief*, and the success component of knowledge-how is *counterfactual successful action*. The anti-luck components of both kinds of knowledge, which are divided into internalist and externalist elements, debar knowledge from being accidental success.

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[2]Another worry is that a mere knack or reflex can play the same epistemic role, thus providing propositional justification (see, e.g., Sosa 2015: 47); in which case, it is not clear that Markie's solution can solve the knowledge-knacks problem. The next problem is that this strategy does not account for some epistemic similarities between know-how and propositional knowledge, which mere propositional justification may not possess. I offer some salient examples of these similarities below.

[3]One might worry that this brief discussion does not do justice to the considered accounts; they deserve more careful examination. I would agree: but my primary concern in this paper is to develop a new solution to the general epistemic problem, not to show that alternative solutions do not work. Readers should see this brief discussion as a preliminary indication that the different anti-intellectualist solutions to the general epistemic problem have their own problems, and that the general epistemic problem is a real challenge for anti-intellectualism.

[4]There are three recent Rylean accounts that develop solutions that are more similar to mine. I discuss them briefly in fn. 36.

[5]For an anti-intellectualist proponent of Hawley's counterfactual analysis, see, for instance, Markie (2015), and for an intellectualist proponent of it, see, for instance, Stanley (2011).

[6]Both versions of my solution are consistent with this abstract formulation of Hawley's insight. However, as will be clear in what follows, Hawley thinks that this general category of knowledge is analyzable and, therefore, her view supports only the first version of my solution.

Not all true belief amounts to propositional knowledge, and not all counterfactual success amounts to knowledge-how. In each case, success must be in some sense non-accidental, or warranted, where "warrant" is a neutral term for whatever makes the difference between true belief and knowledge, or between counterfactual success and knowledge. (27–28)

We are familiar with various versions of the anti-luck component of knowledge-*that*, but what about the anti-luck component of knowledge-*how*? Hawley provides tentative suggestions for the internalist and externalist anti-luck conditions of knowledge-how, proposing that "the various internalist and externalist accounts of propositional knowledge provide raw material for analogous accounts of knowledge-how" (28). In this way, the internalist and externalist components of know-how are as follows:

Success may fall short of knowledge how in two ways: through a subject's failure to understand her situation, or through the absence of a suitable connection between the goodness of the method and the subject's use of that method. (28)

In my view, the main idea of Hawley's solution, according to which there is a general category of knowledge under which both know-how and knowledge-that fall, is sufficiently plausible to take as the leading idea in a promising solution to the general epistemic problem. However, I think that there are reasons to challenge the particular accounts suggested by Hawley for the success and anti-luck elements of know-how, which I now discuss.

2.1. New suggestions for the success and anti-luck conditions

2.1.1. Success condition of know-how

Hawley analyses the success condition of know-how in terms of counterfactual success. However, this account arguably faces the problem of masking. Masking was originally considered to pose a challenge to the project of analyzing dispositions in terms of counterfactual conditions, and was later borrowed by the literature on know-how. As an example of masked know-how, consider the following case from Löwenstein (2017: 167).[7] Suppose that Susan has spent a long time in the royal household and knows how to address the Queen. However, the atmosphere in the royal presence causes her to get nervous, and in that situation she cannot pronounce her words correctly. Therefore, although she knows how to address the Queen, if she tried she would fail to address her correctly. Thus, while she has know-how, she fails to meet the counterfactual success condition.

Two different interpretations of Hawley's account are marshaled to handle such cases. Inspired by some parts of Hawley's paper (2003: 25–7), the first interpretation (suggested by, e.g., Stanley (2011)), adds the condition of *normality* to counterfactual success. Following other parts of her paper (2003: 22–3), the second interpretation (developed by, e.g., Williams (2008)), relativizes know-how to circumstance C. The proponent of the first interpretation argues that, in the above case, Susan is not in a normal condition, and her failure is not a counterexample to the explanation of know-how in

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[7]This example is originally due to Snowdon (2004). However, Löwenstein (2017) described it as an instance of masked know-how. For further examples of masked know-how, see Khalaj (2021) and Khalaj and Shirazi (2022).

terms of counterfactual success *under normal conditions*. Someone who advocates the second interpretation suggests that Susan does not have know-how of addressing the queen in all circumstances, rather she has know-how-to-address-the-queen-when-she-does-not-get-nervous. Each interpretation has its own difficulties. For instance, we can argue against the first interpretation by constructing an Achilles-like example of mimicking[8] as a counterexample to analyzing know-how in terms of counterfactual success under normal conditions. Suppose, for example, that Harry is a striker in professional football known for his prowess in scoring with a header. However, Harry has an "Achilles' heel" and cannot score with a header when the ball is crossed just at one particular angle. Note that crossing the ball at this particular angle is a completely normal situation. Yet in this case, while intuitively Harry knows how to score with a header, if he tried he would fail to score in at least one normal situation. This is thus a counterexample to an explanation of know-how in terms of counterfactual success under normal circumstances.

On the other hand, the second interpretation which relativizes know-how to circumstances leads to absurd consequences. For example, it seems that this interpretation predicts that an infant has a version of knowledge-how of solving the most difficult mathematical problems, since, under the circumstance that she studies hard for decades and becomes an expert in mathematics, if she tried to solve these problems, she would be successful. A similar unwelcome consequence of the second interpretation is addressed by Waights Hickman (2019: 6–7):

> It might be that Mozart could compose drunk, but Bach could not, but it surely doesn't follow that they knew how to do different things. Hawley's theory predicts the opposite verdict, and accordingly, it seems to me, predicts that our collective knowledge attributions are frequently false or problematic.

Moreover, even if we bite the bullet and assent to these unwelcome consequences, it is still a matter of dispute that this interpretation can solve the problems of masking and mimicking. The problem is that masking and mimicking situations, as for example in the case of Susan, are not confined to situations of getting nervous: they can occur in countless ways. What could be the common feature of all these countless ways, unless it is that they are all ways of preventing relevant know-how from manifesting? Thus, it is not clear that we can specify all of these ways in a non-trivial, non-circular way.[9] So it seems that both interpretations of Hawley's suggestion for the success condition face difficulties.

To provide a more satisfying suggestion for the success condition of know-how, I proceed in two steps. The first is that, unlike Hawley, I propose to think of know-how to do F as a matter of an ability or a disposition to do F. Note that Hawley opposes explaining the success condition of know-how in terms of an ability or disposition, arguing instead that we should "set [the] dispositional suggestion aside" and choose "a straight counterfactual analysis" for the success condition of know-how (2003: 19–25).[10] Contrary to her view, I

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[8]The problem of mimicking is another problem for analyzing dispositions in terms of counterfactual conditions. For the standard case of the mimicking, see the case of Achilles' heel from Manley and Wasserman (2008).

[9]A similar problem arises for the first interpretation in defining the constraint of normality in a non-circular, non-trivial way.

[10]There are classic challenges for dispositional accounts in philosophy (see Mumford 1998). In epistemology, however, only a minor group of philosophers cast doubt on the claim that dispositions play a role in epistemological accounts (see, e.g., Siscoe 2021). A major group of them considers significant roles for

suggest that there are good reasons to think of know-how as a kind of ability or disposition. The most relevant of these reasons is that analyzing know-how, like dispositions and abilities, faces the problems of masking and mimicking. In light of this, it would be plausible to think that know-how inherits these problems from its dispositional nature. Consequently, if we find a promising solution to the masking and mimicking problems for dispositions and abilities in general, we can apply it to explaining know-how too. Thus, we can describe the success component of know-how as the successful action which is the manifestation of ability, and through which, we put aside the difficulties raised by the problems of masks and mimics.

Another motivation for considering the ability to do an action as the basis for the success condition of know-how is that there is an analogy between belief (as a component of propositional knowledge) and ability (as a component of know-how) in relevant respects. For example, there is a similarity between belief that has failed to manifest, on the one hand, and unsuccessful ability, on the other. For instance, you may believe that Paris is the capital of France but fail to manifest it because you are not sober. Similarly, I may have the ability to play football but fail to manifest it because I have been temporarily injured. Moreover, both belief and ability, though they may not be reducible to counterfactual conditions, nonetheless have something to do with them. I may have a belief regarding how to cook Margherita pizza but not be manifesting it right now. You may have the ability to dance beautifully but not be manifesting it right now. It is for this reason, namely their close connection to counterfactuality, that both belief and ability have been the object of dispositional accounts.[11] In addition, similar to justified false beliefs, there are skillful exercises of an ability to do an action which are not successful. You may have the false belief that ranitidine is not harmful to your body based on good scientific evidence. I may shoot an arrow due to my skill in archery which does not hit the target. Likewise, and in the converse direction, just as there are true beliefs that are true due to sheer luck, there are successful manifestations of an ability that are due to mere chance. Therefore, there is a strong analogy between belief and ability. Given this, I suggest that, instead of counterfactual success, we should establish a parallelism between successful manifestation of ability (as the success condition of know-how) and true belief (as the success condition of propositional knowledge).

However, there are widely discussed cases of agents – such as the amputee pianist or ski instructor – who know how to do the relevant tasks but are not able to do them,[12] which allegedly show that an ability to do an action is not a necessary condition for possessing knowledge-how to do it (Stanley and Williamson 2001). To handle such cases, we need to take the second step. We will return to these cases below for a more detailed discussion.[13] But for now, in order to provide a preliminary account, it should be noted that the ability whose manifestation is the success condition of know-how manifests *when internal and external enabling conditions are met*. For example, regarding the case of the amputee pianist, following Glick we can think of "[the]

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dispositions in their epistemologies (see, e.g., Stanley 2011; Sosa 2015; Vahid 2016, 2019). As will be clear in what follows, I side with the second group.

[11]For a dispositional account of ability, see Fara (2008); for a dispositional account of belief, see Schwitzgebel (2002).

[12]While the amputee pianist does not have hands and cannot play the piano, she definitely knows how to play the piano. In a similar vein, the ski instructor can teach skiing and therefore knows how to ski, whereas she is not able to ski herself.

[13]See section 3, where I discuss dispositionalism.

pianist's hands merely as tools that she uses to exercise her internal ability" (2012: 132). She has the relevant ability but does not manifest it because some enabling conditions (i.e., her hands as tools of manifesting the ability) are absent.[14] Thus, I suggest that the success condition of know-how to do F is the successful manifestation of the ability to do F when its enabling conditions are met.

2.1.2. The externalist anti-luck condition of know-how

Let us turn to the anti-luck condition suggested by Hawley, discussing in turn its externalist and internalist elements. Hawley does not discuss the externalist anti-luck component of know-how at length, but mentions as an example a causal account (2003: 28): "For example, suppose we require a causal connection from the goodness of the method to the use of the method." Yet it is far from clear what this causal connection is and how it excludes lucky cases of being successful.

Epistemologists appeal to the externalist anti-luck condition to exclude the relevant kind of luck. Of course, it is controversial what kinds of luck may be relevant to know-how. Intellectualists and anti-intellectualists have different intuitions about the kind of luck which undermines know-how, meaning that it is not clear which species of luck is involved in success falling short of know-how. For example, Stanley and Williamson (2001) argue that there are the usual Gettier cases of know-how in which know-how is undermined by epistemic bad luck. On the other hand, some anti-intellectualists, like Carter and Pritchard (2015a), claim that environmental epistemic luck is compatible with know-how. Cath (2015: 20), meanwhile, distinguishes between upstream and downstream luck, claiming that the latter and not the former is incompatible with know-how. There is not enough space here to engage in this issue. However, what is important for our present purpose is that there are kinds of luck which both intellectualists and anti-intellectualists agree are not compatible with know-how. For example, consider the following case as an instance of a successful manifestation of an ability to do an action, for which there is a consensus that it falls short of know-how because it is due to mere luck:

> The case of John
> John is a novice football player who has not sufficient technique to score free kicks from outside the penalty area. However, the one time that a free kick is taken for his team, he kicks the ball (without any idea of how to score from a free kick) and by mere chance, a goal is scored. Intuitively, John does not know how to score free kicks; however, there is a sense of "ability" in which he manifests an ability to score free kicks. Since it is due to mere luck, it falls short of know-how.

A crucial point is that John clearly does not have the technique and *skill* of scoring a goal from a free kick. In light of this, one natural suggestion for excluding the kind of luck which is present in the case of John is to appeal to the constraint of skillfulness. It is widely accepted that there is an intimate connection between skill and know-how. This suggestion becomes more interesting when we consider that some virtue epistemologists (Sosa 2015) invoke skillfulness for explaining an anti-luck condition for propositional knowledge, meaning that skillfulness may be described as the anti-luck

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[14]A similar solution can be provided for the case of ski instructor. The fact that she knows how to ski entails that she is able to ski when the enabling conditions are met, namely, when she is physically in proper condition for skiing.

condition for the general notion of knowledge. Despite these merits, however, this suggestion is worrying because it may be too demanding. There are many proponents of each camp who think that even simple basic actions (such as clenching a fist) manifest know-how (Setiya 2012; Stanley 2011). My solution to the general epistemic problem would be more appealing if it makes room for their intuition. However, it would be implausible to say that simple actions like clenching a fist require *skill*.[15] Therefore, if we consider skillfulness as a necessary anti-luck condition for know-how, we cannot accommodate the intuition that there are instances of knowing-how to do simple basic actions such as clenching a fist.[16]

A more modest alternative is that, following reliabilism about propositional knowledge, we appeal to reliability as an anti-luck condition for know-how. While John has an ability to score a free kick, he does not have a reliable ability to do that. However, this suggestion faces difficulties too, since there is a kind of luck which is compatible with reliable ability and incompatible with know-how. This kind of luck is typically introduced by the following case:

> *Lucky figure skater I*
> Irina is a novice figure skater. She is mistaken about how to perform a complex jump called the Salchow. However, whenever she tries to perform a Salchow in that misleading way, a neurological abnormality makes her perform the correct sequence for the Salchow. Irina is lucky enough to perform the Salchow in the correct way. (Bengson *et al.* 2009)

Note that we can assume that Irina succeeds in performing the Salchow most of the time, and therefore her ability is reliable too. While Irina has a reliable ability to perform a Salchow, intuitively she does not have know-how about performing it. This example has the general double luck structure of Gettier cases. The first bit of bad luck is that while Irina intends to perform a Salchow, she is confused about the correct way of performing it, and the second bit of good luck is that, unknown to her, she has the abnormality which causes her to do the Salchow in the right way. It is therefore necessary to find an anti-luck condition for know-how which excludes this Gettier-style kind of luck. From an anti-intellectualist viewpoint, and inspired by virtue

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[15]In this regard, Stanley and Krakauer (2013: 5) write: "[the basic] activities [such as grasping an object or lifting one's arm] are *not* skills; they are not acquired by or improved upon by training in adult life."

[16]One might object that philosophers have argued that there is no such thing as knowing how to do basic actions such as clenching a fist (Löwenstein 2017) and, in which case, simple basic actions are manifestations of neither skill nor know-how, and skill should be considered as a necessary condition for know-how. In reply, notice that it is a matter of dispute whether there is something like knowing how to do simple basic actions. The problem is partly rooted in conflicting intuitions. One camp thinks that it is *not* intuitive to say that I know how to clench my fist, and the other disagrees. Each camp also has its own arguments. Philosophers of the first camp argue, for example, that talk of "know how" is only apt in cases where there are rules, criteria, methods, norms, etc., that the agent applies, which may not be the case for basic actions (see, e.g., Löwenstein 2017). Philosophers of the second camp argue, for example, that if we reject knowing how to do basic actions, this would lead to our denying knowing how to do non-basic actions too (Small 2019). Moreover, in so far as simple basic actions are under our control and described as intelligent actions, they are manifestations of know-how (Khalaj 2023). I am more sympathetic to the position of the second camp. However, my primary concern does not require me to take a stand on the dispute between these camps, and I leave room for both. Therefore, I prefer a condition that is weaker than skillfulness, one which can be endorsed as necessary for know-how by both camps. Thanks to an anonymous reviewer of *Episteme* for pressing me to say more on this point.

reliabilism, the best candidate for this role is an externalist anti-luck condition according to which not only should the person have both reliable ability and agential ability, but also the reliable success must be explained by appeal to her *internal* ability (or in Sosa's term, her *seat*).[17] In the case of *Lucky figure skater I*, although Irina is successful in performing the Salchow, her success is explained by appeal to Irina's neural abnormality and not the content of her internal ability to perform the Salchow. In other words, the most salient part of the explanation of her success is her abnormality, meaning that the reliable success is not *because of* her internal ability. In Carter and Pritchard's terms, in a genuine case of know-how, unlike the case of the Salchow, "the ability and success components can't merely be 'accidentally satisfied' conjunctively; instead, we stipulate that the success element be *because of* the ability element" (2015*b*: 194–5). This means that the anti-intellectualist externalist condition which is necessary for know-how is that not only must a person have reliable ability, but also her reliable success should be because of her internal ability.

2.1.3. The internalist anti-luck condition of know-how

Now let us turn to the internalist component of the anti-luck condition which, according to Hawley, implies that a subject who knows how to do F must understand her situation correctly. Hawley emphasizes that it is not plausible to interpret this condition in a strong sense. Thus, the internalist requirement suggested by Hawley (2003: 28) is "that the subject knows she would succeed if she tried." This suggestion, however, is too strong. Many anti-intellectualists have considered examples of a subject who knows how to do F but does not know that she would succeed if she tried.[18] With this in mind, Hawley (2003: 28) puts forward a more modest claim, according to which, in order to ascribe know-how "we should require merely that the subject be warranted in believing that she'd succeed, whether or not she has actually formed such a belief." In other words, to attribute know-how, a subject, at the very least, must be *propositionally justified* in believing that she would succeed.

From my point of view, this more modest suggestion is still too strong. We can imagine a case in which a subject knows how to, say, run fast, yet, because an orthopedist deceives her, she has a reason to disbelieve this fact. Moreover, we may worry that this view gets the order of explanation wrong. As Markie (2015) has argued, the proposition that "a subject would succeed in doing F if she tried" is propositionally justified for a subject *because* she knows how to do F, not vice versa. Therefore, intuitively, know-how precedes the internalist condition proposed by Hawley in the order of explanation, meaning that the latter cannot be a constitutive component of the former. Consequently, it seems that Hawley's suggestion for the internalist anti-luck condition is not tenable.

Meanwhile we should ask: Is there an urgent need to introduce an internalist condition for know-how? So far, I have introduced the following two conditions for know-how: the success component of know-how is to be successful in an action that is the manifestation of an ability to do that action, and the externalist anti-luck condition of know-how is that no luck intervenes between the internal ability and reliable success. Aren't these conditions enough to make the solution for the general epistemic problem a plausible one? As said above, if a solution for the general epistemic problem is tenable, it would have to solve the problem of the knowledge-knacks distinction. However, I am

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[17]Several anti-intellectualists, including Carter and Pritchard (2015*a*), Markie (2015), and Carter and Poston (2018), follow a similar line of argument.

[18]For some similar examples suggested from an anti-intellectualist perspective, see Wallis (2008).

doubtful that the two conditions introduced so far are able to distinguish between know-how and knacks, and thereby solve the knowledge-knacks problem. Consider the example of Norman's clairvoyance, originally articulated by Bonjour (1980), and used by Carter and Poston (2018) as a paradigm case of a knack. Norman has a reliable clairvoyant power to form true belief. Suppose that, by manifesting this power, Norman forms the true belief that the president is in New York. The success component of this is to form a true belief: it is an ability and its performance can be not only successful, but also successful because it is a case of manifesting this ability without any kind of relevant luck intervening. In other word, knacks can satisfy both conditions suggested so far for know-how as well. Therefore, since the solution for the general epistemic problem has not solved the knowledge-knacks problem, it is not thus far a tenable solution.

Given this, it seems obvious that the internalist condition for know-how must play a vital role in the solution to the general epistemic problem by solving the knowledge-knacks problem. Therefore, I follow Carter and Poston (2018: 196) in acknowledging that "[t]he internal character of knowledge-how distinguishes it from 'knacks'." They put forward a suggestion for how to distinguish know-how from knacks by reference to the internal character:

> A person with a knack does not know what she is doing to achieve an end. The golf novice does not know how her actions contribute to the end being achieved. … Let's now consider a genuine case of knowledge-how. Mikhail Nikolayevich Baryshnikov, an expert Russian dancer, knows how to perform the traditional Tropak. Consider his performance. He knows what he is doing and why he is doing it. (196)

Carter and Poston accordingly describe the following condition as the internalist condition for know-how from an anti-intellectualist point of view (198):

> A subject knows how to φ only if the subject knows what she is doing in φ-ing and why she is doing it.

We can make the same point in a rather different way: exercises of knacks (such as digesting food, breathing, sleepwalking, mere reflex, and even Norman's belief)[19] are not manifestations of intentional action. However, in order to do an intentional action *in a right way which manifests know-how*, as Carter and Poston suggest, a subject requires to know what she is doing and why she is doing it. For example, the Russian expert dancer manifests know-how of dancing because when he intends to dance, his intentional content contains knowledge of what she is doing and why she is doing it. Therefore, the internalist condition which distinguishes know-how from knacks is explained in terms of having the kind of intentional state which guides an action *non-accidentally* in a right way,[20] and this kind of intentionality (let's call it non-accidentally correct intentionality) requires knowledge-what and knowledge-why.

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[19]It is sometimes argued that mere habit behaviors are manifestations of knacks and not know-how (Elzinga 2018: 124). I disagree. There are many sophisticated tasks such as driving a car or typing which at least in some situations are exercises of mere habit. However, it would be weird to say that these sophisticate actions are not manifestations of know-how.

[20]Note that instances of accidental successful intentional actions may not be exercises of know-how. For discussion about this point, see Setiya (2008).

However, this suggestion apparently suffers from a problem: according to it, the internal character of know-how is explained in terms of knowledge-*what* and knowledge-*why*, which are kinds of propositional knowledge. In which case, an intellectualist can argue that if the cognitive aspect of know-how can be explained only by appeal to an internal character which itself is propositional knowledge, it is therefore plausible to reduce the intelligent aspect of know-how to propositional knowledge; and this means that intellectualism is on the right track.[21] Consider Fridland's suggestion for distinguishing the intellectualist from the anti-intellectualist:

> What Ryle denied, of course, and what the Intellectualist must be committed to, is the fact that *the intelligence of skill* is reducible to a proposition. (2014: 2738)

In my view, what Fridland says about intellectualism and anti-intellectualism about skill is true for intellectualism and anti-intellectualism about know-how too. If, like Carter and Poston, someone reduces the intelligent aspect of know-how to an internal condition, and explains the whole nature of this condition entirely in terms of propositional knowledge, she reduces the intelligence of know-how to propositional knowledge, and it would be plausible to say that she sides with the intellectualist camp.[22]

It seems that in order to find a convincing solution to the knowledge-knacks problem, we must face a dilemma:

> *The dilemma of the internalist condition of know-how for anti-intellectualists:*
> The first horn: On the one hand, if the internal condition for know-how is best explained in terms of non-accidentally correct intentionality and knowledge-wh, it motivates intellectualism.

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[21]Interestingly, Pavese (2021) uses a similar argument to motivate intellectualism.

[22]One might object that a better criterion for distinguishing between intellectualism and anti-intellectualism is that, while intellectualists reduce know-how to propositional knowledge, anti-intellectualists explain know-how *partly* in terms of the ability component. Many anti-intellectualists, in explaining know-how, consider a propositional knowledge component in addition to the ability component. In reply, notice that I don't suggest that invoking relevant propositional knowledge in an explanation of know-how must necessarily lead an account into intellectualism. However, I think that a criterion for distinguishing anti-intellectualism that focuses on the ability component isn't tenable. If we adopt this criterion, we would obscure the most important division in the literature and should describe the prominent intellectualists as anti-intellectualist. For example, Pavese, a leading intellectualist, writes: "one can accept that knowledge how to f does not entail the ability to f simpliciter, while insisting that knowledge how to f entails the ability to f in a qualified sense" (2015: 16). As another example, Stanley (2011: 126) states:

There is a significant question about the modal parameter that is relevant for ascriptions of knowing how. I have described it as a "dispositional or ability" modal, because knowing how to do something seems to require that the agent can, in some sense of "can", perform the task.

If prominent members of both camps explain know-how in terms of propositional knowledge and an ability component, what is the difference between intellectualism and anti-intellectualism? Here we can see why Fridland's criterion is appealing, since it can throw light on the main division. On the one hand, while anti-intellectualists appeal to propositional knowledge in their explanations of know-how, they should deny that this propositional knowledge exhausts the *intelligent* aspect of know-how. On the other hand, while intellectualists invoke a brute ability component in explaining know-how, they must explain the *intelligent* aspect of know-how entirely in terms of propositional knowledge. Notice that this taxonomy, which is not only advocated by Fridland, a leading anti-intellectualist, is entirely compatible with the way Stanley, the father of the new intellectualism, introduces the view: the "intellectualist view [is the view] that actions have intelligence properties in virtue of guidance by propositional knowledge" (2011: 5).

The second horn: On the other hand, if we reject the internal character as a necessary condition for know-how, we cannot distinguish know-how from knacks and cannot explain the cognitive aspect of know-how.

2.2. Non-propositional intentionality as the internalist condition for know-how

We face the dilemma because, on the one hand, if we explain know-how in terms of (non-accidentally correct) intentionality, this requires propositional knowledge which may exhaust the intelligence of know-how; and, on the other hand, if we set the intentionality aside, we cannot distinguish know-how from knacks. However, if we can show that there is a kind of *non-propositional* intentionality which partly explains know-how, we can find a way out of the dilemma. This non-propositional intentionality is the intelligent aspect of know-how which, on the one hand, cannot be reduced to propositional knowledge, and on the other hand, distinguishes know-how from knacks. In this way, we have an anti-intellectualist solution to the general epistemic problem which at the same time can resolve the knowledge-knacks problem. Therefore, I suggest that the internalist condition for know-how should partly be explained in terms of non-propositional intentionality.

However, the way out of the dilemma I offered above is clearly ad hoc. Is there any *independent* argument to support my idea that there is a kind of non-propositional intentionality which can partly explain know-how? Interestingly, there are several independent motivations for accepting the notion of non-propositional intentionality as well-established and that can be invoked in explaining know-how. For the sake of space, let us take a quick look at just three instances of these motivations.

Evidence from phenomenological observation: one of the main points in favor of the notion of non-propositional intentionality is phenomenological observations of unreflective actions. Consider, for example, the everyday skill of riding a bicycle. If a subject learns to ride a bicycle and acquires know-how of riding it expertly, she is able to think about, say, mathematical problems when she rides a bicycle in many situations. How is the subject guided in such situations? What force guides the subject to ride a bicycle appropriately? Based on our first-person descriptions, Dreyfus claims that there is a pre-reflective *sense* called *motor intentionality* which guides the subject by inclining her to ride properly. This pre-reflective sense has two dimensions: when the situation is consistent with our implicit expectations, we have a smooth feeling and fluent sense of the situation. In other words, given our perspective about riding which (most of the time) has been formed by *practice*, when we *perceive* the situation, we smoothly and fluently *engage* to ride properly. However, when the situation does not accord with our implicit expectation, we sense a tension which forces us to seek to regain the lost "flow." In Dreyfus's words "motor intentionality is continuously in play when we move to get maximal grip on our world" (Dreyfus 2002: 418). Thus, the content of motor intentionality as the action-guiding state of unreflective actions is not proposition, rather it is the two-dimensional sense of *reduction of tension and fluency of engagement* (for short tension-fluency). This tension-fluency sense guides us in manifesting unreflective knowing-how and therefore can be thought of as a part of an explanation of know-how. As a result, to the extent that phenomenology is relevant,[23] phenomenological

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[23]Some philosophers think that phenomenology is unreliable and cannot play the role of evidence in such arguments. I disagree; however, I don't have space to discuss this worry. Nonetheless, the two other arguments in favor of non-propositional intentionality are not based on phenomenology.

observations support the legitimacy of the idea of non-propositional intentionality, and so support the claim that non-propositional intentionality is at work in the manifestation of know-how.[24]

Evidence from cognitive science and neuroscience: at least from the time of Merleau-Ponty (1966), anti-intellectualists have discussed pieces of data from cognitive science and neuroscience which can be employed in support of the idea of non-propositional intentionality.[25] More recent data on which anti-intellectualists have focused are from Milner and Goodale's work on the case of D.F. who suffers from visual deficits, yet while "D.F.'s ability to recognize or discriminate between even simple geometric forms is grossly impaired," "she is very good at catching a ball" (2006: 127–8). Since D.F. doesn't have relevant geometric concepts, Sean Kelly argues that the content that is at play in D.F.'s motor intentional activity is not propositional (2002: 387).

Another piece of evidence is provided by Land and McLeod's research (2000) on batsmen's vision. Their data suggest that while, in fact, "Batsmen's eye movements … make a predictive saccade to the place where they expect it [the ball] hit the ground, wait for it to bounce" (1340), they themselves mistakenly think that they keep their eyes on the ball and track it the whole time; whereas "it is simply impossible to visually track an object moving so quickly toward the origin of one's gaze" (Brownstein and Michaelson 2016: 8). There should be a state other than batsmen's false belief which guides their skillful eye movements.[26] Therefore, what D.F. and the batsmen have in common is that there is no belief (with propositional content) which guides their skillful actions, and this suggests that there should be a different kind of action-guiding state, that is, a non-propositional intentionality which is responsible for guiding them in manifesting their knowing-how in the skillful actions.

Note that I don't claim that the anti-intellectualist interpretation is the only interpretation of these cases in the literature.[27] What I claim is that this anti-intellectualist interpretation is a standard, plausible interpretation of them, and since appealing to the idea of non-propositional intentionality is independently motivated, it is not an ad hoc move to employ it in resolving the general epistemic problem.

Evidence from philosophical analysis of intentional action: not only phenomenological observations and scientific data but also the philosophical analysis of intentional action supports the claim that there is a kind of non-propositional intentionality which is at work in manifesting know-how. One important argument in favor of that claim is that the intelligent aspect of intentional action is more fine-grained and richer than propositional doxastic intention.[28] For example, focusing on the mechanism of control which is responsible in nuanced fined-grained intelligent movements of agents in skillful actions, Fridland (2014: 2732) introduces an intelligence beyond propositional

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[24]The point that the non-propositional intentionality is formed when one learns (most of the time by practicing) to do an action is important in explaining the anti-luck aspect of this internal condition. I will return to this point in what follows.

[25]See Merleau-Ponty's discussion of the case of Schneider who suffered from a kind of agnosia (1966: 188). See, also, fn.30 for an idea relevant to this case.

[26]For several similar pieces of data, see among others, Railton (2009), Wallis (2008), Beilock and Carr (2001).

[27]For example, for an intellectualist interpretation of a case that is similar to D.F., see Stanley and Krakauer (2013).

[28]This argument has an ancestor in the philosophy of perception (Peacocke 1992). Just as perceptual content is more fine-grained than our conceptual propositional understanding of it, intentional content is more fine-grained than our conceptual propositional understanding of it.

intention. In her terms: "if an agent governs or controls her skills beyond her [propositional] intention for instantiating them, then we won't be able to claim that intelligence attributions are determined by the intention for which the actions is performed" (Fridland 2015: 708). This nuanced fine-grained intelligence beyond coarse-grained propositional intention can be best explained in terms of non-propositional intentionality.[29,30]

One might object that while we don't have explicit, conscious beliefs which guide our fine-grained, intelligent movements, these movements are guided by our implicit beliefs or unconscious states which have propositional content. However, this move has its own problems. The first is that it leads to overpopulation and overintellectualization of mind.[31] There may be no end to the specification of the content of fine-grained intelligent movements. Consider, for example, a simple subsidiary act of picking up a phone to make a call. The content of this simple, subsidiary action contains knowing how the pinky finger moves in taking the phone, how the index finger helps in doing so, how the olecranon moves 45 degrees in picking up the phone, how the elbow bends 46 degrees in doing so, and so on. If someone considers there to be an unconscious mental proposition for each of these contents and similar states, she would definitely be overpopulating the mind. On the other hand, from the viewpoint of a defender of the idea of non-propositional intentionality, to the extent that the agent picks the phone unreflectively, she does not need to have the concepts of olecranon, degree, 46, and so forth; rather the intentional content of her action is just a tension-fluency sense which, of course, in most cases, is acquired by previous practice. Thus, this intelligence can be best explained via prior practice and experience; and if someone accounts for it in terms of intellectual states, she not only overpopulates but also overintellectualizes the mind. Moreover, the move of appealing to unconscious propositional content faces the charge of being ad hoc, since the burden is on intellectualists to provide an independent motivation for accepting these unconscious contents and spell out how they work. As Fridland (2017), Hasselberger (2018), and others argue, if intellectualists suggest that non-personal, non-agential states such as "motor representation" or "motor

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[29]Another account which can be appealed to in defending the idea of non-propositional intentionality is what Bratman (1987: 113) calls single phenomenon theory, according to which it is not the case that doing an action is intentional only if the agent intended to do it. See Shepherd (2021: 74), for an argument in favor of anti-intellectualism based on the single phenomenon theory.

[30]Here is one objection to this argument. Inspired by the conceptualist's view in the philosophy of perception (see, e.g., McDowell 1996), intellectualists can argue against the above line of argument by appealing to demonstrative knowledge. Someone who has knowledge-how, in addition to having course-grained descriptive knowledge, possesses the fine-grained content through propositional *demonstrative* knowledge. This is a popular view among proponents of intellectualism. Quoting the relevant passage from McDowell (1996: 56–7), Stanley (2011: 169) writes: "One just needs to exploit demonstrative concepts in describing the contents of states of knowing how." In reply, notice that there are several lines of argument against this intellectualist strategy. Due to lack of space, I confine myself to one of them. Consider the case of Schneider, the brain-damaged patient described by Merleau-Ponty:

Even when his eyes are closed, the patient performs with extraordinary speed and precision the movements needed in living his life … : he takes his handkerchief from his pocket and blows his nose … [T]he same subject who is unable to point to order to a part of his body. (1945: 188)

While Schneider knows how to blow his nose, he does not possess the demonstrative concept of nose. (For more cases like this, see Pavese 2021.) With these cases at hand, it would be plausible to conclude that the content of know-how cannot be reduced to conceptual demonstrative content. Thanks to an anonymous reviewer of *Episteme* for drawing my attention to this objection.

[31]For similar arguments, see Ruben (2003, chs. 3–4); Wakefield and Dreyfus (1991).

acuity" play this role, they get the level of explanation wrong, reducing personal, agential actions to non-personal, non-agential *happenings*.[32]

The motivations for supporting the notion of non-propositional intentionality are not restricted to the above arguments. Nonetheless, if the above phenomenological observations, scientific data, and philosophical analysis are on the right track, they suffice to show that the notion of non-propositional intentionality is well-established, and that this kind of intentionality is at work in manifesting knowing how. Therefore, it is not ad hoc to employ it as a part of internalist condition for know-how to resolve the dilemma we have discussed. In this way, the possession of non-propositional intentionality can solve the dilemma for the internalist condition for know-how by providing, on the one hand, an anti-intellectualist non-propositional condition, and, on the other hand, distinguishing between know-how and knacks. Therefore, from an anti-intellectualist view, I suggest that the possession of non-propositional intentionality can be described as one part of an internalist condition for know-how. Note that what is important for resolving the dilemma is that *some parts of* the internalist condition should be non-propositional. Given this, I don't dispute that another part of the internalist condition for know-how could have conceptual, propositional content. The overall propositional intention or the means-end propositional knowledge is a candidate for this propositional part of the internalist condition for know-how.[33]

One might object that, so far, I have shown only that non-propositional intentionality is an internalist condition for know-how; however, I have not demonstrated that it is an *anti-luck* condition for know-how. In response, I think that the above discussion made clear that non-propositional intentionality, as the tension-fluency, guiding sense, can play the role of non-propositional *evidence* for acting in the right way. Epistemologists have different approaches to the epistemic role of emotions and senses; many accept that they can play the role of evidence for *propositional knowledge*;[34] however, independently of how we think about the evidential function of senses regarding propositional knowledge, I think it is intuitive to say that non-propositional intentionality which involves a tension-fluency *sense* can be thought of as guiding evidence for a successful *action*. To illustrate the point, let's make an analogy with the non-propositional content of perception. Just as fine-grained, non-propositional perceptual content can play the role of evidence for a true proposition, fine-grained, non-propositional intentional content can play the role of evidence for a successful action. The crucial point is that, as I mentioned above, we acquire non-propositional

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[32]The third point relevant to this intellectualist move is that anti-intellectualists don't need to deny the obvious facts that experts can improve their skills by propositional instructions or that the non-propositional content can be *translated* (or *transformed*) to propositional content. However, intellectualists require a further argument to show that the input and output of the translation are of the same kind. A prima facie reason for the claim that there is no such argument is that there is a one-to-many relation between the non-propositional intentional content and its propositional translations. People with different conceptual frameworks translate the same non-propositional content of intentional action to different conceptual propositional contents. Therefore, while the non-propositional content can be translated to these propositional contents, it can be reduced to none of these plural contents. Another argument in favor of the claim that the input and output of the translation are not the same is that in reducing the non-propositional contents to propositional ones, some crucial things such as "solicitations" or "affordances" to act are lost (Dreyfus 2007: 357, 360).

[33]The fact that know-how creates opaque context (which Stanley (2011) thinks poses problem for anti-intellectualists) can be explained via this conceptual propositional component.

[34]For discussion on this topic, see Brady (2013).

intentionality just when we *learn* about doing a task. After that, the fine-grained intelligence of non-propositional intentionality guides us to do the task unreflectively. In this way, non-propositional intentionality can play the role of evidence for doing the task in a right way. Of course, like non-propositional perceptual evidence for propositional knowledge, non-propositional intentional evidence for know-how is fallible. Just as we may have an illusion instead of a perception, we may have learned how to do a task in a wrong way instead of a right way. However, this fallibilism does not prevent us from considering both the non-propositional perceptual content and non-propositional intentional content as evidence. Given this analogy with non-propositional perceptual evidence, I suggest that non-propositional intentional content can be described as a kind of evidence, and therefore as an *anti-luck* condition for know-how. Thus, non-propositional intentionality is not only an internalist condition but also an anti-luck internalist condition.[35,36]

3. A know-how-first version of the solution

To provide a solution to the general epistemic problem for anti-intellectualism, following Hawley, I identify three constitutive components for the general concept of knowledge: a success condition, an externalist condition, and an internalist condition. In this section, I discuss three objections to these three components, pushing us toward a version of the solution which can be called a know-how-first version.[37]

The first objection is that know-how itself is prior to the success condition I considered for it; that is, the ability and its enabling conditions can be specified only by appealing to knowing-how itself. Consider again the case of the amputee pianist.

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[35]Even if someone objects to this line of argument and does not find it convincing that that non-propositional intention is a kind of evidence, this does not mean that the suggested solution is entirely false. If we give up the objector's assumption, following externalism about propositional knowledge, we can consider only two elements for the general conception of knowledge under which both propositional knowledge and know-how falls: a success condition and an externalist anti-luck condition. In which case, (propositional and non-propositional) intentional ability in know-how would stand with the belief state in propositional knowledge. The non-propositional intentional aspect of know-how can still distinguish it from knacks in an anti-intellectualist way.

[36]Inspired by novel interpretations of Ryle, some thinkers such as Kremer (2016), Löwenstein (2017), and Elzinga (2018) have developed solutions to the general epistemic and knowledge-knacks problems which have something in common with the solution I suggest in the present paper, especially regarding the internalist anti-luck condition. In order to resolve the knowledge-knacks problem, Kremer considers "critical performance" (2016: 37) as a necessary condition for know-how, while Löwenstein (2017) suggests that know-how (and not knacks) consists of understanding, which needs conceptual assessment, namely something similar to the critical performance. There is not enough space to examine these views carefully here. However, as other authors argue (see, e.g., Cath 2019), there is a worry that, given strong readings of the critical performance and assessment capacities, considering them as necessary conditions for know-how would be too demanding. There are many instances of know-how which are due to mere habits and which manifest in unreflective, unthinking actions. Of course, if we employ "critical performance" or "assessment capacities" in a weak sense, then this would be close to what I called non-propositional intentionality. In this regard, my solution is closer to Elzinga's Rylean account. He identifies the notion of self-regulation as the warrant for know-how, the notion of which, at least on one reading, is similar to the sense of tension-fluency of non-propositional intentionality: "The self-regulator is someone who 'tries to get things right' by making adjustments when they go wrong" (2018: 135–6). Here, I intended to highlight just one feature which may be a similarity between these views and mine. There are other issues and, of course, worries, regarding each of these Rylean accounts which would require another essay for full discussion.

[37]For a defense of know-how-first version of anti-intellectualism, see Khalaj (2022).

Without mentioning know-how, it is odd and ad hoc to say that an amputee pianist has the ability to play the piano and that having hands is an enabling condition of her ability. Independently of her know-how, we don't have an intuition that she has the ability to play the piano and that her lost hands are the enabling condition. However, by appealing to the know-how itself, we can avoid this problem. The fact that the amputee pianist still knows how to play the piano means it makes sense to say that the pianist has *a kind of* ability to play the piano were she to have hands. Consequently, the kind of ability which is relevant to know-how can be specified only by appealing to know-how itself. This means that the success condition of know-how (that we define in terms of the manifestation of ability when enabling conditions are met) cannot be specified in a non-circular way.

To make this objection more forceful, we may make appeal to dispositionalism according to which the problems of masking and mimicking show that there are *unanalyzable* dispositional properties. As Martin argues, such problems show that dispositions cannot be analyzed in terms of counterfactual conditions, and "if, as we have seen, counterfactuality or strong conditionality cannot explain dispositions, then there is no place to turn but to actual first-order dispositions or powers" (1994: 7).[38] In a similar vein, a proponent of a know-how-first version of the solution can argue that in so far as know-how can be masked and mimicked, it is an unanalyzable power.[39] Many cases discussed in the literature on know-how are relevant to this line of reasoning. For instance, consider again the case of the amputee pianist: there is a structural similarity between this case and the case of Susan, a standard case of masking know-how. Like Susan who knows how to address the Queen, the amputee pianist knows how to play the piano. Moreover, just as Susan would fail to manifest her knowing how to address the Queen if she tried in the considered condition, the amputee pianist would fail to manifest her knowing how to play the piano if she tried when she had lost her hands. In both cases, while both agents still possess the relevant know-how, some obstacles mask their powers. We observe that in addition to the standard case of Susan, the infamous case of the amputee pianist can be described as an example of masking. In the previous section, we also introduced the case of Harry as an instance of mimicking know-how.[40] It seems plausible that, inspired by proponents of dispositionalism who argue that masking and mimicking are reasons to favor the unanalyzability of dispositions,[41] someone who advocates a know-how-first view can argue that since knowledge-how can be masked and mimicked, it is an unanalyzable power. To specify the kind of power which is an instance of know-how, we need to appeal to know-how itself. If this line of reasoning is on the right track, the concept of know-how cannot be analyzed in terms of a success condition in a non-circular way.[42]

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[38]For a similar line of argument for dispositionalism, among others, see Molnar (2003) and Lowe (2011: 32).

[39]Recently, the proponents of dispositionalism have developed dispositionalist accounts of some notions which are close to the notion of know-how. For example, Lowe (2013) employs a dispositionalist view in explaining the will. Ellis (2013) follows the same line of argument for accounting for agency, and Vetter (2020) develops a dispositionalist metaphysics for affordance. A dispositionalist view about know-how which a proponent of a know-how-first view vindicates definitely has something in common with these dispositionalist accounts, but we have no space to discuss them here.

[40]Löwenstein (2017: 171) has interestingly argued that the case of *Lucky figure skater* is another instance of mimicking.

[41]Among others, see, e.g., Martin (1994), Bird (1998), and Mumford and Anjum (2011).

[42]For a more detailed version of this argument in favor of know-how-first anti-intellectualism, see Khalaj (2022, section 2).

The second objection is that in explaining the because-of relation (between the internal (agential) ability and reliable success) by which we identify the externalist condition, we might face severe problems. As said above, the explanation of the externalist condition in terms of the because-of relation is inspired by virtue epistemology; however, it is widely argued that the various versions of virtue epistemology are vulnerable to several problems relating to this because-of relation. For example, if, following Greco (2009), we account for the because-of relation in terms of "the most salient part of the explanation of success," we have difficulty in explaining what can be called "easy know-how." Suppose, for example, Marcus and Cristiano are two strikers in a football team. Marcus evades four defenders and the goalkeeper, then passes to Cristiano, who scores the goal. While Cristiano manifests know-how of scoring the goal, the most salient part of the explanation of his success is definitely Marcus's ability to dribble and not Cristiano's. If we explain the because-of relation between the success and internal ability in terms of the most salient part of the explanation of success, this would deliver the wrong verdict that Cristiano's success is not because of his internal ability, and he does not manifest this easy know-how.

As another example, if, inspired by Pritchard's anti-luck virtue epistemology (2012: 273), we account for the because-of relation between reliable success and internal ability by appealing to the idea that one's reliable success "should be to a significant degree creditable to" her internal (agential) ability, we must face a new version of the case of *Lucky figure skater*:

> *Lucky figure skater II*
> Suppose ten figure skaters, including Irina, participate in a game involving performing the Salchow. Irina is the only participant who is confused about the way to perform the Salchow. Imagine, also, that there is an evil demon who wants to annoy these participants, and whenever they intend to perform the Salchow, the evil demon puts the above-mentioned abnormality in their brains. Therefore, the only figure skater who performs the Salchow successfully is Irina.

Of course Irina's success is attributed in the first place to her being lucky, or the evil demon's intervention. However, when we ask why Irina succeeds in performing the Salchow and the others fail, one natural answer is that it is because her agential action has an incorrect content. Therefore, it would be safe to say that Irina's success is to *a significant degree creditable to* the content of her wrong intention (which is the basis of her internal agential ability), meaning that, according to this suggestion, Irina's success is because of her internal agential ability. Thus, contrary to our intuition about the case of *Lucky figure skater II*, this suggestion predicts that Irina has know-how of performing the Salchow.

To avoid similar problems pertaining to the because-of relation in explaining propositional knowledge, some virtue epistemologists such as Miracchi (2015) and Kelp (2017) put forward a knowledge-first version of the view, arguing that there is no non-circular virtue-theoretic-friendly externalist condition for excluding Gettier cases for propositional knowledge. In a similar vein, a proponent of a know-how-first solution suggests that, to avoid the above problems, there is no non-circular virtue-theoretic-friendly externalist condition for excluding Gettier cases for know-how. In which case, in the cases of *Lucky figure skater I and II*, we should explain the because-of relation in terms of know-how, not vice versa. This means that we should say that Irina's

success is not because of her internal agential ability *in the right way* since she does not manifest know-how of performing the Salchow.

So far I have discussed two objections which the know-how-first point of view may raise against the suggested success and externalist conditions. Concerning the internalist condition, the third objection is that we get the order of explanation wrong when we explain know-how in terms of (propositional and non-propositional) intentionality. Some prima facie evidence in favor of this claim is that the philosophers who introduce various versions of non-propositional intentionality mostly explain them in terms of know-how. For example, Dreyfus suggests that our pre-reflective, non-conceptual motor intentionality involves a kind of understanding: "Such an understanding is contained in our knowing-how-to-cope in various domains" (1991: 18). As another example, Railton states: "practical intelligence is largely a matter of know-how" (2009: 95); or in Rietveld's terms: "know-how (*können*) and embodied concerns constitute the basis of the expert's contextual and normative sensitivity" (2008: 983). These philosophers explain the various bases for non-propositional intentionality (i.e., the kind of understanding, practical intelligence, and normative sensitivity) in terms of know-how, not vice versa. Given this, a proponent of a know-how-first version would complain that we cannot invoke the ideas of these philosophers to suggest that non-propositional intentionality is a constitutive condition of know-how.

In addition to that, there are arguments in favor of the claim that intentionality in general should be explained in terms of know-how, not vice versa. Hornsby puts forward an example of such an argument in order to exclude a causally deviant case of intentionality. Consider a would-be assassin who accidentally runs over and kills the man he intends to kill without intentionally killing him.

> It could be that the explanation why the would-be assassin did not intentionally kill his intended victim is that the knowledge how he exercised when he accidentally ran him over was not knowledge how to kill him. (2017: 101)

This suggests that, in order to account for the notion of intentionality, we need to appeal to the notion of the manifestation of know-how, and therefore the latter would be a more fundamental notion than the former.

In a broader context, a proponent of the know-how-first view can suggest a normative definition for intentionality in terms of know-how. In the cases of John's free kick, *Lucky figure skater I and II*, and Hornsby's assassin, the intentional contents fall short of non-accidentally correct intentionality *because* the agents do not manifest know-how. This means that intentional action *targets* the manifestation of know-how, and in other words, manifestation of know-how is the norm of intentional action.[43] With this normative definition of intentionality in terms of know-how, a proponent of the know-how-first version can argue that the notion of know-how is more fundamental than the notion of intentionality (either propositional or non-propositional) which we suggest as the internalist condition for know-how.

In light of these three objections, and inspired by the "knowledge-first epistemology" first broached by Williamson (2000), it is open to the anti-intellectualist to provide a know-how-first version of the suggested solution to the general epistemic problem. In contrast with the dominant post-Gettier approach to knowledge, which tries to explain propositional knowledge via justified true belief and a fourth condition,

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[43]Habgood-Coote (2018) has made a strong case for this claim.

Williamson develops the knowledge-first epistemology which assumes that propositional knowledge is an unanalyzable notion and seeks to explain other epistemic notions such as evidence, belief, and justification in terms of propositional knowledge.[44] In this way, propositional knowledge comes first in the order of explanation of theoretical achievement. In a similar vein, and to the extent that the above objections show that there is no non-circular conception of the three suggested conditions for know-how, we can suggest that know-how is an unanalyzable notion which comes first in the order of explanation of practical achievement. Regarding the three considered objections, there are three motivations for a know-how-first version of the solution: the first is dispositionalism, according to which there are unanalyzable powers, and know-how is among them; the second is the idea that there is no non-circular condition for excluding Gettier cases, including Gettier cases for know-how; and the third is that intentionality should be explained in terms of know-how (not vice versa). Therefore, just as based on Williamson's view the belief condition (Williamson 2000: 3), the reliability condition,[45] and the safety condition (2000: 128)[46] are informative,[47] circular, and necessary conditions for propositional knowledge, in the present conception of know-how, the suggested success and anti-luck conditions are informative necessary conditions for know-how which, of course, cannot be identified without appealing to the notion of know-how itself.

Of course, if we adopt a know-how-first view to provide a solution to the general epistemic problem, we can no longer suppose that the general notion of knowledge is *analyzable* to the success and anti-luck conditions. Instead, we should think of the broader sense of "knowledge" as an unanalyzable notion which applies to both propositional knowledge and knowledge-how, seen as two analogous notions of knowledge. The core idea of the analogy is that both propositional knowledge and know-how have intrinsic relations to success and anti-luck conditions which cannot be identified in non-circular ways. Let's call this "the analogical conception of knowledge," in contrast with the above analyzable conception of knowledge. According to the analogical conception of knowledge, knowledge comes first in both theoretical and practical realms: in the theoretical realm, propositional knowledge is the target of belief, and in the practical realm, manifestation of knowledge-how is the target of intentional action. Moreover, if we choose the analogical conception of knowledge, the solution to the knowledge-knacks problem is this: know-how differs from knacks since the former and not the latter is intrinsically related to non-propositional intentionality; the intelligence of non-propositional intentionality is explained in terms of know-how, and not knacks.

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[44]Very recently, Williamson (2022) has argued for a knowledge-first account of know-how by focusing on the role of know-how in explaining practical deliberation. As expected, he employs the knowledge-first methodology to argue in favor of intellectualism.

[45]Regarding the reliability condition, Williamson (2000: 100) writes: "If one believes p truly in a case α, one must avoid false belief in other cases sufficiently similar to α in order to count as reliable enough to know p in α. The vagueness in 'sufficiently similar' matches the vagueness in 'reliable', and in 'know'. Since the account of knowledge developed in Chapter 1 implies that the reliability condition will not be a conjunct in a non-circular analysis of the concept knows, we need not even assume that we can specify the relevant degree and kind of similarity without using the concept knows."

[46]See, also, Williamson (2009: 305–6).

[47]In response to Goldman, Williamson (2009: 305) addresses the charge of uninformativeness, "circularity does not entail uninformativeness, as Nelson Goodman pointed out long ago."

4. Conclusion

How can anti-intellectualism account for the fact that know-how is a distinct kind of knowledge? I called this problem *the general epistemic problem for anti-intellectualism* and sought to provide a solution. Inspired by Hawley, I drew on the insight that there is a general conception of knowledge to which both propositional knowledge and know-how belong. I developed two versions of the solution: in fleshing out the general conception of knowledge, classic anti-intellectualism supports the analyzable conception of knowledge, and know-how-first anti-intellectualism advocates the analogical unanalyzable conception of knowledge.

Note that, in providing a solution to the general epistemic problem, I don't need to choose between the analyzable conception of knowledge and the analogical conception of knowledge. Both options are available to anti-intellectualists and provide a broader conception of knowledge to which know-how and propositional knowledge belong; establishing this broader conception of knowledge is enough for my solution. Choosing between two versions of the solution requires solving hard problems, including the problems of masks and mimics, Gettier problems, and the problem of the right order of explanation between intentional action and knowledge, which are beyond the scope of the present project. If the three objections I considered at the beginning of this section are on the right track, anti-intellectualists should choose the analogical conception of knowledge to provide the solution to the general epistemic problem; and if they are on the wrong track, the analyzable conception is preferable to provide that solution.[48,49]

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[48]As I argue in my paper (2022), I am indeed inclined toward the know-how-first view, and therefore prefer the analogical conception of knowledge. However, the crucial point is that in developing the suggested solution to the general epistemic and knowledge-knacks problems, I don't need to defend a know-how-first account. With two versions of the suggested solution to hand, I and those anti-intellectualists who don't agree with me about the know-how-first view can form a united front against our common opponents, namely, intellectualists who think that anti-intellectualism *cannot* solve the general epistemic problem, and anti-intellectualists who think that anti-intellectualism *doesn't need* to solve this problem.

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