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Practical Knowledge and Luminosity

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When a person knows something, the world is non-accidentally as she thinks; and when a person acts intentionally, the world is non-accidentally as she intends it to be. Knowledge and action thus yield a distinctive harmony between mind and world. Partly on the basis of such considerations, some philosophers, including Aristotle, have argued that there is an important link between a person's intentional actions and her knowledge of them;¹ that when a person acts intentionally, she must know what she is doing.² This is one of the central theses of Anscombe's seminal *Intention*, where she argues that in cases where an agent lacks knowledge of what she is doing, 'what happens does not come under the description—execution of intentions' that is the subject of her book.³

We can put the Aristotle-Anscombe thesis about the connection between action and knowledge more formally as follows:

Practical Knowledge Principle (PKP): (Necessarily) If an agent is Φ ing (intentionally and under that description), she knows that she is Φ ing (intentionally and under that description).⁴

Central to Anscombe's understanding of (PKP) is the contention that the knowledge that agents have of their own actions is of a special kind. This knowledge is 'non-observational' (p.13ff.) and

¹ For elucidative accounts of the parallels in Aristotle, see Moss (2014) and the papers by Allen and Charles in the collection edited by Henry and Nielsen (2015). See also my Piñeros Glasscock (2019, sec.5). For a recent extended treatment of the parallels, see Williamson (2017).

² See *NE* 1111a23-4; *EE* 1223a15-7. Some may balk at the ascription of this thesis to Aristotle since, as Anscombe (1981 [1965]) noted, it is unclear whether he shares our notion of *intention*. However, in the cited passages Aristotle is listing the cognitive conditions for *voluntary* (ἐκούσιον) action, and it seems safe to assume that he would recognize intentional action as a subset of voluntary action, given that he thinks chosen (προαιρετική) action is such a subset (*NE* 1111b7).

³ Anscombe (1958, §48), and see also Anscombe (1963). Hampshire (1983) defends an even stronger thesis: 'To say that I did something intentionally is to say that I knew what I was doing when I did it' (p.145). Other defenders of (PKP) include Newstead (2006), Rödl (2011, 2007), and the authors mentioned in fn.6.

⁴ I will omit the bracketed qualifications from now on unless they are important.

‘practical’ (p.57ff.) rather than ‘speculative’.⁵ To explain what this means, she uses a formula from Aquinas: unlike speculative knowledge, which ‘is derived from the objects known’, practical knowledge is ‘the cause of what it understands’ (p.87). Although the phrase is widely agreed to capture an important truth, its exact meaning is unclear and disputed. We shall return to the question at different points throughout the paper.

For many years there was a consensus in the literature that (PKP) should be rejected in light of counterexamples by Donald Davidson (2001a, 2001c) and others. The force of these counterexamples, however, has recently been contested, as a number of scholars have argued that attention to aspectual distinctions shows that they miss the mark.⁶ As a result, (PKP) has enjoyed something of a resurgence, and it is once again considered an important contender among principles that might elucidate the nature of intentional action and practical knowledge.

In this paper I defend a novel objection to (PKP), arguing that the thesis is subject to a form of Timothy Williamson’s influential anti-luminosity argument (2000). Together with other plausible principles about the nature of knowledge, (PKP) leads to contradiction and should therefore be rejected. Since the argument relies on general epistemic principles, rather than on intuitions about fringe cases, the recent responses that have been given to defuse the force of Davidson’s purported counterexamples are silent against it. The upshot, if I am right, is that can and do act intentionally without knowing what they are doing. Hence, we shall need a different account of the non-accidental connection between intentional action and practical knowledge than defenders of (PKP) have proposed. I suggest an outline of such an account at the end of the paper, modelling the relation between intentional action and practical knowledge on that between perception and perceptual knowledge.

I proceed as follows. I first explore the reasons to hold (PKP), paying particular attention to an argument on the basis of aspectual considerations, arguing that the standard objections in terms of presumed counterexamples leave us at an impasse (§1). I then present the anti-luminosity argument as it applies to practical entities such as intentional action and intention, leading to the

⁵ See Moran (2004) on the relation between these two characterizations.

⁶ See Small (2012), Stathopoulos (2016), Thompson (2011), and Wolfson (2012). Thompson’s second chapter in *Life and Action* (2008), circulated for a long time before publication under the title ‘Naive Action Theory’, seems to be largely responsible for the resurgence of interest about aspectual differences in much recent philosophy of action. To my knowledge, Falvey (2000) was the first to point out the importance of aspect for studying practical knowledge, but unlike recent defenders of (PKP) he seems to think Davidson’s counterexamples should lead us to weaken the principle (see pp.36-7).

conclusion that (PKP) and related theses drawing a necessary connection between practical entities and knowledge should be rejected (§2). I close with a positive proposal for how to capture the central motivations for (PKP) without falling prey to anti-luminosity arguments (§3).

1. (PKP) and Presumed Counterexamples

(PKP) expresses an ostensibly necessary connection between intentional action and knowledge. Related theses about other practical phenomena, like intentions, have been defended by other philosophers.⁷ For now, though, I want to focus on (PKP), in light of its impressive history and given the recent attention it has received.

A few remarks about the principle are in order. First, as the parenthetical phrases indicate, the description under which the agent knows her actions must match the description under which the action is intentional. Second, I shall assume (for reasons that will soon become clear) that (PKP) is aspect-sensitive: it is a thesis about what an agent *is doing* (imperfective aspect), rather than what she *will have done* (perfective aspect). Third, since it is often possible to distinguish between Φ ing intentionally and Φ ing *simpliciter*, we might ask whether simply knowing that one is Φ ing *simpliciter* is sufficient to satisfy the knowledge requirement in (PKP). Although it is not always made clear, I assume supporters of (PKP) think only knowledge of an action as done intentionally fulfills the principle, since it would be strange to think that my practical knowledge could be expressed by saying, for instance, ‘I’m walking, but I’m not sure whether I’m doing it intentionally’. Moreover, since (PKP) includes in its scope actions that, as Anscombe notes (1958, §47), must be carried out intentionally (her examples include calling, greeting, signalling, and marrying), an interpretation along these lines is most principled, keeping the knowledge requirement consistent through all action types.⁸

⁷ For instance, Fleming (1964) defends the view that intention requires knowledge that one intends: ‘to intend to do x is itself to know that you intend to do x : intending is itself awareness of intending’ (p.315). And, as I’ll note shortly, although Davidson is often portrayed as the main opponent to Anscombe’s view, he held the related thesis that the agent must know what she is doing under at least one description if her action is intentional. Searle (1983) defends a similar view, holding that ‘at any given point in a man’s conscious life he knows without observation the answer to the question ‘what are you now doing?’’, where knowledge that one is trying to act a certain way counts as meeting this condition (p.90). I shall show that the anti-luminosity argument also calls these weaker views into question.

⁸ These are the actions denoted by what Jonathan Bennett calls ‘intention-drenched verbs’ and Michael Moore calls ‘intentionally complex’ (Bennett 1988, pp.205-6; Moore 2010, p.174). The existence of such actions is sufficient for the anti-luminosity objection I present to (PKP), since the argument below would show that the principle is false at least with respect to these actions.

One reason (PKP) seems attractive is that, as Anscombe notes, if you asked a man why he was sawing a plank (as he moved a saw in the relevant way across a plank) it would be strange for him to reply that he didn't know he was sawing a plank (1958, p.11). Such a reply would call into question whether he was sawing the plank intentionally, suggesting that knowledge of the relevant sort is necessary to act intentionally.

Here, however, I want to focus on an argument for the principle that specifically appeals to the progressive nature of the knowledge in question.⁹ Thus, take a sentence with a telic verbal phrase with imperfective aspect, such as:¹⁰

(1) The stone is rolling down to the bottom of the hill.

(1) can be true, even if it also turns out that:

(2) The stone didn't roll down to the bottom of the hill.

This can happen, for instance, if the ball was rolling, but someone stuck her hand out and stops it before it can reach the bottom. Generalizing and ascending semantically: something can be engaged in a process even though the process is never successfully accomplished.¹¹ This feature is known as the 'openness' of the imperfective.¹²

As recent defenders of (PKP) emphasize, we should not conclude from this that the truth-conditions of corresponding imperfective and perfective sentences are wholly independent of each other.¹³ After all, if I flick the stone in question from the top of the hill with just enough force to move it a few centimeters downward, that would not be enough to guarantee the truth of (1). Intuitively, this is because in order to be rolling down to the bottom of the hill, the rock must be engaged in a process that has as its default terminus the rock's reaching of the bottom of the hill: if, in the end, it does not reach the bottom, something must have interfered *preventing* it from doing so. Generalizing, then, the proposal is that:

⁹ A version of this argument is presented by Small (2012) and Wolfson (2012). My rendering of it abstracts from differences in their presentation (differences of importance are noted in the footnotes).

¹⁰ I follow defenders of (PKP) in focusing on telic VPs (commonly referred to as 'accomplishments', following Vendler (1957)), and the recent linguistic literature that treats aspect as a property of VPs rather than verbs. See Rothstein (2004) for an excellent critical summary of recent linguistic work on aspect.

¹¹ I use 'process' in a fairly standard way in philosophy of action to refer to those entities subject to predications that differ in aspectual character (see e.g. Steward (1997, 2012) and Stout (1997))

¹² The term comes from Falvey (2000, p.22). It is also known to linguists as the 'imperfective paradox', but as Zoltán Gendler Szabó notes, this is a misnomer: 'The imperfective paradox is not really a paradox, just a refutation of the once common view that lexical aspect can be analyzed with the resources of classical tense logic' (2008, p.523n33)

¹³ See Small (2012, pp.179-80) and Wolfson (2012, pp.331-3).

(3) x is Φ ing iff x is doing something such that it will not be accidental if x will have Φ 'd (i.e. it will have Φ 'd unless something interferes).

The principle expressed by (3) is a general proposal about the truth conditions of telic imperfective sentences (or, ascending semantically, about the nature of telic processes in general). The case of intentional action is special, however, insofar as the aim of the action, and the non-accidental connection between it and what the agent is doing, obtain in virtue of her own representation of her action.¹⁴ Thus, for an agent to be Φ ing intentionally it must be that: (i) she represents what she is doing as being such that it will be non-accidental if she will have Φ 'd, and (ii) the non-accidental connection obtains in virtue of the agent's practical representation of it—a plan or instrumental order which determines what counts as an interference.¹⁵ A Φ ing is intentional, therefore, only if it occurs as an expression of the agent's know-how or skill to carry out that plan; without the know-how the connection between the representation and the happening will be accidental, conflicting with (i).

Why should we understand the non-accidental condition so strongly, rather than hold that it suffices to act intentionally if the agent accomplishes an aim she 'sets for herself'? To answer this challenge, Wolfson (2012, p.349) appeals to deviant-chain cases, where an intentional action fails to obtain despite meeting the weaker condition. Thus, consider the following case from Davidson (2001b):¹⁶ If a man wants to kill someone by shooting a gun, it does not follow that every death that results from a shooting of his gun caused by such a want is intentional (under the relevant description). For instance, if a person dies from a heart attack after hearing the shot that the man aims at another person, the killing of the one who dies from a heart attack is not intentional. According to Wolfson, the reason is that the death wasn't brought about as an execution of the shooter's plan.¹⁷

It might at this point help to illustrate the two conditions with an example. Thus, suppose Ann is walking to the store intentionally. It must then be that: (i) Ann represents what she is doing (e.g. taking some steps) as being such that it would be no accident if she gets to the store as a result,

¹⁴ See Small (2012, p.163 et passim) and Wolfson (2012pp.344-5) who quotes approvingly the following passage from Searle (1984, p.58): 'what I am doing depends in large part on what I think I am doing'. This is also a central thesis in Rödl (2007), who identifies a certain form of so thinking with the intentional action.

¹⁵ Small (2012) appeals to the notion of an instrumental order, as characterized by Anscombe's (1958) special sense of the question 'Why?', whereas Wolfson (2012) appeals to Bratman's (1999 [1987]) notion of a plan.

¹⁶ Attributed to Daniel Bennett.

¹⁷ See Mele and Moser (1994) for a similar explanation.

and (ii) the fact that it wouldn't be an accident is explained by her representation of a plan to get to the store (she is taking these steps to reach the corner, in order to turn left, in order to keep walking and eventually get to the store), a plan that she is executing as an expression of her know-how. An action is intentional, on the proposed view, only under those descriptions that meet these conditions.

Let c be an arbitrary case where S is Φ ing. Given (i), S must have a representation that she will Φ unless interrupted. Hence, she must have a representation that she is Φ ing, a representation that either constitutes or puts the agent in a position to form a belief that she is Φ ing.¹⁸ Since S is indeed Φ ing in c , the belief is true. Moreover, given (ii), the agent must possess know-how to ensure that unless something intervenes, the agent will succeed in Φ ing. The possession of this know-how ensures that the agent's belief that she is Φ ing is not just true, but non-accidentally true. It thus seems to constitute knowledge.¹⁹ Hence, an agent cannot act intentionally unless she knows what she is doing. Metaphysical considerations about the structure of processes therefore give us strong reasons to accept (PKP).

On the other hand, (PKP) was near-unanimously rejected for many years by philosophers of action, who took it to be vulnerable to counterexamples. The most influential is by Davidson:²⁰

[I]n writing heavily on this page I may be intending to produce ten legible carbon copies. I do not know, or believe with any confidence, that I am succeeding. But if I am producing ten legible carbon copies, I am certainly doing it intentionally. (2001c, p.92)

Davidson is arguing here against a weaker thesis than (PKP), namely, the view that acting with an intention requires a belief that one is doing what one intends.²¹ But since knowledge entails belief, the example, if successful, would show that (PKP) is false. More recently, Sarah Paul (2009a) has argued that cases of absent-mindedness might also be counterexamples to (PKP). For instance, she notes that someone driving on 'autopilot' might signal to turn left out of habit without realizing

¹⁸ Small (2012) argues for the first view, whereas Wolfson (2012) seems committed only to the second.

¹⁹ Small (2012, pp.205-206) moves from the claim that the belief is true and justified to the conclusion that it is knowledge; but, as is well known from Gettier cases, there can be justified beliefs that aren't knowledge. I therefore think the argument is better stated in terms of non-accidentality with respect to the truth. In §3, however, I shall argue that the non-accidentality in play is not sufficient for knowledge.

²⁰ What follows is from a passage in "Intending". An earlier and more condensed formulation of the example appears in his "Agency" (2001a, p.50). A similar example is offered by Bratman (1999 [1987], p.37).

²¹ And ultimately the target of the objection is the view defended by Grice (1971) and Harman (1986a, 1997, 1986b) that intending to Φ requires the belief that one will Φ . See Pears (1985) and Velleman (1989, pp.114-121) for sustained replies to Davidson's objection.

that she is doing so at all (p.5). She suggests that in such a case the person acts intentionally without knowing what she is doing.

Many respond to these cases by rejecting (PKP). Paul, for instance, concludes that there is no interesting necessary connection between practical and cognitive attitudes (2009a, 2009b). Others try to preserve a connection by weakening the principle. This is Davidson's preferred strategy. He writes: 'Action does require that what the agent does is intentional under some description, and this in turn requires, I think, that *what the agent does is known to him under some description*' (Davidson 2001a, p.50, emphasis added).²² Similarly, although cognitivists such as David Velleman (1989) and Keiran Setiya (2008, 2009) reject (PKP), they aim to capture the insight behind it with principles that appeal to weaker cognitive attitudes than knowledge, beliefs in Velleman's view, and increases in confidence in Setiya's (considered) view.²³

The third strategy, one that was neglected for many years but has recently received increasing support, is to deny that the presumed counterexamples actually tell against (PKP).²⁴ For instance, it might be claimed that if we allow that knowledge and belief are sometimes unconscious and dispositional states (as opposed to conscious, occurrent states), examples like that of the habitual driver are consistent with (PKP), since the driver might still know what she is doing, though unconsciously and/or dispositionally.²⁵ And while many saw counterexamples like Davidson's as decisive, the considerations about aspectual differences that ground the metaphysical argument for (PKP) presented above have also been used to call into question the force of the counterexamples (Thompson 2011; Small 2012; Wolfson 2012; Stathopoulos 2016). For instance, Michael Thompson (2011) argues that in the ordinary cases of *making* (progressive) ten carbon copies, one has the opportunity to check and try as many times as needed until one has succeeded in one's aim. In those cases, all of what one does is subsumed under the action-description *making ten carbon copies*. Under that description, the agent can know all along what

²² Falvey (2000, pp.36-7) also seems to endorse this view.

²³ Velleman (1989) initially held that intentions are beliefs, but in the introduction to the latest edition of his book, he rejects this formulation (without changing the substance of his view) (2001, p.xix). Which mental states constitute intentions according to Velleman is a matter of dispute. See Yaffe (1995) for helpful discussion of this question.

²⁴ For an early precursor of this type of response, which distinguishes between the sense of 'intentional' of interest to philosophy of action and the sense employed in ordinary language, see Velleman (1989, pp.114-21).

²⁵ See Setiya (2009, p.389) for a response along these lines. A related strategy is to hold that the person acting need not *actually* know what she is doing, but must at least be in a position to know (see fn.29 below on 'being in a position to know'). As an anonymous referee pointed out, though, these responses are complicated by the fact that, as Paul imagines the case, the person can come to know only *by looking* at the dashboard.

she is doing, even if she fails on her first try (and even if she fails to bring the action to completion). Of a case where the person only gets one chance, Thompson writes:

[F]or him, the making of the inscription is like the buying of a lottery ticket. You can say he made ten copies intentionally if you like, but it will not be an illustration of the topic of Anscombe's book, any more than lottery-winning is when you bought the ticket with that aim. (p.210)

Small (2012) arrives at the same verdict:

[I]t's not clear that a copier under such a strange and unusual demand is in a position to intend to make all ten copies at once. He can aspire to, perhaps . . . he can give it a shot and hope for the best. But if you hope to make ten copies and you bring it about that ten copies are made, you haven't necessarily acted intentionally. (p.199)

Indeed, as both Small (2012) and Wolfson (2012) note, their metaphysical argument for (PKP) entails that under such conditions the carbon-copier is not making ten carbon copies intentionally, since the action's success is in this case overly accidental.

Now, I don't take these authors to deny that ordinary intuitions about the case might lead one to say that the man is intentionally making ten carbon copies in the case where he only gets one go.²⁶ Rather, their point is that such an example is very different from the central cases of intentional action where, in particular, the person retains control over her action in a way that makes her success non-accidental: the person has the chance to correct and continue pursuing her intended action in the face of obstacles and difficulties. Therefore, a theory of intentional action need not be responsive to our intuitions about these cases.²⁷

Drawing a parallel to a dispute in epistemology is helpful at this point. Many of us hold that knowledge entails belief: Necessarily, if *S* knows *p*, *S* believes *p*. However, there are cases where it seems to some intuitive to ascribe knowledge while denying belief.²⁸ Although this leads some to reject the view that knowledge entails belief, many of us judge that given how much else there is to be said for it, we should hold on to the connection even if it conflicts with some intuitions: our theory of knowledge is allowed to diverge from intuitions about fringe cases. What

²⁶ Studies I have conducted on Amazon Turk suggest that people generally think in cases with this structure a person acts intentionally and without knowledge. I should note, however, that I do not readily share the intuitions myself; but to the extent that we can ascribe evidential value to intuitions, these ones seem safe enough. I discuss these studies in Piñeros Glasscock (ms).

²⁷ Wolfson (2012) is particularly clear on this score when he says that the conception he defends implies that 'we do fewer things intentionally than many philosophers, and many non-philosophers, have thought' (p.354).

²⁸ The contention goes back to Radford (1966), and has been recently defended by Myers-Schulz and Schwitzgebel (2013).

goes for the connection between knowledge and belief should go for the connection between knowledge and action. Given the arguments that motivate defenders of (PKP), the lack of control in the carbon-copier case gives us reason to think it is fringe. Hence, those attracted to the principle are free to reject objections based on intuitions about such cases.

2. Practical Anti-Luminosity

There are powerful arguments in favour of (PKP), and we have seen that outstanding objections to it are far from decisive. In this section I shall argue that, nonetheless, we should reject it because it conflicts with principles that capture important properties of knowledge. This is shown by the fact that (PKP) is subject to arguments of the sort that Williamson (2000) has used to call into question the luminosity of mental states like appearances, feelings of pain, and knowledge.²⁹ Because it is not reliant on intuitions about fringe cases, this strategy cannot be dismissed on the same grounds as Davidson's counterexample.

Let's start with a brief summary of the anti-luminosity argument for the case Williamson considers, that of feeling cold (a more detailed version is given below for practical cases). Consider the following thesis:

Luminosity of cold feelings (LUM):³⁰ Someone feels cold iff they are in a position to know that they feel cold.

Williamson's argument against (LUM) begins with the observation that we often go from feeling cold to feeling warm slowly and gradually. Suppose that such a transition takes place as the sun warms up Sunny on an initially cold morning. As time goes by, it becomes less and less clear whether Sunny is feeling cold in such a case, and Sunny will start losing confidence that she is so feeling as a result. At some point, Sunny's confidence will be fairly low but still high enough for belief. In that case, there are two possibilities: either her belief that she feels cold is true or it isn't. If it isn't, then clearly Sunny doesn't know; but even if the belief is true, Sunny will not know because there are nearby cases where her belief that she is feeling cold is false: her belief is too accidentally true to constitute knowledge.

²⁹ A condition *C* is luminous just in case, the following is necessarily true: one is in *C* iff one is in a position to know that one is in *C*. To be in a position to know *p* is to be such that if one is doing what one can with the aim of finding out whether *p* (such as directing one's attention in the relevant way), then necessarily one knows *p*.

³⁰ There is no standard labelling of the principles in the anti-luminosity argument in the literature. I largely follow Srinivasan's (2015).

A number of strategies have been proposed to resist the anti-luminosity argument.³¹ It is beyond the scope of this paper to consider them. My view is that the argument is sound.³² But it is sufficient for my purposes that many philosophers endorse the arguments, and that even its detractors admit that there are important costs to rejecting it.³³

It is easy to adapt the argument about feeling cold to show that many other conditions are not luminous. What has not been noticed, and I want to argue here, is that it can be adapted to practical phenomena like intention and intentional action. Anti-luminosity arguments present a powerful challenge to (PKP) and related theses, a challenge that I believe should lead us to reject these principles.

Consider the following case:

Cleaning Sisyphus: The floors of the Underworld are getting filthy with blood and bile. Hades notices, and decides to give Sisyphus a more useful task than pushing a rock, repeatedly, up a hill. Handing him a mop, he orders him to clean the floors using the waters from the river Acheron, the cleanest in the Underworld. There is one problem: while at noon the waters of Acheron are clean as a spring, they slowly and gradually get dirtier and dirtier as the day goes by—by midnight it is just filth, much dirtier than the floors of the Underworld. Hades thus tells Sisyphus that at midnight he will be punished proportionally to his efficiency: his punishment will be worse if either he fails to keep mopping when the water is still clean enough or if he keeps mopping when the water is dirtier than the floors. Each day, therefore, Sisyphus grabs his mop in the morning trying to mop as much of the Underworld as he can while the water is still cleaner than it. At noon, he is fully confident that he is intentionally acting under the description *cleaning the floors*. As the day goes by, however, he loses more and more confidence. But by midnight in those days when he keeps mopping to defy Hades, he is certain that he is *not* cleaning the floors of the Underworld (but instead making them dirtier).

We can assume that Sisyphus is very skilled at mopping floors, and that he knows this. This ensures that Sisyphus meets the know-how condition that defenders of (PKP) argue is necessary to engage in intentional action. With this in mind, take the span of a day where Sisyphus mops continually

³¹ See e.g. Berker (2008); Brueckner and Fiocco (2002); Cresto (2012); Egré and Dokic (2008); Egré (2006); Leitgeb (2002); Neta and Rohrbaugh (2004); Vogel (2010); Weatherston (2004); Cohen (2010); Blackson (2007).

³² The central objections are, in my view, successfully addressed by Williamson (2005) and Srinivasan (2015), and the considerations presented below in defense of the application to practical cases can be used as the basis to defend the argument against some of other powerful objections

³³ Thus, surveying iteration principles of the sort that the anti-luminosity argument calls into question, Daniel Greco, who has elsewhere defended the view that knowledge is luminous (2014), notes that rejection of margin for error principles ‘will be a bullet to bite’ (2015, p.769). In a similar vein, Jonathan Vogel notes that there is ‘something mysterious about the luminist’s position’ given the commitments she incurs when rejecting the argument (2010, p.564).

from noon to midnight, concentrating throughout on what he is doing.³⁴ Let t_0, t_1, \dots, t_n be a series of times at one millisecond intervals from the time he starts mopping until a time where he is still mopping but no longer cleaning the floors because the water is too dirty, and let α_i be the case at time t_i in this series.³⁵ As described in the story, Sisyphus is cleaning the floors (intentionally) at α_0 , and knows it, while at α_n he isn't cleaning the floors, and knows it. It seems plausible to think that Sisyphus can't discriminate between cases α_i and α_{i+1} with respect to what he is doing. The following principle therefore seems to apply (more on this soon):

Margin for Error for Action (MARA): If Sisyphus knows that he is cleaning the floors at α_i , he is cleaning the floors at α_{i+1} , for all times in the series t_0, t_1, \dots, t_n .

From (MARA), it follows that Sisyphus is cleaning the floors at α_1 , given that he knows he is doing so at α_0 . Now suppose (PKP) is true. If so, Sisyphus knows that he is cleaning the floors at α_1 , and again, by (MARA), that he is doing so at α_2 ; hence, by (PKP), he knows he is cleaning the floors at α_3, \dots and so on. Evidently, sufficient applications of this mode of reasoning (n-many) will yield the conclusion that Sisyphus is cleaning the floors of the Underworld at α_n . This contradicts the initial assumption that he isn't doing so at the time. (PKP) leads to contradiction, so it must be rejected.

As I said above, a number of strategies have been proposed to resist the anti-luminosity argument, and it is not my aim to defend it against them here. However, I will now consider objections that might arise from the specific nature of intentional action and practical knowledge that might not generalize to applications of the anti-luminosity argument to other conditions. Before doing so, though, I want to briefly defend (MARA), given the crucial role that it plays in the argument.

(MARA) can be seen as a way of capturing, in modal terms, the view that to constitute knowledge, a belief must be non-accidentally true.³⁶ This property becomes salient when we

³⁴ The last supposition is needed to ensure the transition from being in a position to know to knowing. As Antonia Peacocke pointed out to me, it is possible that the transition is different for practical and theoretical cognition, in ways that might complicate the argument (since paying attention in the practical case may increase the chances that the action is successfully done). The case of Cleaning Sisyphus is set up to fend off these worries (throughout, he is attending fully to his task).

³⁵ A case is a centered possible world.

³⁶ Williamson defends margin for error principles by appeal to a safety principle, according to which knowledge requires it to be the case that in nearby cases where one forms a similar belief, the belief is true. Other defenders of safety include Ernest Sosa (2000, 1999) and Duncan Pritchard (2007, 2008, 2009). A proper vindication of the principle would require defending the transition from safety to margin for error (for which see Srinivasan (2015)).

consider standard fake-barn cases.³⁷ Suppose I find myself in a field full of objects, most of which are fake barns, and only one of which is a real barn. I point to one of them and say, ‘That’s a barn’. It seems that even while pointing to the real barn I could fail to know that what’s in front of me is a barn. Here is an attractive explanation of what goes wrong: given the presence of all those fake barns nearby, there are nearby cases where the objects about which I form beliefs are not barns. By contrast, if I was in a similar position but the field was full of real barns instead, all the objects about which I could form such beliefs in nearby cases would be barns. In this latter case, then, my belief would be non-accidentally true, and I would know. This explanation relies on a generalized version of (MARA)’s being true.

Recent arguments for (PKP) appeal to the distinction between action in the progressive and completed action, and the fact that it is possible to be doing something even when one will fail to have done it. It might thus be suggested that in the example, Sisyphus *is* still cleaning the floors (if he so intends), even when the water is pure filth; it’s just that he’s not succeeding at achieving his goal. However, for this strategy to work as a defense of (PKP), we would need to hold that one can be engaged in an action *regardless* of the material conditions in one’s environment. This is utterly implausible: I can’t be crossing a road in a desert (regardless of my intentions) if the closest road is many kilometers away.³⁸ By the same token, regardless of his intentions, Sisyphus can’t be cleaning the floors if the water is so grimy that it is instead clearly dirtying up the floor. If my friend told me that she is cleaning the floors of her apartment using dungy mud, I have to think that she’s making a complex joke, or that she has gone mad.

This, it should be noted, is a point that is emphasized by defenders of (PKP) who, following Anscombe, take the principle to be about ‘what happens’ rather than about a purely internal, mental state.³⁹ This is part of what makes (PKP) such an interesting thesis. However, the point shows that what I consider the most promising response to the anti-luminosity argument cannot easily be

³⁷ The cases were popularized by Goldman (1976), and are credited to Carl Ginet. Recent x-phi work in this area suggests that the intuitions in these cases are not as straightforward and secure as it might have been thought initially (Colaço et al. 2014; Horvath and Wiegmann 2015). With many others, however, I think there are good reasons to hold that fake-barns subjects lack knowledge. Moreover, to draw out the right intuition, it helps to imagine the case in such a way that the person has consistently gotten matters wrong (DeRose 1995, p.30). This last point, I have recently learnt, was originally made by Helen Beebe.

³⁸ The possibility of error here grounds the fact that, as Donnellan (1963, p.403) points out, one can make assertions of the form ‘I thought I was Φ ing, but in fact I am not \neg ’, e.g. ‘I thought I was turning on the radio, but I’m not since the radio doesn’t work’.

³⁹ See Wolfson (2012, pp.329, 337) and Small (2012, pp.167-173).

adapted as a defence of (PKP).⁴⁰ The response hinges on the contention that there are beliefs about certain facts, call them ‘B-facts’, that meet the following condition:

(*) If S believes that B-fact *F* obtains, *F* obtains.

But if (*) holds, then we could imagine a case where S has the belief that a B-fact obtains even though in nearby cases the belief would be false. If so, there are beliefs about B-facts that don’t meet a margin for error principle but nonetheless count as knowledge because the fact that they are true is not a matter of luck: (*) ensures that these beliefs are true whenever held. Now, it is disputed whether this strategy works; but the point I want to stress here, one emphasized by those who endorse this objection, is that the only reason it is plausible to think that beliefs about B-facts might constitute knowledge despite not meeting a margin for error principle is that a condition like (*) holds for them. However, we have just seen that such a principle cannot hold for intentional action given its dependence on material conditions.⁴¹ Anti-luminosity arguments are thus particularly powerful as objections to (PKP).⁴²

On the other hand, I want to consider two objections to the principle that appeal to what’s distinctive of practical knowledge as ‘the cause of what it understands’, to call into question important assumptions in the argument as given. Let’s distinguish two objections.⁴³

⁴⁰ This type of response was first presented by Leitgeb (2002) and is developed by Weatherson (2004) and Berker (2008).

⁴¹ More carefully: the occurrence of at least some intentional actions that lie within the scope of (PKP) depend on material conditions extrinsic to the agent’s state of mind. Of course, on a materialist understanding of the mind every state of mind depends on the occurrence of certain material conditions. The present problem, though, is that the material conditions required for these actions to obtain (such as conditions in the environment) seem to go well beyond the material conditions required for the relevant beliefs to obtain. This objection could be resisted by identifying a practical condition whose material requirements correspond to the material requirements for the belief that the condition obtains. For instance, one could restrict the scope of the principle to internal practical conditions like tryings (understood à la Hornsby (1980)), or (compatibly) defend a less internalist account of belief, where, for instance, the agent’s bodily movements are taken as constitutive of certain beliefs. Below, I consider restricted principles of the first sort. Such principles are immune to the present objection, and could thus be defended by appeal to the B-fact strategy. This is not to say that the strategy works. A defender of such a strategy would presumably have to argue for the required correspondence on independent grounds. Moreover, Srinivasan (2015) has presented a forceful (and, to my mind, convincing) defense of the anti-luminosity argument against this strategy, a strategy that can also be challenged in light of considerations presented below (pp.17-18). A defender of it would thus have to respond to these objections. I grant, however, that given the availability of this strategy, the anti-luminosity argument against (PKP) is *prima facie* stronger than the argument against some of the weaker principles to be considered. I thank an editor of MIND for pressing me on these issues.

⁴² Likewise, strategies that deny the applicability of safety (and therefore margin for error) principles to second-order (but not to first-order) knowledge (Egré and Dokic 2008; Egré 2006; Cresto 2012), also fail as defenses of (PKP) assuming actions are not mental states.

⁴³ I thank two anonymous reviewers for these objections.

The first objection is that it cannot be assumed that a situation analogous to a fake barns case could ever arise for practical knowledge. The reason is that whereas things like barns (both fake and true) exist independently of what the agent thinks about them, intentional actions are dependent for their existence on the agent's mind. For, as we saw, defenders of (PKP) contend that whether one is Φ ing intentionally depends precisely on whether one represents what one is doing as a Φ ing. For this reason, it is unclear whether an agent could even find herself in a situation where she believes that she is Φ ing intentionally, is doing so, but there are nearby cases in which she is not.

A related objection directly questions whether a margin for error principle applies to practical knowledge. For it may be suggested that part of what it is for such knowledge to be 'the cause of what it understand' is that in the situations where an agent is in a position to Φ intentionally, her intention settles whether she is Φ ing or not. This is because in these situations she both has the relevant know-how to carry out the action, and the circumstances are such that she could carry it out (since she is in a position to do so). Hence, if the agent's beliefs are constituted by or aptly track those intentions, the beliefs will necessarily be true. In the case of Sisyphus, for instance, there will come to be an interval of time (say, t_i), at which he is cleaning the floors intentionally (and so believes), but at the end of which he ceases to intend to clean the floors because the water is getting too dirty. He would thereby cease to intentionally clean the floors and to believe that he is doing so at t_{i+1} . However, the fact that he is no longer cleaning the floors intentionally at t_{i+1} doesn't count against the claim that his belief constitutes knowledge at t_i , since he is capable of discriminating between these cases through his *practical* discernment: his intention to cease cleaning is enough to distinguish the case where he is intentionally cleaning and where he is not. Therefore, his beliefs cannot but be true when they are aptly formed on the basis of his practical capacities. This means that, despite not meeting (MARA), these beliefs are sufficiently reliable to constitute knowledge in the case where the agent acts intentionally.

Let us take the objections in turn. Starting with the first objection, I want to show that the dependency of intentional action on material conditions suffices for the possibility that one can find oneself in epistemically perilous cases, analogous to a fake-barns case. To see this, consider the example Anscombe introduces in *Intention* to elucidate the notion of practical knowledge. She writes:

Imagine someone directing a project, like the erection of a building which he cannot see and does not get reports on, purely by giving orders. His imagination (evidently a superhuman one) takes the place of the perception that would ordinarily be employed by the director of such a project. He is not like a man merely considering speculatively how a thing might be done; such a man can leave many points unsettled, but this man must settle everything in a right order. His knowledge of what is done is practical knowledge. (p.82)

The point of considering such a weird case is clear: Anscombe is seeking to isolate a distinctively practical source by which the director might know what is happening with the project, so she needs to ensure that in the example the director does not know of this through theoretical sources, like reports or perception. How, then, *does* he know? He knows on the basis of his orders: so long as they are executed at some given stage, and his imagination represents them as being followed as they are, he can continue giving orders until the project is completed. And if the workers are obedient, and the director's imagination is working properly, he will have knowledge on the basis of his orders that a construction project of a determinate sort (say, a house of two floors, two bathrooms, three bedrooms with such dimensions, etc.) is being carried out; and since the source of the knowledge is practical rather than theoretical, then, as Anscombe writes, 'His knowledge of what is done is practical knowledge'.

The terms of the analogy are also clear. As the director stands to the project, an agent stands to her intentional actions. In particular, as the orders of the director determine, in a distinctively authoritative way, what gets done in the project, an agent's intentions determine, in a distinctively authoritative way, what she does intentionally. And as the director knows of the project through his orders, an agent knows what she does through her intentions.

Imagine now that the case is as Anscombe presents it, with the director giving orders at a distance without theoretical checks on what happens. Today, the director is giving orders to the electrician, who, luckily, is perfectly obedient and skilled at her job. His orders to her, therefore, are executed perfectly, so the director's beliefs about what she does are true. Imagine, however, that all the other workers are either completely disobedient or incompetent, so that when the director orders them to do something, his orders are never fulfilled. I submit that under such circumstances, the beliefs that the director forms on the basis of his orders to the electrician are analogous to the beliefs that the person forms in a fake-barns case: though the beliefs are true, there are too many nearby cases where similar beliefs are false. Hence, they don't amount to

knowledge.⁴⁴ This case, moreover, helps to diagnose *why* such cases can arise for practical knowledge, and, therefore, why anti-luminosity arguments are particularly powerful against (PKP): even granting that agents have a practical and authoritative kind of knowledge of their actions, limited agents like us do not have such knowledge of the material conditions of our actions: the director does not have practical knowledge of whether his workers are obedient or competent, and Sisyphus does not have practical knowledge of the conditions of cleanliness of the water. These limitations make perilous epistemic situations inescapable for agents like us.

Moving on to the second objection, it is worth noting that Williamson (2000) offers a second version of the anti-luminosity argument that aims to target precisely conditions like B-facts; and such a version of the argument would still apply to the case of practical knowledge. I cannot consider the argument in detail. What follows is a simplified version.⁴⁵ The basic idea is to run a parallel anti-luminosity argument targeting, not the person's beliefs, but her epistemic confidence. When one forms beliefs about a condition that changes slowly and gradually, one's confidence in the proposition that the condition obtains slowly diminishes as it becomes less and less clear that the condition obtains. As we reach an epistemically perilous case, a person's confidence level will either be high enough to constitute knowledge, or it will not. If it is not, then she doesn't know; but if it is high enough, then her confidence will be out of proportion to what the case merits (given that she is in an epistemically perilous situation), and her mental state will therefore be too unreliable to constitute knowledge. Either way, then, the person will fail to know, and all of this is consistent with the supposition that the agent forms only true beliefs about the matter at hand when these beliefs track her intentions.

Appealing to the type of considerations that showed that epistemically perilous situations arise for practical knowledge, however, we can give a more direct response to the second objection.⁴⁶ To do so, we need to take a deeper look at margin for error principles. As noted, these principles are part of a larger class of modal principles that aim to capture the characteristic non-accidentality of the relation between truth and belief when one has knowledge. It is generally agreed that these principles are *source-relative*: to decide whether a possibility is epistemically

⁴⁴ Working independently, John Schwenkler (2015, pp.22-5) arrives at a similar conclusion on the basis of these cases.

⁴⁵ I refer the reader to Srinivasan (2015, p.15ff.) for a detailed account and defense of the argument.

⁴⁶ Because the objections above have a structure similar to the one pursued by Berker (2008), they provide the bases for a more general defense of the anti-luminosity argument against such objections. I hope to explore this point further in future work.

near, we can ignore worlds where the agent would form false beliefs on the basis of a different source. Thus, to take a case from Nozick (1981), suppose a woman judges that her grandson is healthy upon seeing him. The knowledge that the woman thereby acquires of her grandson's state would not be called into question even if she would have judged that he was ill had he instead called her to say so. Knowledge acquired on the basis of perception is not called into question by the possibility of forming a false belief on the basis of testimony.

However, it is equally clear that the principles cannot be so strict as to require that only beliefs formed on the basis of the *same* source count as nearby. Cases where the person forms beliefs on the basis of a *similar* source must also count as near. To see why, suppose that whenever one *remembers* something, one recalls a fact (i.e. a true proposition). This would ensure that beliefs formed on the basis of remembering would be non-accidentally true, since every such belief will be true. However, suppose that a man suffers from memory-delusions: very often, when it seems to him that he is remembering something, he is actually just making something up. Those delusions do not count as remembrances, since they are not true. However, the beliefs that the man forms on the basis of his remembrances are clearly not reliable in a case like this, given how easily he could be suffering from a delusion when he thinks he is remembering. Therefore, the beliefs that this man forms on the basis of his memory do not constitute knowledge.

Let's now consider the practical case. Grant, for the sake of argument, that whenever a person intends to Φ in circumstances where she is in a position to Φ , she forms a true belief that she is Φ ing. Thus, practical beliefs formed on the basis of intentions are non-accidentally true, since every belief formed on *that* basis is true. However, it is a standard view in philosophy of action (and one shared by defenders of (PKP)) that there are similar cases where, if one formed the belief that one is acting intentionally, the belief would not be true, because in such cases one's attitude doesn't amount to an intention. For instance, Small (2012: 167-73) follows Baier (1970) in holding that when the action is not appropriately within the agent's control, the agent merely has an aspiration, which falls short of an intention; but—and here is the crucial point—a belief that one is acting intentionally, when formed on the basis of an aspiration would not be true, unlike beliefs formed on the basis of intentions; yet it might be hard for an agent to tell whether she is intending or merely aspiring to do something.⁴⁷ An agent might thus find herself in a situation

⁴⁷ As Small puts it (p.170), 'there need be no easy answer' for the question whether one is intending to do something or merely aspiring to do so in a particular case.

where she cannot tell whether she is intending to Φ , or merely aspiring to do so (hence whether she is acting intentionally). In that kind of case, even when the agent forms a belief on the basis of an intention that ensures that she is acting intentionally, her belief might not constitute knowledge because there is a nearby case where she merely has an aspiration, so that she is not acting intentionally (perhaps she acts ‘aspirationally’). At some point in the series, the case of Sisyphus has this structure, and this explains why his beliefs about what he is doing, even when true, fail to constitute knowledge.

I take the above to sufficiently show that anti-luminosity arguments present a powerful challenge to (PKP), one that cannot be fend off by the same strategies that have been employed to respond to Davidson’s carbon-copier case. Interestingly, these arguments also call into question more modest cognitivist principles, such as Davidson’s weaker view that:⁴⁸

Weak Practical Knowledge Principle (WPKP): (Necessarily) If an agent is Φ ing she knows that she is Φ ing under *at least one* description of what she is doing.

To see this, imagine that a group of scientists give you a drug at noon which, they say, will slowly inhibit your motor system so that in three hours you will be unable to move your fingers at all. Suppose they are telling you the truth and you believe them (e.g. based on evidence from previous experiments). For this study, they blindfold you and instruct you to continually move your finger as you usually would. Since the drug has not affected you at noon, when you set out to move your finger at that time you move it intentionally and know this, but by 5pm, you don’t move it and you know this (even though you seem to yourself exactly as though you were). The case so far has a similar structure to Sisyphus’s, and it should be easy to see how the argument would go from here to show that you do not know that you’re moving your finger in this case. However, the description *moving a finger* seems like the most basic kind of description under which you might know what you are doing for a case like this. (I consider what others might view as more basic descriptions below). Understanding the principle in such a way that even more basic descriptions will count as fulfilling it risks triviality. After all, a sufficiently weak principle will apply to not just actions, but any happening whatsoever: the principle that necessarily, if some process x is happening a person knows that x is happening under *at least one* description will come out true if we allow the following description to fulfill it: *something is happening*.

⁴⁸ The version of the argument that follows is also meant to forestall an objection on the basis of a distinction between achievements and activities, to which Stathopoulos (2016) appeals in his defence of (PKP).

It may be replied that there is a more basic and non-trivial description under which the person might know what she is doing in a case like this, perhaps *trying to move a finger*, or *intending to move a finger*. But anti-luminosity arguments also show that even principles stated in those terms fail. For simplicity, I shall focus on trying, though it should be clear how what I say here applies to the case of intending.

Plausibly, an agent need not do anything (apart from trying) by way of Φ ing, to count as trying to Φ .⁴⁹ This is most easily seen from cases like the one above, where an agent sets to do what is plausibly taken to be a basic action such as moving a finger, but fails to do so because, say, she took a drug that blocks the relevant neural receptors in her motor system. Since this is a basic action, the agent does not do anything else (apart from trying) as she sets to move her finger; but she still tried to move her finger.⁵⁰ This means that only the most minimal material conditions are needed for an agent to try in this sense, since an agent need not in fact Φ , or do anything (else) by way of Φ ing, to be trying to Φ .⁵¹ With this in mind, consider:

Trying Entails Knowledge (TEK): (Necessarily) If an agent is trying to Φ , she knows that she is trying to Φ .

(TEK) can be seen as an attempt to capture the grain of truth in (PKP) through a principle that is even weaker than (WPKP).

Now, trying may not require the agent to do anything else; but insofar as it involves the agent's practical commitment to an action, it must bear *some* important relation to that action. In particular, I take the following as a minimal condition that tryings must meet:

Trying Entails Disposition to Act (TEDA): If S is trying to Φ , S must be such that she would Φ (even if she does not) given that the relevant conditions obtain (such as ability and opportunity to Φ).⁵²

⁴⁹ The bracketed qualifications here and below are meant to show neutrality on a debate that is not relevant to the present discussion, as to whether the trying is to count as an action if there is no bodily movement.

⁵⁰ For a convincing defense of this verdict, see Hornsby (1980, pp.39-44). As Hornsby notes, we may need to suppose that the agent doesn't know (or think) that he cannot move his finger, since trying might be incompatible with such knowledge. Note that we may, on the basis of the present considerations, decide to use 'basic' only to describe tryings. This point is merely terminological.

⁵¹ Of course, this is compatible with the view that some underlying material conditions (such as neural firings in her frontal cortex) are needed for the agent to try to Φ . But such neural firings are not on this view a further intentional action.

⁵² (TEDA) is a special case of the proposed connection between process and success considered in §1 as part of an argument for (PKP). The principle can also be seen as a version of Yaffe's 'Completion Counterfactual' (2010, pp.94-8), though I state it in terms of dispositions rather than counterfactuals to make it clear that I take this as metaphysical in nature, rather than epistemic, as Yaffe suggests. Motivated by Austin's (1958) case of the golfer who misses his putt despite having ability and opportunity to sink it, Yaffe adds as a further condition lack of 'execution failure'.

(TEDA) allows us to distinguish tryings from mere whims: for instance, it allows us to distinguish between the agent who tries to get up from her bed but is unable to do so because she has been given a drug that paralyzed her limbs, from one who thinks to herself lazily after waking up, ‘I’ll get up now—here we go: one, two, three!’, but remains in bed for another hour, soaking in the morning sun. The former agent would get up were it not for her inability, whereas the latter does not (and would not) despite possessing ability and opportunity—she just lacks will (i.e. practical commitment). Hence, only the former can be correctly characterized as trying to get up.

Consider now a variation on the case above: A patient has finished a double shift at work, and is thus really tired. The experimenters ask her to lay in a bed, and to continue moving her finger for as long as she can (this time, there are not pills) Thus, the patient starts out moving her finger, but she gradually gets more and more lethargic. As the minutes go by, her finger moves less and less energetically. At a certain point, it moves only sporadically. Eventually, the patient’s thoughts cease to have any effect at all, and soon she is asleep. At some point in the process, she can be correctly characterized as trying to move her finger even when she doesn’t succeed; but as she dozes off, her intentions turn to whims. The transition here can be characterized in terms of a decrease in practical commitment: her disposition to move her finger weakens gradually as she dozes off. Hence, at some stage in that time-frame the agent will be in the epistemic position that anti-luminosity arguments exploit: even if she forms a true belief that she is trying to move her finger, the belief will be too epistemically hazardous to constitute knowledge. This suggests that an agent may be trying to do something and not know that she is so trying.

The foregoing argument relies on the gradeability of commitment, a feature shared by the lot of entities that are expressive of the agent’s will (such as intentional actions, decisions, intentions, and tryings). Hence, it should be easy to see how we can run an anti-luminosity argument for any such practical entity on the basis of the preceding case. The argument is particularly powerful against principles like (PKP), given that intentional actions depend on material conditions extrinsic to the agent’s mind;⁵³ but it has also become clear that the argument can be applied to much weaker principles. Thus, we have good reason to think that there are no

⁵³ See pp.13-14 on how this bears on the argument.

interesting practical entities that are luminous, and, hence, no interesting necessary connection between such entities and knowledge.⁵⁴

3. Reconsidering the Non-Accidental Condition

The considerations in the previous sections show that there are powerful objections to (PKP) that do not rely on intuitions about fringe cases, and I have argued that there are no straightforward ways of responding to the argument. Of course, there might be responses available that I have not considered; in that case the onus lies on defenders of (PKP) to present those responses and explain what costs they are willing to pay, since, as I noted, even opponents of the anti-luminosity argument grant that there are costs to pay. Although I am not optimistic about the prospects of this enterprise, it is worth noting that the results would be of independent interest: it has been thought that the most plausible candidates for luminous conditions are internalist or purely mental entities, whereas (PKP) is a principle governing intentional actions, paradigmatic external entities. A successful defense of (PKP) would thus show that, contra Williamson, there are far from trivial luminous conditions.

Nonetheless, the position we end with if we accept the argument against (PKP) is not wholly satisfactory. For the argument in §1 suggests that general truths in the metaphysics of action support (PKP), whereas I've argued that the anti-luminosity argument shows that general truths in epistemology call the principle into question. We seem, therefore, to have reached one of those perennial philosophical impasses. Against this verdict, I shall presently argue that some of the considerations at play in the previous section also suggest a way of accepting the core contentions in the metaphysical argument for (PKP) without endorsing its conclusion. We thus move beyond a mere impasse.

At the most general level, the metaphysical argument for (PKP) is motivated by the following three general claims:

- (1) *Representation and content connection*: If S is Φ ing intentionally she must represent herself as Φ ing intentionally.

⁵⁴ Although it is beyond the scope of this paper to explore this, it may be possible to use anti-luminosity arguments to call into question connections not just between practical entities and knowledge, but between practical entities and belief. This is because, as Greco (2015, p.768) has pointed out, many influential accounts of belief posit a strong connection with knowledge that can be used as a basis to run an anti-luminosity argument.

(2) *Non-Accidental*: The match between content and representation in (1) is non-accidental: it is not accidental that if S represents herself as Φ ing she is Φ ing (at least in cases where she is).

(3) *Representation and non-accidental connection*: (2) holds in virtue of essential features of S 's representation qua intention.

From these claims, it is concluded that an agent cannot be Φ ing intentionally without knowing that she is doing so. For suppose that S is Φ ing intentionally. Given (1), the agent must represent herself as Φ ing intentionally, which means that she either believes that she is Φ ing intentionally (if the representation constitutes her belief) or is in a position to so believe, given the representation. Given that we are considering a situation where she is indeed Φ ing intentionally, this belief is true. Moreover, given (2) and (3), the fact that the belief is true is non-accidental and it is partly in virtue of the agent's particular representation that it is non-accidentally true. Therefore, if an agent is Φ ing intentionally, she must have (or be in a position to have) a non-accidentally true belief that she is Φ ing intentionally, a non-accidental that is grounded in her very representation. From this, it is concluded that the agent must (be in a position to) know that she is Φ ing intentionally when she is, as per (PKP).

It is this last step that I want to challenge by arguing that, even if (1)-(3) are true, it doesn't follow that (PKP) is true. To see why, it is helpful to consider a parallel case in the theoretical sphere, the case of the connection between perception and perceptual knowledge. In parallel to (1)-(3), the following seems true of perception:⁵⁵

(4) *Representation and content connection*: If S is perceiving that p she must have a representation that p .

(5) *Non-accidental*: The match between content and representation in (4) is non-accidental: it is not accidental that if S perceives that p , p is the case.

(6) *Representation and non-accidental connection*: (6) holds in virtue of essential features of S 's representation qua perceptual representation.

Claim (4) is trivial since perceiving is a representing relation.⁵⁶ The grounds for (5) and (6) are essentially the same grounds as motivate (2) and (3): we need these claims to account for deviant-

⁵⁵ For simplicity, I shall assume that the content of perception is propositional.

⁵⁶ I am using 'representation' and cognates broadly to include also relational views of perception (e.g. Martin (1997), Campbell (2002), Brewer (2011)). The reader may thus wish to substitute 'intentional'. The trivial claim is

causal chains. Just as a person does not act intentionally unless her action is brought about non-accidentally by an intention, a person does not perceive unless her representation of p is brought about non-accidentally by p . As in the case of intention, this requires more than a causal connection, as brought out by a famous case from Grice:

It might be that it looked to me as if there were a certain sort of pillar in a certain direction at a certain distance, and there might actually be such a pillar in that place; but if, unknown to me, there were a mirror interposed between me and the pillar, which reflected a numerically different though similar pillar, it would certainly be incorrect to say that I saw the first pillar, and correct to say that I saw the second. (Grice 1988: 69-70)

Grice focuses on seeing, but the point obviously generalizes to the other sense modalities.

Given (4)-(6), does it follow that whenever an agent perceives that p she knows, or is in a position to know p ? It does not. We can see why, once more, by reflecting on fake-barns cases. In such cases, the person sees a barn in front of her, but is not in a position to know that there is a barn in front of her. This is because the environmental conditions make the connection between her perceptual belief and the truth too epistemically precarious to amount to knowledge. As I argued in the previous section, analogous cases obtain for practical knowledge. Hence, just as the type of non-accidental connection between mind and world that obtains when an agent perceives does not guarantee that the agent is in a position to acquire perceptual knowledge, the type of non-accidental connection between mind and world that obtains when an agent acts intentionally does not guarantee that the agent is in a position to acquire practical knowledge. In this way, the considerations at play in the argument above not only call (PKP) into question, but suggest a way to grant the premises in a central argument for the principle without accepting the conclusion.

On the other hand, I think defenders of (PKP) are right to insist that there is an important link between intentional action and practical knowledge, one that we must respect if we are to understand their nature; but there may be an important link between the two without the need to posit a necessary connection along the lines of (PKP) (Gibbons 2010). Indeed, the parallel with the perceptual case suggests ways of characterizing such a link without recourse to necessary connections. One way is to say that just as the function of perception is to yield knowledge, the function of the will (understood as the capacity to act intentionally) is to yield practical knowledge. Another (compatible) way is to say that just as perceiving can *on its own* (and without the need of

just that perception is directed at or about something, which is common ground between representational (in a narrower sense than I'm using here) and relational views of perception.

an inference) give us knowledge about our surroundings, exercises of the will can on their own give us practical knowledge.⁵⁷ If either of these ideas is correct, we would expect that cases where an agent acts intentionally with practical knowledge would form a central core of cases of intentional action. However, since powers can sometimes fail to achieve their function, and since even non-inferential sources can fail to yield knowledge in epistemically inhospitable circumstances, both ideas are compatible with rejection of (PKP). Of course, a lot of work would be needed to defend either of these ideas; and it is worth emphasizing that we should not expect an exact parallel, given that perceptual knowledge is paradigmatically ‘speculative’ rather than practical. The central point is that there may still be an important connection between intentional action and practical knowledge, even if we can, and often find ourselves, acting intentionally without knowing what we are doing.⁵⁸

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⁵⁷ See Peacocke (2003, pp.121-3) and O'Brien (2007, ch.9) for proposals along these lines. O'Brien's proposal is particularly attractive, as it offers a way to capture the distinctive authoritativeness of practical knowledge without appeal to necessary connections of the sort that I have argued against.

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