# **Knowing How Without Knowing That**

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What is knowledge-how? One prominent view, often known as *intellectualism*, is that knowledge-how is a species, kind, or sort of knowledge-that. More precisely, intellectualists hold that one knows how to  $\phi$  if and only if one stands in the knowledge-that relation to some relevant proposition, and (on some variations of this view) one may also have to satisfy some further condition. In what follows I present and then examine three new arguments by counterexample against intellectualism, so understood. Each putative counterexample is intended to be a scenario where a subject knows how to  $\phi$  and yet fails to know that p, for any proposition p such that their knowing how to  $\phi$  might plausibly be equated (partly or wholly) with their knowing that p. More cautiously, the subject in each scenario fails to possess the relevant knowledge-that if a standard assumption about the nature of knowledge-that is correct. The scenarios differ with respect to the assumption in question.

### 1. Three Putative Counterexamples

To see why the cases I will discuss are putative counterexamples it will help to have an actual intellectualist account of knowledge-how in mind. I shall focus on Stanley and Williamson's (2001) influential account of knowledge-how as "simply a species of propositional knowledge" (p. 441). Stanley and Williamson (henceforth S&W) argue that the truth conditions of 'S knows how to φ' ascriptions conform to the following schema:

- 'S knows how to  $\phi$ ' is true in a context c if and only if there is some contextually relevant way w for S to  $\phi$  such that:
- (a) S stands in knowledge-that relation to the proposition that w is a way for S to  $\phi$ , and
- (b) S entertains the proposition that w is a way for S to  $\phi$  under a practical mode of presentation.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Conditions (a) and (b) accurately reflect S&W's most explicit statement of their view (see p. 430). However, I think S&W should actually state (b) as something like: (b\*) In standing in this relation S entertains the proposition that w is a way for S to  $\phi$  under a practical mode of presentation. The reason is that there will likely be possible cases where a subject S only stands in the knowledge-that relation to the proposition that w is a way for S to  $\phi$  under a non-practical mode of presentation, but S does entertain this proposition under a practical mode of presentation when they stand in some other intentional relation to it. (I assume this because it is easy to describe cases with this structure for other modes of presentation.) And, presumably, S&W would not want to say that one knows how to  $\phi$  in such a scenario. This is why I think S&W are best interpreted as not actually

On the basis of this analysis of knowledge-how ascriptions S&W (2001, p. 435) adopt an intellectualist view of knowledge-how according to which "knowing how to F is a matter of knowing that p, for a certain proposition p (as well as entertaining it under the right mode of presentation)." For example, on S&W's view, Shane Warne knows how to bowl a googly if and only if there is some way w such that Shane knows, under a practical mode of presentation, that w is a way for him to bowl a googly.

With S&W's account in mind I can introduce our three putative counterexamples to intellectualism. I take each example to be a case where knowledge-how *comes apart* from knowledge-that; that is, a case where someone knows how to φ, but there is no proposition p concerning a way to φ such that their knowing how to φ might be plausibly equated (partly or wholly) with their knowing that p. The first example is a case where intuitively someone knows how to φ, but they do not possess the kind of knowledge-that that such knowledge-how might be plausibly equated with, because their relevant beliefs are only accidentally true. S&W (2001, p. 435) and Poston (forthcoming) discuss similar cases. But neither author discusses the possibility that such cases might constitute counterexamples to intellectualism (a point I will return to).<sup>2</sup>

The second and third cases are each of a kind that has not been discussed before. The second case is a scenario where intuitively someone knows how to  $\phi$ , but they do not possess the kind of knowledge-that that this knowledge-how might be plausibly equated with because their relevant beliefs are *defeated*. The third case is a scenario where intuitively someone knows how to  $\phi$ , but in this case they do not possess the kind of knowledge-that that this knowledge-how might be plausibly equated with because they *lack* the relevant beliefs.<sup>3</sup> Here then are our three putative counterexamples:

The Lucky Light Bulb: Charlie wants to learn how to change a light bulb, but he knows almost nothing about light fixtures or bulbs (as he has only ever seen light bulbs already installed and so he has never seen the end of a light bulb,

making the conjunctive claim: 'S knows how to  $\phi$ ' is true in a context c iff there is some contextually relevant way w such that S knows that w is a way for S to  $\phi$  and S entertains this proposition under a practical mode of presentation. Rather, S&W should only be interpreted as making the claim: 'S knows how to  $\phi$ ' is true in a context c iff there is some contextually relevant way w such that Hannah knows, under a practical mode of presentation, that w is a way for S to  $\phi$ . (S&W use both claims to describe their view at different points, which suggests that they assume them to be equivalent. But if the kind of scenario just described is possible then the latter claim can be false even when the former claim is true.) And I think what the latter claim amounts to is the claim we get when we replace (b) with something like (b\*).

<sup>&</sup>lt;sup>2</sup> Aidan McGlynn, on his blog *The Boundaries of Language*, makes a similar point with respect to S&W's discussion of this first kind of case (see <a href="http://aidanmcglynn.blogspot.com/2007/08/is-knowledge-how-gettier-susceptible.html">http://aidanmcglynn.blogspot.com/2007/08/is-knowledge-how-gettier-susceptible.html</a>).

<sup>&</sup>lt;sup>3</sup> The three arguments by counterexample I give against intellectualism are closely related in form to arguments that Pettit (2002) has given for a different conclusion, namely, that linguistic *understanding* is not a kind of knowledge-that. The first of the arguments I give is also related to an argument by Kvanvig (2003, Chapter 8) that what he calls 'objectual understanding' is not a kind of knowledge-that.

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nor the inside of a light fixture). To remedy this situation Charlie consults *The Idiot's Guide to Everyday Jobs*. Inside, he finds an accurate set of instructions describing the shape of a light fixture and bulb, and the way to change a bulb. Charlie grasps these instructions perfectly. And so there is a way, call it  $w_1$ , such that Charlie now believes that  $w_1$  is a way for him to change a light bulb, namely, the way described in the book. However, unbeknownst to Charlie, he is extremely lucky to have read these instructions, for the disgruntled author of *The Idiot's Guide* filled her book with misleading instructions. Under every entry she intentionally misdescribed the objects involved in that job, and described a series of actions that would not constitute a way to do the job at all. However, at the printers, a computer error caused the text under the entry for 'Changing a Light Bulb', in just one copy of the book, to be randomly replaced by new text. By incredible coincidence, this new text provided the clear and accurate set of instructions that Charlie would later consult.

The Dogmatic Hallucinator. Lucy occasionally suffers from a peculiar kind of hallucination. On occasion it seems to her that she remembers events of learning how to  $\phi$ , when in fact no such event occurred. Furthermore, the way Lucy 'remembers' as being the way to  $\phi$  is not a way to  $\phi$  at all. On Saturday, a clown teaches Lucy how to juggle. By the end of the class she knows how to juggle, and is juggling confidently. And so there is a way, call it  $w_2$ , such that Lucy now believes that  $w_2$  is a way for her to juggle, namely, the way the clown taught her to juggle. On Sunday, Lucy is about to tell a friend the good news that she knows how to juggle. However, as she begins, the alarm goes off on her false memory detector (or FMD), a remarkable device that is a superreliable detector of her false memories. This indicates to Lucy that her apparent memory of learning how to juggle is not only a false memory but that it is also misleading with respect to the way to juggle. Normally, Lucy would revise her beliefs accordingly, and this is what she believes she ought to do now. However, on this occasion she is unable to shake the beliefs she believes she ought to revise. So, Lucy continues to believe that she knows how to juggle and that  $w_2$  is a way for her to juggle. Of course, Lucy did learn how to juggle yesterday, so her FMD has made an error, albeit one that was highly unlikely.

The Non-Dogmatic Hallucinator. Jodie occasionally suffers from a peculiar kind of hallucination. On occasion it seems to her that she remembers events of learning how to  $\phi$ , when in fact no such event occurred. Furthermore, the way Jodie 'remembers' as being the way to  $\phi$  is not a way to  $\phi$  at all. On Saturday, a clown teaches Jodie how to juggle. By the end of the class she knows how to juggle, and is juggling confidently. And so there is a way, call it ' $w_3$ ', such that Jodie now believes that  $w_3$  is a way for her to juggle, namely, the way the clown taught her to juggle. On Sunday, Jodie is about to tell a friend the good news that she knows how to juggle. However, as she begins, the alarm goes off on her false memory detector (or FMD), a remarkable device that is a superreliable detector of her false memories. This indicates to Jodie that her apparent memory of learning how to juggle is not only a false memory but that it is also misleading with respect to the way to juggle. Normally, Jodie would revise her beliefs accordingly, and this is exactly what Jodie does. So, she no

longer believes that she knows how to juggle or that  $w_3$  is a way for her to juggle. Of course, Jodie did learn how to juggle yesterday, so her FMD has made an error, albeit one that was highly unlikely.

The conclusion that these examples are all counterexamples to S&W's account of knowledge-how rests on two premises. The first premise is that the subjects in these cases each possess the relevant knowledge-how. More precisely, the premise is that the following claims are all correct, where 't<sub>1</sub>' refers to a moment just after Charlie has grasped the instructions in *The Idiots Guide*, 't<sub>2</sub>' a moment just after Lucy has resisted revising her beliefs, and 't<sub>3</sub>' a moment just after Jodie has revised her beliefs:

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The Knowledge-how (KH) Claims

(KH1) At t<sub>1</sub> Charlie knows how to change a light bulb

(KH2) At t<sub>2</sub> Lucy knows how to juggle

(KH3) At t<sub>3</sub> Jodie knows how to juggle
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The second premise is that the subjects do not possess the kind of knowledge-that which S&W would identify their knowledge-how with. More precisely, the premise is that the following claims are all correct:

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The No Knowledge-that (NKT) Claims
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(NKT1) At  $t_1$  Charlie does not know that  $w_1$  is a way for him to change a light bulb

(NKT2) At  $t_2$  Lucy does not know that  $w_2$  is a way for her to juggle

(NKT3) At  $t_3$  Jodie does not know that  $w_3$  is a way for her to juggle

The KH claims, I submit, are all intuitively correct. The fact that Charlie is extremely lucky to read accurate (as opposed to misleading) instructions just seems irrelevant to whether or not he comes to know how to change a light bulb on the basis of reading those instructions. The fact that a number of Lucy's beliefs about juggling are defeated does not seem to be a reason to think that she has lost her knowledge how to juggle. Indeed, the intuitive thing to say with regard to Lucy's belief at  $t_2$  that she knows how to juggle, is that while this belief is unjustified, it is nonetheless true. Finally, the fact that at  $t_3$  Jodie no longer believes that she knows how to juggle, or that  $w_3$  is a way for her to juggle, does not seem to be a reason to conclude that Jodie has lost her knowledge how to juggle. Indeed, while Jodie's belief at  $t_3$  that she does not know how to juggle is justified, it is also intuitively false.

Moving to the NKT claims, recall that according to S&W an ascription of the form 'S knows how to  $\phi$ ' is true only if there is some contextually relevant way w such that S knows that w is a way for S to  $\phi$  under a practical mode of presentation. But this putative necessary condition for knowing how to  $\phi$  fails to hold in any of our three scenarios. The contextually relevant ways in these three

scenarios are clearly just  $w_1$ ,  $w_2$  and  $w_3$ . Now, each subject presumably entertains the relevant way under a practical mode of presentation. The problem is that they do not know that it is a way for them to perform the action in question. At  $t_1$ Charlie does believe that  $w_1$  is a way for him to change a light bulb, and this belief is both true and justified. But this belief does not constitute knowledge, for it is only accidentally true, or true only as a matter of mere luck. And it is a familiar lesson from the Gettier literature, that knowledge-that is incompatible with the kind of epistemic luck present in this scenario.<sup>4</sup> Similarly, at t<sub>2</sub> Lucy does believe that  $w_2$  is a way for her to juggle. But again, this belief does not constitute knowledge, for Lucy knows that her FMD is a super-reliable detector of her false memories, and that these false memories are misleading with respect to the way to perform the relevant action. Lucy believes then that her belief that  $w_2$  is a way for her to juggle is not reliable or epistemically responsible. Furthermore, she is justified in this higher-order belief. In such a situation, Lucy's first-order belief that  $w_2$  is a way for her to juggle, while true, does not possess the justification or warrant necessary for knowledge. Finally, at  $t_3$  Jodie clearly does not know that  $w_3$ is a way for her to juggle, for she does not even believe that  $w_3$  is a way for her to juggle.

I submit that the KH and NKT claims are all correct. In which case it follows that each of our three examples is a scenario where a subject knows how to do something, but they fail to possess the kind of knowledge-that that S&W would

<sup>4</sup> The editors of this volume suggested to me that one might try to resist NKT1 by arguing that at  $t_1$  Charlie would have access to a new source of evidence for  $w_1$  being a way for him to change a light bulb that would be independent of the testimony of the book, and would suffice for his knowing that  $w_1$  is a way for him to change a light bulb. The suggestion was that now that Charlie can entertain the proposition that  $w_1$  is a way for him to change a light bulb he would be able, simply with the aid of his imagination, to see that  $w_1$  is a way for him to change a light bulb. In response, I have made explicit in my description of the case the detail that Charlie has previously never seen the end of a light bulb, nor the inside of a light fixture. This is to make clear that the instructions Charlie reads are not only meant to be the source of his true beliefs about the series of actions he has to follow in order to change a light bulb, but also the source of his true beliefs about the shape of light bulbs and fixtures. Now, suppose that prior to  $t_1$  Charlie had just happened to entertain the proposition that  $w_1$  is a way for him to change a light bulb, as well all the other true propositions about the shape of light bulbs and fixtures expressed by the instructions he will later read (these thoughts all just pop into his head). And we can also stipulate that he entertains each of these propositions under a practical mode of presentation. Perhaps, with the aid of his imagination, Charlie would thereby be able to reflect on these propositional contents and come to know that if light bulbs and fixtures are shaped in that way then  $w_1$  is a way for him to change a light bulb. But given that Charlie has no reason to think that light bulbs and fixtures are actually shaped like that, he clearly would not be able to know that  $w_1$  is a way for him to change a light bulb. The moral is mere reflection on the contents of the instructions he reads would not provide Charlie with a source of evidence at  $t_1$  that would suffice for him to know that  $w_1$  is a way for him to change a light bulb.

<sup>5</sup> I assume that the defeater for Lucy's belief that  $w_2$  is a way for her to juggle is her higher-order belief that her belief that  $w_2$  is a way for her to juggle is not reliable or trustworthy. However, this assumption is not essential to my argument. It could be that the defeater is Lucy's experience of seeing the readout on her FMD or some relevant proposition. For our purposes, all that matters is that Lucy's belief that  $w_2$  is a way for her to juggle does not constitute knowledge-that in this scenario. Similarly, for ease of exposition, I assume that what gets defeated is Lucy's belief that  $w_2$  is a way for her to juggle. But my argument is perfectly consistent with views according to which it is Lucy's reasons for believing that  $w_2$  is a way for her to juggle that are defeated, rather than the belief itself.

equate their knowledge-how with. In other words, each case is a counterexample to S&W's account of knowledge-how.

Furthermore, I submit that these examples will also be counterexamples to any plausible account of knowledge-how whereby one knows how to  $\phi$  only if one stands in the knowledge-that relation to some relevant proposition p. On any plausible version of such an account, this proposition p will concern something like a way, method or procedure for  $\phi$ -ing. If so, it will be an easy exercise to redescribe our three examples to emphasize the fact that Charlie's belief that p is only accidentally true, that Lucy's belief that p is defeated, and that Jodie does not believe that p. That is, for any such account of knowledge-how we will be able to provide parallel arguments for the corresponding NKT claims of the form: 'At  $t_n$  S does not know that p.'6

To clarify these three arguments against intellectualism it may help to contrast the first of them with a related but weaker form of objection to intellectualism examined by S&W and Poston (forthcoming). S&W (2001, p. 435) imagine that someone might object to their account of knowledge-how by appealing to a supposed disanalogy between knowledge-how and knowledge-that:

On the analysis we presented...knowing-how is straightforwardly analysed in terms of knowing-that. But one might worry that significant disanalogies still remain between knowing-how and other kinds of knowing-that. One potential source of disanalogy involves Gettier cases. We can imagine cases of justified true belief that fail to be knowledge-that, because they fail to satisfy some extra condition. It may appear difficult to conceive of Gettier-cases for knowledge-how. But if knowledge-how is really a kind of knowledge-that, there should be such cases.

S&W dismiss this disanalogy objection by disputing the claim that there are no Gettier cases for knowledge-how. In response, Poston defends this objection by defending the claim that there are no Gettier cases for knowledge-how. And both S&W and Poston discuss cases like the *lucky light bulb* when evaluating this objection.

However, this disanalogy objection and my argument are importantly different. Suppose we could demonstrate that Poston is right, and there are no Gettier cases for knowledge-how. That is, no cases where one fails to know how to  $\phi$  for the same kind of reason one fails to know that p in a standard Gettier case. This alone would not establish that intellectualism is false, for it could be the case that knowledge-how is a kind of knowledge-that that is merely disanalogous, in this respect, to other kinds of knowledge-that. That is, for all that we have shown, it could be the case that in any Gettier-like scenario where someone knows how to

<sup>&</sup>lt;sup>6</sup> The arguments given here can clearly be extended to other existing intellectualist accounts of knowledge-how, including those offered by Bengson and Moffett (2007), and Brogaard (2008, 2009). Bengson and Moffett are committed to the claim that one knows how to  $\phi$  only if there is some way w such that one knows that w is a way to  $\phi$ . And Brogaard is committed to the claim that one knows how to  $\phi$  only if there is some way w such that one knows that w is how to  $\phi$ .

<sup>&</sup>lt;sup>7</sup> As we will see in §2, S&W also give another reason for rejecting this disanlogy objection, namely, they reject the assumption that all kinds of knowledge-that are susceptible to Gettier cases.

 $\phi$ , they will also possess the kind of knowledge-that that intellectualists would identify their knowledge-how with.

On the other hand, my argument claims that there is at least one Gettier scenario where someone knows how to  $\phi$  and they also fail to possess the kind of knowledge-that that this knowledge-how might be plausibly identified with. If this is correct, it does follow that knowledge-how is not a species of knowledge-that. Furthermore, the existence of such a Gettier scenario is consistent with the existence of other Gettier scenarios where knowledge-how and knowledge-that go together. This argument does not require then that knowledge-how is never susceptible to the kind of epistemic luck found in Gettier cases. Nor, for that matter, does it require that knowledge-that is always susceptible to such luck.

The crucial issue then is not whether or not there is some disanalogy between knowledge-how and knowledge-that with respect to Gettier scenarios. Rather, the crucial issue is whether or not knowledge-how and knowledge-that *come apart* in any such scenarios. The more general moral is that to respond to any of my putative counterexamples it will not suffice for the intellectualist to merely argue that there are other similar cases where knowledge-how and knowledge-that go together. Rather, the intellectualist must dispute the evaluation offered of these particular examples. There are obviously two ways they could do this. For each case the intellectualist could deny the relevant KH claim, or they could deny the relevant NKT claim. I will examine each response separately.

#### 2. The No Knowledge-that Claims

The first form of response I will consider is that which disputes the NKT claim. If we start with the *lucky light bulb* case, the question is whether the intellectualist can reasonably deny NKT1. Recall that the reason for thinking that Charlie's belief that  $w_1$  is a way for him to change a light bulb does not constitute knowledge-that is that this belief is only accidentally true. If the intellectualist is to claim that at  $t_1$  Charlie does know that  $w_1$  is a way for him to change a light bulb, they will have to deny the standard view that knowledge-that is subject to an anti-luck condition. Namely, that if one knows that p then it is not a matter of mere luck or accident that one's belief that p is true. Denying NKT1 is an unattractive response to the *lucky light bulb* case because it commits the intellectualist to a major revision of our conception of knowledge-that.

The intellectualist might respond that all that is needed is a 'localized' rejection of the idea that knowledge-that is subject to an anti-luck condition. S&W (2001, p. 435) themselves could be interpreted as suggesting this kind of response in their discussion of the disanalogy objection:

We doubt that every kind of knowledge-that is susceptible to Gettier cases. So it would not worry us if it were not possible to come up with a Gettier case for knowledge-how.

<sup>&</sup>lt;sup>8</sup> One might point out that at  $t_1$  Charlie is better positioned with respect to knowing that  $w_1$  is a way for him to change a light bulb than he was before  $t_1$ . For example, if he now attempts to change a light bulb he will come to know that  $w_1$  is a way for him to change a light bulb more easily than he would have if he did not already believe that this was the case. This is true but beside the point, as it does not alter the fact that at  $t_1$  Charlie does not know that  $w_1$  is a way for him to change a light bulb.

On one interpretation of this passage, S&W are claiming that they would be unconcerned if they had to deny that knowledge-how is subject to an anti-luck condition because they think that there are other kinds of knowledge-that are also not subject to such a condition. And the claim that knowledge-how is not subject to an anti-luck condition is consistent with the claim that other kinds of knowledge-that are subject to such a condition. S&W might then point out that in claiming that Charlie knows that  $w_1$  is a way for him to change a light bulb they need only commit themselves to the claim that one particular kind of knowledge-that is not subject to an anti-luck condition.

However, S&W cannot simply assert that knowledge-how is a distinctive kind of knowledge-that that is not susceptible to Gettier cases. Rather, what they would need to establish is that S's standing in the knowledge-that relation to a proposition of the form 'w is a way for S to  $\phi$ ', is a distinctive kind of knowledge-that that is not susceptible to Gettier cases. But why should we think that this is the case? There is nothing obviously special about propositions concerning ways to perform actions such that S could know that p, even though S's belief that p is merely accidentally true, whenever p happens to be a proposition of the form 'w is a way for S to  $\phi$ .'

Perhaps S&W might argue that the relevant kind of knowledge-that that is not susceptible to Gettier cases is the knowledge-that S has when S stands in the knowledge-that relation to some proposition of the form 'w is a way for S to  $\phi$ ' and S entertains that proposition under a practical mode of presentation. That is, S&W could claim that the fact that Charlie's belief that  $w_1$  is a way for him to change a light bulb is accidentally true is irrelevant to whether or not he knows that  $w_1$  is a way for him to change a light bulb under a practical mode of presentation.

But note how odd this suggestion would be. No one ever tried to defend the tripartite analysis of knowledge by claiming that while the subjects in Gettier cases do not come to know that p under such-and-such mode of presentation they do come to know that p under some other mode of presentation. And there is a good reason why not. For the fact that someone's belief that p is merely accidentally true is surely a reason to think that they do not know that p *simpliciter*, regardless of what mode of presentation they happen to entertain that proposition under.

At the very least, if S&W were to adopt this response they would owe us an explanation of why knowledge of propositions of the form 'w is a way for one to  $\phi$ ' is resistant to Gettier influences in the special case where one entertains that

 $<sup>^9</sup>$  This claim, that not all kinds of knowledge-that are susceptible to Gettier cases, can be interpreted in at least two ways. As interpreted above, the idea is that there is at least one kind of knowledge-that such that one can possess this kind of knowledge-that even when one's relevant justified true beliefs are only accidentally true. If this were the case, then this kind of knowledge-that would not be susceptible to Gettier cases because it is not subject to an anti-luck condition. However, it may be that S&W's idea is that there are some kinds of knowledge-that such that one simply cannot describe any scenario where one has the relevant justified true beliefs but they are only accidentally true. If this were the case then this kind of knowledge-that would not be susceptible to Gettier cases but it would still be subject to an anti-luck condition, for it would trivially satisfy such a condition. I have focused on the former idea above for the simple reason that we obviously can describe scenarios where someone has a justified true belief of the form 'w is a way for me to  $\phi$ ' that is only accidentally true.

proposition under a practical mode of presentation. And this explanation cannot simply consist in the claim that knowing that w is a way for one to  $\phi$  under a practical mode of presentation is knowledge-how and knowledge-how is resistant to Gettier influences.

The problem is that modes of presentation look like the wrong kind of thing upon which to base such an explanation. Consider the sorts of reasons that are typically offered to explain why S fails to know that p in a given Gettier scenario: that the truth of S's belief that p is not appropriately related to S's reasons for holding that belief; or that the source of S's belief that p is unreliable; and so on. Such reasons for thinking that S fails to know that p do not seem even to be addressed—let alone outweighed or undermined—by the extra information that S happens to entertain p under such-and-such a mode of presentation. It is very difficult to see then how the intellectualist could motivate the claim that in denying NKT1 they need only endorse a localized, rather than wholesale, rejection of the idea that knowledge-that is subject to an anti-luck condition. This is because the kind of knowledge-that that intellectualists' equate knowledge-how with has no distinctive features that would support such a claim. In which case, denying NKT1 still commits the intellectualist to a major revision of the standard conception of knowledge-that.

And, if anything, the situation with regard to NKT2 and NKT3 is worse. Recall the reasons given in §1 for accepting these two claims. NKT2 was supported by the claim that at  $t_2$  Lucy's belief that  $w_2$  is a way for her to juggle is defeated, and hence does not possess the justification or warrant necessary for it to constitute knowledge. NKT3 was supported by the claim that at  $t_3$  Jodie does not believe that  $w_3$  is a way for her to juggle. If we accept the defeat and no-belief claims, the consequences of denying NKT2 and NKT3 are severe. If the defeat claim is true, to deny NKT2 is to deny that having justification or warrant for one's belief that p is a necessary condition for knowing that p. And if the belief claim is true, to deny NKT3 is to deny that believing that p is a necessary condition for knowing that p.

If the intellectualist is to deny NKT and NKT3 whilst avoiding these consequences, they must establish that the defeat and belief claims are false. But can one plausibly deny either of these claims? Perhaps, against the defeat claim, the intellectualist might argue that when one entertains a proposition p under a practical mode of presentation, then one's belief that p can be justified even when one has a justified belief that their belief that p is unreliable. But again, I think the intellectualist would be hard pressed to justify this 'localized' rejection of what clearly looks like a necessary condition for knowledge-that in general. Namely, that if one knows that p then one does not have a justified belief that one's belief that p is unreliable, or epistemically inappropriate. The fact that Lucy has a justified belief that her belief that  $w_2$  is a way for her to juggle is unreliable, is surely a reason to conclude that she does not know that  $w_2$  is a way for her to juggle simpliciter. It is not merely a reason to conclude that Lucy does not know that  $w_2$  is

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<sup>&</sup>lt;sup>10</sup> This kind of condition is widely accepted as a necessary condition for knowledge-that by both internalists and externalists, for discussion see Bergman (1997). There is a debate about whether one's second-order belief that one's belief that p is not reliable must itself be justified in order for it to defeat one's first-order belief that p. However, this debate is not relevant here given that Lucy's higher-order belief is justified.

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a way for her to juggle, if she happens to entertain this proposition under a non-practical mode of presentation.

What of the no-belief claim? Could one not argue that at  $t_3$  Jodie still *implicitly* or *tacitly* believes that  $w_3$  is a way for her to juggle? And, if so, could one not argue that Jodie still implicitly or tacitly knows that  $w_3$  is a way for her to juggle? Undoubtedly, there is a good sense in which at  $t_3$  it will still *seem* to Jodie that  $w_3$  is a way for her to juggle. For example, if Jodie imagines  $w_3$ , this way will still strike her as being a way to juggle. But we should not confuse mere seemings with beliefs. Even if one knows that the two lines in a Müller-Lyer figure are of the same length, it will still seem to one that they differ in length. And as Bealer (1993) has pointed out, the same point applies not only to perceptual but also to intellectual seemings, it can still seem to one that the naïve axiom of set theory is true even though one does not believe that it is true, because one knows that it leads to a contradiction. Similarly, while it seems to Jodie that  $w_3$  is a way for her to juggle, I think it is clear that she fails to believe that  $w_3$  is a way for her to juggle.

Furthermore, Jodie has consciously reflected on the question of whether or not  $w_3$  is a way for her to juggle, and she has concluded on the basis of her relevant evidence that  $w_3$  is not a way for her to juggle. If someone has consciously reflected on the question of whether or not p and concluded on the basis of their relevant evidence that not-p, this is normally a strong indicator that they do not believe that p. There are difficult cases (including ones involving delusional beliefs) where one might think that someone has both the belief that p and the belief that not-p at the same time. But I see no reason to regard the *non-dogmatic hallucinator* as such a case. Suppose, however, that one did want to say (implausibly) that Jodie both believes that  $w_3$  is not a way for her to juggle *and* that she also believes that  $w_3$  is a way for her to juggle. I think it is clear that in such a situation the latter belief would not possess the justification or warrant required for it to constitute knowledge. In which case, NKT3 would still be true; all that would have changed is the diagnosis of why Jodie fails to know that  $w_3$  is a way for her to juggle.

Denying the relevant NKT claim does not look to be an attractive response for the intellectualist to any of our putative counterexamples. In each case, denying NKT1, NKT2, or NKT3, forces the intellectualist to reject a plausible and widely accepted assumption about the nature of knowledge-that, namely, that knowledge-that is subject to an anti-luck condition, a justified or warranted belief condition, and a belief condition, respectively. Perhaps some intellectualists would be prepared to radically revise our conception of knowledge-that just to maintain the thesis that knowledge-how is a kind of knowledge-that. I am sceptical that such a position could be made plausible, but my main concern here is simply to highlight these substantial costs involved in denying the NKT claims. However, there is still another form of response available to the intellectualist that we need to consider.

#### 3. The Knowledge-how Claims

The second possible form of response to our putative counterexamples is to contest the KH claim. There is reason to think that S&W would at least reject KH1. Consider what S&W (2001, p. 435) say about the following example they offer as proof that there can be Gettier cases for knowledge-how:

Bob wants to learn how to fly in a flight simulator. He is instructed by Henry. Unknown to Bob, Henry is a malicious imposter who has inserted a randomising device in the simulator's controls and intends to give all kinds of incorrect advice. Fortunately, by sheer chance the randomising device causes exactly the same results in the simulator as would have occurred without it, and by incompetence Henry gives exactly the same advice as a proper instructor would have done. Bob passes the course with flying colors. He has still not flown a real plane. Bob has a justified true belief about how to fly. But there is a good sense in which he does not know how to fly.

So, S&W think that this example—I will call it *the flight simulator* case—is a case where someone fails to know how to φ for the same kind of reason one fails to know that p in a Gettier scenario. Now, for the reasons discussed at the end of §1, if S&W's evaluation of this case is correct it does not follow that KH1 is false. Nevertheless, given the obvious similarities between the *flight simulator* and *lucky light bulb* cases one might reasonably expect that our verdicts about whether Bob knows how to fly and whether Charlie knows how to change a light bulb should be the same. If S&W are right then in claiming that Bob does not know how to fly, this would at least give us some reason to reconsider KH1.

But are S&W right? Is there a good sense in which Bob does not know how to fly? Clearly, Bob has justified and true beliefs about flying that do not constitute knowledge-that, because they are only accidentally true. However, I think S&W are simply wrong that the intuitive thing to say of this case is that Bob does not know how to fly. As Poston (forthcoming, p. 2) says, "As far as intuition goes this does not seem correct. There is a good sense in which Bob *does* know how to fly."

To make the intuition vivid, compare Bob with his near perfect counterpart Joe. The only salient difference between Bob and Joe is that in Joe's world his simulator not only operates correctly but it has not been interfered with, and his instructor not only gives him the correct advice but he intended to do so. So, when Joe exits his simulator, we can safely assume that he knows how to fly. But on what grounds then, could we deny that Bob knows how to fly? The fact that Bob, unlike Joe, is extremely lucky to receive the very same feedback from his simulator/instructor does not seem to be a reason to conclude that only Joe comes to know how to fly on the basis of receiving this feedback.<sup>11</sup>

Someone might try to argue that there is both a good sense in which Bob knows how to fly and a good sense in which he does not know how to fly. I doubt that this is the case but two points are worth mentioning about this idea. First, it is clear that S&W themselves do not take knowledge-how ascriptions to be ambiguous in this way. Second, as S&W acknowledge, Bob's relevant belief of the

<sup>&</sup>lt;sup>11</sup> Note that we could have used a similar comparison to support the intuition for KH1. Compare Charlie with his near perfect counterpart Jack. Jack's world is just like Charlie's in all but one salient respect, namely, in Jack's world *The Idiots Guide\** was written by a non-malicious author who intended to fill her book with helpful descriptions of ways to perform everyday jobs (and there were no errors during printing etc.). The text in Jack's copy of *The Idiot's Guide\** is the same as the text in Charlie's copy of *The Idiot's Guide*. So Jack reads the exact same description of how to change a light bulb that Charlie reads. And Jack, like Charlie, comprehends these instructions perfectly. Obviously, it is safe to assume that Jack knows how to change a light bulb after reading these instructions. This is an ordinary way of gaining knowledge-how. But how could we deny that Charlie comes to know how to change a light bulb after reading the very same instructions? The fact that Charlie, unlike Jack, is extremely lucky to read these instructions does not seem to be a reason to conclude that only Jack comes to know how to change a light bulb.

form 'w is a way for Bob to fly' does not constitute knowledge-that in this scenario. If so, then if there is a good sense in which Bob knows how to fly it follows that there is a good sense in which knowledge-how comes apart from knowledge-that in the *flight simulator* case. In other words, it would follow that there is a good sense in which knowledge-how is not a kind of knowledge-that.<sup>12</sup>

S&W's interpretation of this case is also strange given that their own account of knowledge-how tells us that Bob knows how to fly. Let me explain. The core of S&W's account of knowledge-how was stated earlier in §1. But S&W also make two further, and important, claims about the nature of knowledge-how. First, S&W (2001, pp. 442–43 and pp. 415–16) hold that all intentional actions "are employments of knowledge-how". That is, they accept the following claim:

#### (1) If S $\phi$ s intentionally, S knows how to $\phi$

Second, S&W (2001, pp. 442–3) infer from (1) a further claim concerning abilities, as their discussion of the ability hypothesis reply to the knowledge argument<sup>13</sup> reveals:

For the ability to imagine an experience of red is clearly an ability to perform an intentional action. And we do find it very plausible that intentional actions are employments of knowledge-how. ... But if intentional actions are employments of knowledge-how then Mary's acquisition of an ability to imagine an experience of red brings with it knowledge how to imagine red [.]

So, S&W hold that if one has the ability to perform an action intentionally then one knows how to perform that action. That is, they accept the following claim:

## (2) If S has the ability to $\phi$ intentionally, S knows how to $\phi^{14}$

But then it is a necessary consequence of S&W's full account of knowledge-how—and a plausible assumption—that Bob does know how to fly. The assumption is that Bob has the ability to fly a plane intentionally. And this is very

<sup>&</sup>lt;sup>12</sup> Stanley (2005, p. 131) explicitly denies that knowledge-how ascriptions are ambiguous between a sense in which they attribute knowledge-that and a sense in which they do not. Bengson and Moffett (2007, p. 38–40) deny that knowledge-how ascriptions are ambiguous at all. Brogaard (2008, p. 175) does hold that 'S knows how to  $\phi$ ' ascriptions are ambiguous, as she claims that John knows how to play the piano' can be read as "saying that there is a w such that John knows that w is how JOHN may play the piano, or as saying that there is a w such that John knows that w is how ONE may play the piano". But clearly, on either disambiguation, knowing how to play the piano is still a kind of knowledge-that.

<sup>&</sup>lt;sup>13</sup> S&W claim that their account of knowledge-how is inconsistent with the ability hypothesis reply to Jackson's (1982, 1986) knowledge argument. I dispute this claim in Cath (2009).

<sup>&</sup>lt;sup>14</sup> This claim is consistent with S&W's opposition to the idea that S know how to  $\phi$  iff S possesses the ability to  $\phi$ , for S&W (2001, p. 416) explicitly deny the entailment in the other direction: "ascriptions of knowledge-how do not even entail ascriptions of the corresponding abilities".

plausible. After all, Bob passes the course that imparts this ability with "flying colours". To emphasize the point, note that Joe has the ability to fly a plane intentionally as he exits his simulator. But then we must conclude that Bob also has this ability, for Joe and Bob are clearly equivalent with respect to their abilities to fly a plane.

The issue here can be illustrated by noting that the following three claims form an inconsistent triad:

- (2) If S has the ability to  $\phi$  intentionally, S knows how to  $\phi$
- (3) Bob has the ability to fly intentionally
- (4) Bob does not know how to fly

S&W claim both that Bob does not know how to fly and that having the ability to  $\phi$  intentionally entails knowing how to  $\phi$ ; that is, they endorse both (2) and (4). However, (3) is true. It must be the case then that either (2) or (4), or both (2) and (4), are false. So, to maintain that Bob does not know how to fly S&W would have to deny (2), thereby denying a key commitment of their full account of knowledgehow.

Furthermore, if S&W are right that having the ability to  $\phi$  intentionally entails knowing how to  $\phi$ , this is highly important in this context given that the following ability ascriptions are very plausible:

- (5) At  $t_1$  Charlie has the ability to change a light bulb intentionally
- (6) At  $t_2$  Lucy has the ability to juggle intentionally
- (7) At  $t_3$  Jodie has the ability to juggle intentionally

For if S&W are right that (2) is true then (5), (6) and (7) each entail the corresponding knowledge-how ascription, that is, they entail KH1, KH2 and KH3, respectively. At this point there are only two choices available to an intellectualist who wishes to deny any one of the KH claims: they could deny (2), that is, they could reject S&W's idea that having the ability to  $\phi$  intentionally entails knowing how to  $\phi$ ; or they could deny the corresponding ability claim (5), (6) or (7), that is, they could deny that the subject in the putative counterexample possesses the ability to perform the action intentionally.

Some intellectualists have offered what could be regarded as counterexamples to (2) when arguing against the view that to know how to  $\phi$  is to simply possess the ability to  $\phi$ —a view that is often attributed to Ryle which I will call *neo-Ryleanism*. For example, Bengson and Moffett (2007, p. 46) present the following

<sup>&</sup>lt;sup>15</sup> My use of this term is borrowed from Bengson and Moffett (2007). I use this term rather than 'Ryleanism' because while it is clear that Ryle (1946, 1949) identified knowing how to φ with the possession of a complex of dispositions, I think it is not actually clear that he endorsed neo-Ryleanism. S&W (2001, p. 411) attribute both the complex disposition view and neo-Ryleanism to Ryle, as they claim that according to Ryle "knowledge-how is ability, which is in turn a complex of

scenario—I will call it the *salchow* case—where intuitively someone has the ability to  $\phi$  but does not know how to  $\phi$ :

Suppose that Irina is seriously mistaken about how to perform a salchow. She believes incorrectly that the way to perform a salchow is to take off from the front outside of her skate, jump in the air, spin, and land on the front inside edge of her skate. (The correct sequence is to take off from the back inside edge and land on the back outside edge of the opposite foot after one or more rotations in the air.) However, Irina has a severe neurological abnormality that makes her act in ways that differ dramatically from how she actually thinks she is acting. Whenever she actually attempts to do a salchow (in accordance with her misconceptions) this abnormality causes her to reliably perform the correct sequence of moves. So, although she is seriously mistaken about how to perform a salchow, whenever she actually attempts to do a salchow (in accordance with her misconceptions) the abnormality causes Irina to perform the correct sequence of moves, and so she ends up successfully performing a salchow. Despite the fact that what she is doing and what she thinks she is doing come apart, she fails to notice the mismatch. In this case, it is clear that Irina is (reliably) able to do a salchow. However, due to her mistaken belief about how to perform the move, she cannot be said to know how to do a salchow.

Does Irina also have the ability to perform the salchow *intentionally*? Bengson, Moffett and Wright (2008, fn. 22) suggest that she does and on this basis they reject S&W's claim that having the ability to φ intentionally entails knowing how to φ. But Stanley (forthcoming, p. 14) disputes the idea that the *salchow* is a counterexample to (2):

...Irina has a false belief about how to do the Salchow, and she is lucky enough that whenever she intends to do the Salchow, she succeeds. Though she intelligently and successfully performs the Salchow, she does not *intentionally do the Salchow* when she succeeds, anymore than it follows that I *intentionally win the lottery* when I win the lottery after buying a lottery ticket intending to win. Of course, when Irina performs the salchow, she does it with the intention of performing the Salchow, and there is a causal connection between her intention to perform the Salchow and performing the Salchow. But as we have learned from Davidson, F-ing with the intention of F-ing does not entail intentionally F-ing, even when there is a causal connection between one's intention to F and one's F-ing. In order to intentionally F there must be the *right kind* of causal relations between one's intention to F, and one's F-ing, and those are lacking in Irina's case.

Stanley (fn. 4) also claims (in response to an earlier draft of this paper) that, faced with the inconsistent triad I presented above, S&W would reject (3) on similar grounds. I agree with Stanley's reasons for concluding that Irina would merely have the ability to perform the salchow, and not to do so intentionally. But the *flight simulator* case is importantly different from the *salchow* case. Bob's success in flying is not lucky in the way that Irina's success in performing the salchow is. Of

dispositions." That is, they take Ryle to be committed to both of the following identity claims: (i) to know how to  $\phi$  is to possess the ability to  $\phi$ ; and (ii) to know how to  $\phi$  is to possess a complex of dispositions. This is why S&W take the counterexamples they offer to (i) to be counterexamples to Ryle's account of knowledge-how. Brian Weatherson, on his blog *Thoughts Arguments and Rants* (see: <a href="http://tar.weatherson.org/2006/07/22/ryle-on-knowing-how/#comments">http://tar.weatherson.org/2006/07/22/ryle-on-knowing-how/#comments</a>), argues that such counterexamples do not apply to Ryle on the grounds that he is only committed to (ii) and not (i). Like Weatherson, I am not convinced that Ryle is committed to (i), but even if he is it seems to me that Ryle would lose little if, in response to the standard counterexamples to (i), he were to simply reject (i) whilst retaining (ii).

course, Bob is very lucky to have true, rather than false, beliefs about how to fly. But how Bob came to possess these beliefs is irrelevant. What matters, as Stanley says, is whether the causal relation between Bob's intention to fly in accord with these beliefs and his flying is the *right kind* of causal relation, and it clearly is. Unlike Irina and the salchow, Bob does have an accurate conception of how to fly, and so he needs no lucky abnormality, or other fortuitous intervention, to succeed in flying when he forms the intention to fly. And the exact same kind of point can be made in support of (5) and (6).

Perhaps with regard to (7), one might argue that Jodie does not have the ability to juggle intentionally because she does not believe that  $w_3$  is a way for her to juggle. However, as mentioned earlier, at  $t_3$  it would still seem to Jodie that  $w_3$  is a way for her to juggle. Suppose one convinced Jodie to try to juggle that way that merely seems to her to be a way to juggle. If she did try, she would likely succeed as a result of this intention, and it would be no lucky accident that her intention caused this success. In which case, I think the right thing to say would be that Jodie not only juggled but that she did so intentionally.

Anyway, even if one could resist (7) on such grounds, (5) and (6) seem straightforwardly true. It may be a necessary condition of S's having the ability to  $\phi$  intentionally that there be some way w that is a way for S to  $\phi$  such that S believes that w is a way for S to  $\phi$ . But it is surely not a necessary condition of S's having the ability to  $\phi$  intentionally that such a belief must also be non-accidentally true and/or justified.<sup>16</sup>

If the intellectualist is to deny any of the KH claims (or at least, KH1 and KH2) then they must deny (2), that is, they must deny that having the ability to φ intentionally entails knowing how to φ. Whether the intellectualist can justify denying this entailment thesis is another matter. As Stanley shows us, examples like the *salchow* are not convincing counterexamples to (2). But suppose that the intellectualist could establish that (2) is false. This would show us that one can *consistently* deny KH1, KH2 and KH3 whilst accepting (5), (6) and (7). However, this is not yet a reason to think that any of the KH claims are false.

I think it is clear that in practice many subjects would share the intuition that the KH claims are correct. One line of response available to the intellectualist is to claim that while the KH claims are intuitive they are nonetheless false. But if they are to deny these intuitive claims, the intellectualist owes us some explanation of why our intuitions about these cases are so systematically misleading.

Probably the most obvious explanation would be to claim that we somehow confuse the fact that the subjects in our putative counterexamples possess the relevant ability with their possessing the corresponding knowledge-how. Appealing to the idea that ability ascriptions implicate, but do not entail, the corresponding knowledge-how ascription, would be one way to develop such an argument. The explanation then of our intuitions regarding KH1, KH2 and KH3 would be that we confuse a conversational implicature with an entailment. For example, our intuition that Charlie knows how to change a light bulb is explained by the fact that we know that Charlie has the ability to change a light bulb and we mistakenly think that 'S has the ability to  $\phi$ ' entails 'S knows how to  $\phi$ '.

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<sup>&</sup>lt;sup>16</sup> See Bengson, Moffett and Wright (2008, fn. 22) for a related concern with S&W's commitment to (2).

This strategy for explaining away our intuitions regarding the KH claims may appear promising.<sup>17</sup> Even if there is no entailment from 'S has the ability to  $\phi$ ' to 'S knows how to  $\phi$ ', it would still presumably be true that in stereotypical cases of someone's having the ability to  $\phi$  they will also know how to  $\phi$ , in which case it seems reasonable to suppose that 'S has the ability to  $\phi$ ' implicates 'S knows how to  $\phi$ '.

However, note that there is an inherent tension in this kind of response to our putative counterexamples. To establish that having the ability to  $\phi$  does not entail knowing how to  $\phi$  the intellectualist needs there to be clear cases where someone intuitively has the ability to  $\phi$  but does not know how to  $\phi$ . And there are such cases. But then why does our familiarity with the relevant implicature lead us to mistakenly have the intuition that KH1, KH2 and KH3 are true, when it obviously does not lead us to make the parallel mistake with regard to examples like the *salchow* case? In such cases the relevant subject has the ability to  $\phi$  and, according to the intellectualist, does not know how to  $\phi$ . The intellectualist then would have to provide a plausible explanation of this asymmetry that is also consistent with their interpretation of these cases. Perhaps there is some such explanation, but I am not sure what it would be.

On the other hand, we can offer a natural explanation of this asymmetry in our intuitions, namely, that the subjects in the *lucky light bulb*, *dogmatic hallucinator* and *non-dogmatic hallucinator* cases know how to perform the relevant actions, whereas the subjects in the *salchow* and *man in a room* cases do not.

I also doubt that it is an essential feature of the counterexamples offered here that the subjects in these scenarios possess the ability to perform the relevant action. As intellectualists often point out, one can know how to  $\phi$  without possessing the ability to  $\phi$ . For example, S&W (2001, p. 416) offer the case of "a master pianist who loses both her arms in a tragic car accident". Intuitively, the master pianist would still know how to play the piano even though she has lost her ability to do so. Again, such examples are cited by intellectualists as evidence against neo-Ryleanism, for they suggest that having the ability to  $\phi$  is not a necessary condition for knowing how to  $\phi$ .

Bearing this point in mind, let us add an unfortunate twist to the *lucky light bulb* case. Namely, just after Charlie grasps the instructions in *The Idiot's Guide* at  $t_1$  his arms are removed (I will spare you the details of how this happens). Otherwise, the case remains exactly the same. Does Charlie still know how to change a light bulb? As with S&W's *pianist* case, I take it that the intuitive answer is yes. In which case, we still have a scenario where intuitively Charlie knows how to  $\phi$ , and the same reasons are still present for thinking that Charlie does not possess the kind of knowledge-that that such knowledge-how might be plausibly equated with. But in this modified scenario Charlie also lacks the ability to change a light bulb. So, the intellectualist cannot dismiss the knowledge-how intuition here by claiming that we are merely confusing the fact that Charlie has the ability to change a light bulb with his knowing how to change a light bulb. And I think one could modify

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<sup>&</sup>lt;sup>17</sup> Bengson and Moffett think that there is a stereotypical implicature in the other direction, from knowing how to  $\phi$  to having the ability to  $\phi$ . For further discussion of the notion of a stereotypical implicature see Bengson and Moffett (2007, p. 35).

the *dogmatic hallucinator* and *non-dogmatic hallucinator* cases to achieve the same kind of result.

However, the more important point here is simply that there are good reasons to be suspicious of this kind of strategy for dismissing our intuitions regarding the KH claims. Consider the very examples intellectualists appeal to when arguing against neo-Ryleanism—like the *salchow* and *pianist* cases. As counterexamples to neo-Ryleanism these cases are compelling. But the intuitive force of such examples suggests that we are quite capable of discerning the difference between knowing how to  $\varphi$  and possessing the ability to  $\varphi$ . It seems implausible then to suppose that our intuitions about the KH claims are merely the result of our confusing the fact that a subject has the ability to  $\varphi$  with their knowing how to  $\varphi$ .

There is no simple way to dismiss our intuitions that the KH claims are true. But we saw in §2 that intellectualism requires that we deny the KH claims if we are to avoid radically revising our conception of knowledge-that. In the absence of some good argument for dismissing our intuitions regarding the KH claims, I submit that that we should reject intellectualism or revise our conception of knowledge-that.

#### 4. What these arguments do not establish

I have argued that intellectualism is false if certain standard assumptions about the nature of knowledge-that are correct. But what is knowledge-how if not a kind of knowledge-that? This question cannot be answered here, but I do want to show that the arguments given in  $\S 1$  should not be regarded as arguments for the most prominent alternative to intellectualism, namely, neo-Ryleanism. The reason is that even if these arguments succeed it might still be reasonable to hold that knowing how to  $\varphi$  is a matter of standing in an intentional relation to a proposition *other than* the knowledge-that relation.

This claim may appear implausible. After all, if my evaluation of the *non-dogmatic hallucinator* case is correct knowledge-how cannot even be analysed in terms of the *belief* relation to a proposition. To support this claim then it may help to consider a possible alternative to both the standard intellectualist and neo-Rylean views of knowledge-how. According to this view, knowing how to  $\phi$  is a matter of standing in the relation to a proposition that S stands in when it *seems* to S that p is the case. Importantly, this is not the belief relation. As mentioned earlier, it can seem to one that p even when one fails to believe that p. In which case, seemings cannot be understood as simply a kind of belief. Bearing that in mind here is our alternative analysis of knowledge-how:

The Seeming Analysis

S knows how to  $\phi$  if, and only if, there is some way w to  $\phi$  such that:

<sup>&</sup>lt;sup>18</sup> Note that this claim is consistent with the common idea that seemings are a kind of inclination or disposition to believe. I am inclined, however, to agree with Tolhurst (1998, p. 297) when he claims that when it seems to one that p, one is not merely inclined to believe that p but one also "experiences believing [that p] to be demanded or required".

- (c) S stands in the seeming relation to the proposition that w is a way to  $\phi$ , and  $^{19}$
- (d) S entertains the proposition that way w is a way to  $\phi$  under a practical mode of presentation.<sup>20</sup>

The seeming analysis is consistent with the arguments given in §1 because in all of my putative counterexamples there is still some way w for the subject to perform the relevant action  $\phi$  such that it *seems* to the subject that w is a way to  $\phi$ . It seems to Charlie that  $w_1$  is a way to change a light bulb even though his belief that  $w_1$  is a way for him to change a light bulb is only accidentally true. It seems to Lucy that  $w_2$  is a way to juggle even though her belief that  $w_2$  is way for her to juggle is defeated. And, as noted earlier, it still seems to Jodie that  $w_3$  is a way to juggle even though she does not believe that  $w_3$  is a way to juggle.

The seeming analysis also accords with our intuitions about examples like the *salchow* and *pianist* cases. There is a series of actions such that it seems to Irina that that series of actions is a way to perform the salchow. But this series of actions is not a way to perform the salchow. The seeming analysis rightly predicts then that Irina does not know how to perform the salchow. Even after her accident, it will still seem to the pianist that that way she used to play the piano is a way to play the piano. Across a diverse range of cases then the seeming analysis accords with our

<sup>&</sup>lt;sup>19</sup> As indicated earlier, Bealer (1993), and others and others like Huemer (2005) and Pust (2000), distinguish perceptual from non-perceptual seemings, including intellectual seemings. Assuming that such distinctions can be made, I think one would want to restrict (c) to a non-perceptual seeming relation. Also, with regard to (c), one can obviously know how to  $\phi$  even when it does not occurrently seem to one that some way w is a way to  $\phi$ , for example, when one is asleep. The seeming analysis will not be plausible then unless one can satisfy (c) even when it does not occurrently seem to one that w is a way to  $\phi$ . But I think there is a natural interpretation of 'It seems to S that p' ascriptions, whereby they can be satisfied by non-occurrent states. Suppose that during a conversation about the intuitions of our friends I assert, "It still seems to Bill that the naïve axiom of set theory is true even though he knows it to be false". In such a context, it is no objection to my claim to point out that Bill is currently in a deep dreamless sleep. For my claim is naturally interpreted as being satisfied by some standing, or non-occurrent, state of Bill, rather than some occurrent state of it seeming to Bill that the naïve axiom of set theory is true. Presumably, a nonoccurrent state that consists (at least partly) in the disposition for it to occurrently seem to Bill that the naïve axiom of set theory is true, in certain relevant conditions. Likewise, (c) should be understood in such a way that to satisfy (c) it suffices that it seem to one that w is a way to  $\phi$ , in this non-occurrent sense of 'It seems to S that p'. (See Hunter (1998) for a structurally parallel distinction between states of occurrent understanding and dispositions to be in occurrent states of understanding.)

<sup>&</sup>lt;sup>20</sup> Why include the parallel of S&W's condition (b) here as condition (d)? S&W include (b) because without it their analysis would clearly not describe a sufficient condition for knowing how to φ. Intuitively, there can be contexts in which one fails to know how to φ even though there is some way w such that one knows that w is a way for oneself to φ. Likewise, one could presumably fail to know how to φ even though there is some way w such that it seems to one that w is a way to φ. S&W's condition (b) is intended to be a solution to this problem. Insofar as this fix works for their intellectualist account of knowledge-how, the same fix should work for the seeming analysis. If practical modes of presentation cannot solve this problem one could appeal to other intellectualist strategies for addressing the same issue. For example, Bengson and Moffett (2007, pp. 50–3) attempt to address this problem by requiring that to know how to φ not only must there be some way w such that one knows that w is a way to φ, but one must also minimally understand w. Also the kind of qualification I made in fn. 1 about (b) and (b\*) should also be made here with respect to (d).

intuitions better than both intellectualism and neo-Ryleanism. Unlike intellectualism, it accords with our intuitions about the *lucky light bulb*, *dogmatic hallucinator* and *non-dogmatic hallucinator* cases. And unlike neo-Ryleanism, the seeming analysis accords with our intuitions about the *salchow* and *pianist* cases.

Obviously, I am not claiming to have thereby shown that the seeming analysis is a serious rival to intellectualism and neo-Ryleanism. The role of the seeming analysis here is simply to illustrate the possibility of promising alternatives to both intellectualism and neo-Ryleanism.<sup>21</sup> In the literature, intellectualism and neo-Ryleanism are normally the only accounts of knowledge-how that are discussed. This situation can lead to a tendency to regard arguments against either account as being arguments, by default, for the other. The seeming analysis emphasizes the point that we should not regard the arguments against intellectualism given here as being arguments for neo-Ryleanism. Furthermore, it shows us that even if knowledge-how is not a kind of knowledge-that it could still be the case that knowledge-how is propositional in nature. In looking beyond the standard dichotomy of intellectualism and neo-Ryleanism we may just find a more adequate account of knowledge-how.<sup>22</sup>

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<sup>21</sup> I hope to examine the seeming analysis and other alternative analyses of knowledge-how in future work. I should note that Ryleans would presumably still regard the seeming analysis as being 'intellectualist', given that it analyses knowledge-how in terms of an intentional relation to a proposition. Bengson, Moffett and Wright (2008, fn. 5) note that one can give a broader definition of the term whereby any view that analyses knowledge-how in terms of a propositional attitude is a form of 'intellectualism'. If we were to define 'intellectualism' in this broad way my point above would be that the arguments I have given only undermine those intellectualist accounts which analyse knowledge-how in terms of the knowledge-that or belief relation. See also Glick (forthcoming) for a useful distinction between weak and strong intellectualism, in his terminology (as I understand it) the seeming analysis would be a version of weak but not strong intellectualism.

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