Hybrid Virtue Epistemology and the A Priori¹

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Abstract. How should we understand good philosophical inquiry? Ernest Sosa has argued that the key to answering this question lies with virtue-based epistemology. According to virtue-based epistemology, competences are prior to epistemic justification. More precisely, a subject is justified in having some type of belief only because she could have a belief of that type by exercising her competences. Virtue epistemology is well positioned to explain why, in forming false philosophical beliefs, agents are often less rational than it is possible to be. False philosophical beliefs are often unjustified—and the agent is thereby less rational for having them—precisely because these beliefs could not be formed by exercising competences. But, virtue epistemology is not well positioned to explain why, in failing to form some true philosophical beliefs, agents are less rational than it is possible to be. In cases where agents fall short by failing to believe philosophical truths, the problem is not that they believe things they shouldn't, but that they lack beliefs they ought to have. We argue that Timothy Williamson's recent critique of the a priori/a posteriori distinction falls prey to similar problem cases. Williamson fails to see that a type of belief might be a priori justified if and only if, even without any special confirming experiences, agents fall short by failing to have this type of belief. We conclude that there are types of beliefs that are deeply a priori justified for any agent regardless of what epistemic competences the agent has. However, we also point out that this view has a problem of its own: it appears to make the acquisition of a priori knowledge too easy. We end by suggesting that a move back towards virtue-based epistemology is necessary. But in order for this move to be effective, epistemic competences will have to be understood very differently than in the reliabilist tradition.

§1. Introduction: Foundations in Philosophy

Arguments in philosophy, like arguments in general, need starting points. Hansel may have a transparently valid argument from and < q > to < r >; but that won't impress Gretel—or provide grounds for Hansel's own belief that < r >—unless and < q > themselves have some appropriate justificatory status. They might themselves be supported by arguments, of course; but the same issue recurs. For familiar reasons, then, arguments in philosophy must ultimately rely on premises that are justified, but not as the result of further argument. There must be foundational philosophical justification. A central question about the epistemology of philosophy concerns the nature of this foundational justification: what is it in virtue of which the foundations are justified? Our primary interest in this paper is this question, but the issues involved

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¹ This paper was written shortly after the 2013 publication of *The Rules of Thought*. Benjamin Jarvis presented a version at the Philosophy of Philosophies Conference hosted at University College, Dublin on June 18–19, 2013; Jonathan Ichikawa presented a version at a Humboldt University workshop on counterfactuals and thought experiments on September 2–3, 2013. We are grateful to the organizers as well as the participants at both events—most especially Timothy Williamson. We'd also like to express our gratitude to J. Adam Carter, Dylan Dodd, Elia Zardini, and an anonymous referee for reading a draft and providing comments. We've benefitted from conversations with many people on related topics—many of these individuals are noted in the Acknowledgements of *The Rules of Thought*.

generalize straightforwardly to other a priori disciplines, like mathematics and logic.² Our discussion will generalize to these disciplines as well.

So where do philosophical foundations come from? One traditional answer comes immediately to mind: intuitions. According to a traditional picture, certain kinds of experienced attractions to assent to particular contents play the foundational role. Much as perceptual experiences provide foundational support for a posteriori propositions, so do intuitive experiences provide foundational support for a priori propositions. One is foundationally justified in accepting an a priori proposition by virtue of having an intuition with that content.

This traditional view has recently come under attack from several quarters. Some critics think that intuitions aren't trustworthy enough to play these foundational roles.³ Others worry that there is no such state as intuition, or that study of philosophical methodology does not reveal any reliance on such a state.⁴ For our purposes here, we are interested in two different kinds of challenge to the traditional view. One, developed at length in Ichikawa & Jarvis (2013), is that positing such a foundational role for intuitions is inconsistent with the sense in which the norms of rationality are objective. We will rehearse and extend these considerations below. Another, pressed in recent work by Ernest Sosa, is that intuitions are themselves epistemically evaluable in a way inconsistent with their serving the relevant foundational role. Sosa writes:

Intuitive intellectual seemings cannot provide basis-dependent *foundational* justification, being themselves epistemically evaluable. In general, again, a consideration can be assigned the *wrong* weight, as it attracts one too strongly or too weakly. Why should intuitive attractions be any exception? The sheer considering of a proposition can attract too much, if for example its attraction derives from enculturation into an unfortunate bias or superstition. (Sosa 2007, p. 51)

We find two objections in these remarks. First, a theoretical worry: part of what it is to be foundational in the relevant sense is to be the sort of state that is not subject to rational assessment; but intuitions can be justified or unjustified, just as beliefs can. Second, a class of counterexamples: in cases of unjustified intuitions—those that derive from bias, for instance—there is no justification (foundational or otherwise). Therefore, intuition isn't sufficient for foundational justification.

Sosa's arguments against intuitions as providers of foundational a priori justification seem to us convincing—although as we will suggest below, we think they may also have implications that Sosa wouldn't be happy with. If intuitions do not have a foundational role in philosophical inquiry, what does? In one sense, Sosa's answer is that *nothing* does. Sosa holds that when it comes to aprioristic philosophical inquiry, there is no *psychological state* that "lies beyond

² Of course not *all* philosophical claims are plausibly a priori; but some are. *Cf.* Ichikawa & Jarvis (2013), p. 320. We recognize that there is some controversy about whether anything at all is a priori; we offer some reasons to resist detractors below.

³ E.g. Weinberg (2007), Cummins (1998).

⁴ E.g. Williamson (2007), Cappelen (2011).

justification and unjustification" upon which beliefs acquired through philosophical inquiry can properly be based. We think this suggestion is exactly right.

However, in another sense, Sosa offers a replacement—philosophical inquiry has virtue foundational justification. Instead of intuitions or other psychological states, Sosa offers epistemic competences to play the foundational role in philosophy. We think that there's an important sense in which this suggestion is wrong—although there's also a sense in which it is right. In the sense that Sosa is wrong, we should say: not only do no psychological states have a foundational role in philosophical inquiry; epistemic competences don't have a foundational role in philosophical inquiry either. Our first major aim in this paper will be to explain why this is. To this end, we will use and extend arguments first given in Ichikawa & Jarvis (2013). In §2-3, we will explain what is for our purposes central to Sosa's virtue-theoretic approach, and relate the proposal to a different suggestion from Timothy Williamson, indicating that the two approaches share significant similarities. In §§4–6, we lay out the problem for these views. In §7, we rehearse our own, competing proposal, whereby there is an important sense in which foundational justification in the realm of the a priori (at least often) owes to brute properties of a priori propositional contents; on our view, the presence of these properties does not depend on any particular psychological contingencies of a given subject. Finally, in §8, we acknowledge the sense in which Sosa is right; we offer reasons for suggesting a secondary role that competences can and should play in the epistemology of the a priori. The result is a 'hybrid epistemology' that admits both 'belief-based' and 'virtue-based' epistemic phenomena.

§2. Virtue-Based Epistemology

In her 2008 *Philosophy Compass* paper, Heather Battaly articulates a helpful distinction between approaches to epistemology:⁵

In belief-based epistemology, beliefs are the primary objects of epistemic evaluation, and knowledge and justification, which are evaluations of beliefs, are the fundamental concepts and properties in epistemology. In contrast, in virtue epistemology, agents rather than beliefs are the primary objects of epistemic evaluation, and intellectual virtues and vices, which are evaluations of agents, are the fundamental concepts and properties. Specifically, virtue epistemology takes intellectual virtues and vices - types of agentevaluation – to be more fundamental than justification, knowledge, or any other type of belief-evaluation; whereas belief-based epistemology takes justification and knowledge – types of belief-evaluation - to be more fundamental than the intellectual virtues and vices, or any other type of agent-evaluation. The belief-based epistemologies mentioned above do not make a point of addressing the epistemic evaluation of agents or the intellectual virtues. But if they had, they would have made agent-evaluation subordinate to belief-evaluation by explaining the virtues in terms of knowledge or justification. For instance, a belief-based epistemologist might define an intellectual virtue to be a disposition to attain justified beliefs, and define justified beliefs to be those that accord with one's epistemic obligations. In sum, virtue epistemology differs from traditional analytic epistemology because the former takes intellectual virtues to be more fundamental than knowledge and justified belief, and the latter does the reverse. (Battaly 2008, p. 640)

⁵ On this distinction, see also Axtell (2000).

Ernest Sosa's approach to foundational a priori justification, described above, represents a clear commitment to virtue-based epistemology in Battaly's sense. (This should come as no surprise; Sosa played major seminal roles in the introduction of virtue epistemology, and virtue epistemology is a central theme of much of his work.) According to Sosa's approach, the epistemic character of a subject—in particular, her epistemic *competences*—are theoretically fundamental; we understand the assessments of particular beliefs, or of particular belief-types, by reference to these competences, standing dispositions which are either "encoded" or "wired into" a subject's psychological machinery (and individuated as competences at least partly due to their virtuous connection with the broader world). Sosa thinks all of this quite generally: *any* justified belief is justified in virtue of being the deliverance of an epistemic competence; so too for the particular case of an a priori belief. This is why intuitions cannot play fundamental foundational roles; any role intuitions play in the epistemology of the a priori, for Sosa, they must play by virtue of exemplifying a competence.⁶

In opposition to virtue-based epistemology stands *belief-based epistemology*, according to which the assessment of beliefs is more fundamental than the assessment of character. It is important to note that a belief-based approach need not take the epistemic statuses of *particular token* beliefs as fundamental; a belief-based epistemology might take as its fundamental unit of epistemic evaluation a belief *type*. (Compare the analogue in moral theory; a virtue-based ethics focuses on character traits, while an act-based theory focuses on actions. But it may do so by virtue of focus on action *types*—e.g., actions that maximize utility, or actions that are made on the basis of maxims that are universalizable.) In the same way, a belief-based epistemology might abstract away from *particular* beliefs, and give a theory in terms of belief types—perhaps ones characterized by a property of the belief content. As will emerge in §7, a central part of our view is of this sort.

To foreshadow a bit, we think that pure virtue-based epistemology inevitably faces certain shortcomings; these shortcomings point to a concession that must be made to belief-based epistemology generally. Before arguing for this claim, however, we think it will be helpful to set out another recent approach to the epistemology of the a priori: that featured in some of Timothy Williamson's recent work. Although superficially Williamson's approach is very different from Sosa's—and although there are important theoretical differences between them—the two approaches also share a significant similarity that will help bring focus to our critique.

§3. Extending the Target

Sosa is not the only philosopher to emphasize the importance of something like epistemic competences in philosophical inquiry.⁷ Timothy Williamson has recently suggested that the acquisition of so-called "a priori" knowledge "involves a general human capacity to transpose 'online' cognitive skills originally developed in perception into corresponding 'offline' cognitive

⁶ Ichikawa (2013) argues that the best version of Sosa's competence-based view should afford no significant role to intuitions at all; for Sosa's own subtler view on which intuitions play some role in manifesting competences, but not a foundational one, see that paper or chapter 3 of Sosa (2007).

⁷ There are, of course, many philosophers who endorse the view that exercising epistemic competences (or something akin) is a necessary condition for knowledge *generally*—and thus philosophical knowledge in particular. A sampling might include Zagzebski (1996), Greco (2012), and Pritchard (2012).

skills subsequently applied in imagination." (We use scarequotes to signal Williamson's skepticism about the significance of the a priori/a posteriori distinction; see §6.) The suggestion that a priori knowledge is the deliverance of *cognitive skills* is obviously much like Sosa's suggestion that justified beliefs in philosophy are the deliverances of *epistemic competences*. In both instances, competences or skills have the major role in explaining why these beliefs attain a positive status when they do.

None of this is to say that Williamson, like Sosa, accepts a virtue-based epistemology. Williamson's (2000) commitment to the theoretical prominence of *knowledge*—a status that good *beliefs* attain—suggests to us that he is best understood as a belief-based epistemologist. Still, Williamson's approach seems to have this in common with Sosa's: cognitive skills play an important role in establishing foundational justification. Where Sosa thinks this role is fundamental, Williamson (we imagine) thinks that they are only relevant insofar as they help to establish knowledge, which is fundamental. But both think they have an important foundational role to play.

It is also possible to interpret Williamson's remarks as a way of rejecting foundational justification of the sort we've been engaging with. We began the paper with the observation that arguments require starting-points; but Williamson's talk of "offline capacities" may provide a way of resisting what looked like a truism. At least on the assumption that starting points need to be premises, we can do without them if we work with offline assumptions—contents imagined, rather than believed. Then we can bring to bear our cognitive skills to discern what is true, given these assumptions; we can subsequently discharge these assumptions, gaining knowledge of a conditional. Note that often in philosophy, insofar as our interest was in necessary or sufficient conditions for something—a typical philosophical pursuit—knowledge of a conditional seems to be just the sort of thing we were looking for. Perhaps, then, the search for philosophical foundations is, in a sense, misguided; we can reach philosophical conclusions without them. These conclusions are *inferred*, so in that sense, they might not count as foundationally justified. On the other hand, these conclusions do not rest on any more basic beliefs, so, on another understanding of 'foundational', they are foundationally justified. On one understanding of 'foundational', Williamson is indeed offering a competing alternative to Sosa by denying the problem that Sosa is trying to address; on another, he is offering an explanation of how beliefs acquire this virtue-foundational justification. For our purposes, it doesn't matter whether philosophical and any other a priori knowledge or justified belief is foundational or not. The arguments we will give against Sosa's proposal have nothing to do with whether philosophy or

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⁸ Williamson (2013), p. 295.

⁹ Williamson famously defends the priority of knowledge over belief; in saying his is a "belief-based epistemology" in Battaly's sense, we don't mean to suggest that Williamson thinks the category 'belief' as particularly fundamental. But like other belief-based epistemologists, and unlike virtue theorists, Williamson emphasizes the outputs of belief-forming methods (especially when they are knowledge), rather than the features of those methods themselves. Insofar as Williamson wishes to discuss epistemic virtues or cognitive skills, his tendency may be to explain them in terms of their propensity to produce knowledge. (Carter et. al (2013) highlight something along the lines of this possibility on route to arguing for an important relationship between cognitive abilities and knowledge.) So the doxastic states, not the intellectual skills, are central.

the a priori have foundations. Moreover, as we will explain in §6, while Sosa's virtue-based epistemology is sufficient to give rise to the problem, it is not necessary.

In their (2013) paper, "Reasoning as a Source of Justification," Magdalena Balcerak Jackson and Brendan Balcerak Jackson also deny, in a certain sense, that since arguments proceed from premises, there must be foundational justification. The conclusion of their paper is that "reasoning can sometimes generate epistemic justification, rather than merely transmitting justification that a subject already possesses to new beliefs. We should include reasoning in the list of mental states and processes, such as [perception, memory, or introspection], that function as sources of justification." Arguments themselves can generate justification *ex nihilo*. Their cases, like Williamson's, are cases of conditional conclusions derived from offline imaginative capacities. (Unlike Williamson, they focus on cases in which one reasons explicitly from a hypothetical assumption.) Some of their cases involve the justification for a priori claims; these will be our focus.

As in the case of Williamson's view, one can describe the Balcerak Jackson view as either explaining or denying the sense in which there is foundational justification in these cases: there are beliefs that are not justified by other beliefs, but arguments don't need to start with justified beliefs. And as in the case of Williamson's, it doesn't matter much for our purposes which way it is described. The (partly psychological) activity of *reasoning*, according to their view, is a fundamental source of justification for a priori (or putatively a priori) beliefs.¹¹

We think that all of these views—Sosa's, Williamson's, and Balcerak Jackson and Balcerak Jackson's—are committed to implausible views about the preconditions for having justification for philosophical or a priori conclusions. This becomes apparent by considering similar kinds of problem cases. We turn now to our objection to Sosa; we generalize it to these other views in §6.

§4. Why Virtue is Not Enough

Consider again Sosa's arguments against the intuition view. An intuition with content $\langle p \rangle$ does not suffice for justification for a belief of $\langle p \rangle$, because having the intuition might be irrational rather than rational. This is why he brings in epistemic competences. What matters for Sosa is not the presence of an intuition, but that the belief is ultimately delivered by an epistemic competence. We think that this argument is just right as far as it goes, but that a parallel argument makes trouble for Sosa's own view.¹²

¹⁰ Balcerak Jackson & Balcerak Jackson (2013), p. 113. The bracketed addition reflects their intended correction to a typographical error in the printed version.

¹¹ Adam Carter pointed out to us that it might be possible to understand Sosa as adopting a similar view. Consider the suggestion that the source of foundational justification in philosophy is either the *exercising* or *manifesting* of epistemic competences, i.e. the suggestion that foundational beliefs in philosophy are based on some sort of (proper?) activity involving the *use* of epistemic competences. This suggestion seems very much in the spirit of Sosa, yet also might be developed as a version of the Balcerak Jackson view.

¹² In addition to the argument presented in the main text, there is, it seems, another obvious application of Sosa's argument against his and similar views: *epistemic competences* are epistemically evaluable—to the extent to which they are good, something explains what is good about them; *patterns of reasoning* are likewise epistemically evaluable. Insofar as one complaint against the intuitions view was that intuitions, being epistemically evaluable,

First, note that the divorce between intuition and justification runs two ways. Not only does the presence of an intuition with content p not suffice for justification for a belief of p, the absence of an intuition with content does not suffice for the lack of justification for a belief of , because *lacking* the intuition might be irrational rather than rational. Mention of intuitions is not essential to the point. To make the point, we begin by noting that failing to believe or judge some content when prompted can be a sign that one is rationally defective. One can't meet the demands of rationality merely by not believing anything—even supposing believing nothing is possible for a rational agent. Some beliefs are mandated by evidential considerations and relevance to present concerns. Examples of this phenomenon are bound to be controversial, but we think it should not be especially controversial that there are such examples. For the purposes of illustration, consider the proposition < If it rains, it rains > or the proposition <If it isn't raining, then nobody knows that it is>. A person may reasonably fail to believe these propositions because the question as to their truth never arises. But, if the question does arise say, in a philosophical discussion of classical logic or the nature of knowledge—then the failure to believe is no longer so reasonable. The subject is rationally compromised by virtue of failing to come to the proper conclusion. Actively withholding can be irrational, just as belief can.

The natural way to understand this irrationality is roughly as follows: upon prompting, one is rationally committed to—and thus justified in—believing such propositions. But one does not follow through on this commitment. It is this failure to follow through that manifests the rational defect. Notice that this way of understanding the rational defect entails that there is justification for believing, even though, by stipulation, no belief is present. So when we say that justification is present, we must not mean that there is a doxastically justified token belief. Instead, there is justification for a certain belief *type*. We type beliefs by their contents; since the content of a belief is a proposition, we call the sense of justification in question 'propositional justification'. If someone understands and considers the proposition <*If it rains*, *it rains*>, and remains wholly agnostic about it, her problem is that she *fails* to believe that which is propositionally justified. We have learned from reactions to our past work that some philosophers are uncomfortable describing the positive epistemic status in question as 'propositional justification'. We're not particular about labels. The important point is that belief types have significant positive epistemic statuses in these kinds of cases; these statuses are *normative* (or at least value-laden).

How does the significance of propositional justification in cases where belief is absent bear on virtue-based epistemology? A thoroughgoing virtue epistemology holds that all significant epistemic statuses—including propositional justification—are ultimately to be explained in terms of epistemic competences. Of course, there is no general problem with applying this framework to cases where no belief has been formed. Suppose a subject attempts to exercise a competence that could deliver a doxastically justified belief, but does not, in fact, successfully exercise the competence. For example, a subject might attempt to calculate the product of two numbers—something ordinarily well within his powers—but miscalculate. In other words, we are imagining that the subject commits a *performance error*. Still, the virtue theorist might say that the belief type is justified because the subject could have (successfully) exercised her competence (perhaps

were ineligible to serve foundational roles, it is not clear how the virtue view can do any better in this regard. Although we think that this may be a serious problem for Sosa (or at least, a problem for his way of arguing against the intuitions view), we do not pursue it in the main text, as it is orthogonal to our more central point.

in more favorable conditions). Such is a relatively natural approach to propositional justification for a thorough-going virtue theorist.

The problem is that not all rational failures are performance errors. Some are *errors of competence*: cases where the subject fails to form the belief precisely because she lacks the needed competence. If what has occurred is an error of competence, then the rational failure manifested wasn't the subject's failure to *exercise* her (possessed) epistemic competence, but rather the total *lack* thereof. If the subject lacks epistemic competence in the presence of propositional justification, then the presence of propositional justification cannot be explained in terms of even the *potential* for exercising that missing epistemic competence. In this way, we think that these errors of competence—some of the instances of what we call elsewhere "blind irrationality"—undermine virtue-based epistemology. They show that there is a significant epistemic status—propositional justification—that cannot easily be accounted for in virtue-theoretic terms. One can have propositional justification for a belief type, even though one does not have the epistemic competences that would allow one to have the belief justifiedly. The moral is that while epistemic competences might have roles to play in epistemology, they cannot provide the whole story; there must be some concessions to belief-based epistemology as well.

§5. Meta-Aptness

Sosa is not unaware of the prima facie challenge of extending his virtue theory to the withholding of belief. In his (2011), he describes, as a challenge to his virtue theory, "the fact that suspension of belief admits the same epistemic normativity as does belief itself, even though to suspend is of course precisely *not* to perform, at least not with the aim of truth." (p. 1) A central project of chapter one of that book is to extend the virtue theory to apply to the evaluation of failure to form belief. Although his new approach may well help with some of the cases Sosa is thinking about, it does not have the resources to answer the challenge posed above in generality—particularly in the case of the a priori.

Sosa's strategy for this challenge involves positing a kind of higher-order epistemic competence, which governs the epistemic risk-taking of a given agent. Returning to his oft-invoked analogy between a belief, which aims at truth, and an archer's shot, which aims at a target, Sosa writes:

Let our archer now be a hunter rather than a competitor athlete. Once it is his turn, the competitor must shoot, with no relevant choice. ... The hunter by contrast needs to pick his shots, with whatever skill and care he can muster. Selecting targets of appropriate value is integral to hunting, and he would also normally need to pick his shots so as to secure a reasonable chance of success. The shot of a hunter can therefore be assessed in more respects than that of a competitor athlete. The hunter's shot can be assessed twice over for what it is manifest in: not only in respect of its execution competence, but also in

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¹³ See Ichikawa & Jarvis (2013), pp. 281–2 and 303–4.

¹⁴ Elia Zardini suggested to us that a virtue theorist might invoke 'competence types' to play this kind of role, where the types in question are not actually instantiated by the subjects in question, but where they might have been. While this approach is contrary to the letter of the view we develop here, we agree that it is an intriguing idea, and one worthy of future development in study. A competence-type-emphasizing virtue theorist avoids some of the problems we're discussing by allowing more of epistemology to be grounded outside of epistemology.

respect of the competence manifest in the target's selection and in the pick of the shot. (pp. 5–6)

The broader metacompetence has to do with appropriate risk management. In the case of the hunter, it concerns whether the shot type is too difficult to be worth the attempt; in the case of the epistemic agent, it concerns whether it is too epistemically risky to form a belief of a certain type. These questions, of course, depend on the proper evaluation of the subject's first-order capacities. A more highly skilled archer, who knows that she is highly skilled, ought to attempt more difficult shots than should a less skilled archer. Similarly, epistemic metacompetence consists in significant part in an accurate understanding of one's cognitive limitations.

With these sorts of metacompetences, Sosa has resources for delivering some appropriate epistemic verdicts, even about withholdings. For example, Sosa can deliver the appropriate verdict that most humans are justified in withholding belief about whether there is an even or an odd number of stars in the universe at any given time—we don't have a sufficiently reliable competence to render a belief with respect to that question sufficiently reliable, and we have sufficient epistemic humility to realize that this is so. He can also explain why, not only failing to exercise epistemic competences, but failing to even attempt to exercise competences can be an epistemic shortcoming. Under normal circumstances, if Amir—a subject with ordinary eyesight—looks at a blue hydrangea, and remains agnostic as to its color, he is performing poorly with respect to this metacompetence: he is being unduly cautious.

However, the strategy does not generalize to cases of blind irrationality, where the competences needed to form a doxastically justified belief are not present. Consider, for example, this variant of cases we have used elsewhere:

Jack and the Time Machine

He's not the brightest guy in the world, but in many respects, Jack has done pretty well for himself in life. He has lots of disposable income. He is not without regrets, however. In particular, he has always regretted his failing grade in that philosophy of time course he took at university. But recently, he is feeling more upbeat about it. Last month, Jack came across a man—with outstanding credentials—who has agreed to construct (for a considerable fee) a time machine, which Jack could use to correct his past confusions about time. The man has promised Jack that, once the machine is complete, Jack can use it to travel back to his university days, and give his past self the answer key to that exam. Then it will no longer have been the case that Jack did poorly on that exam, and his biggest regret in life will have been erased. Jack knows that salespeople sometimes promise more than they can deliver, so he declines from forming the belief that he really will succeed in changing the past. Instead, he's taking a wait-and-see attitude about whether the machine will work—but he's excited about the possibilities. 15

Jack is confused; he is exhibiting rational deficiencies of a kind. (He's also exhibiting some competences, but those are not our interest here.) The proposition *Sack will go back in time and make it the case that he no longer did poorly on his exam*> is incoherent; a fully rational agent would reject it, and believe its negation. ¹⁶ Jack is agnostic, which demonstrates that he's not a

¹⁵ The original cases are in Ichikawa & Jarvis (2013), pp. 281 and 289. We have modified this case for present dialectical purposes. The central point remains the same.

¹⁶ If you disagree with us about the coherence of *Back-to-the-Future*-style time travel, you can substitute a different

fully rational agent. Furthermore, it is part of the case that Jack lacks the rational capacity to do a better job here. It is for this reason that Sosa's invocation of meta-competences can't explain why Jack's withholding is rationally deficient. Sosa's meta-competences are about the proper management of epistemic risk, given the subject's cognitive capacities. But the best practical strategy available to Jack, given his capacities, is withholding. If he tried to evaluate the salesman's likelihood of success based purely on a priori considerations about time, he would not do a very good job. So Jack is performing well with respect to Sosa's meta-competences. The Sosa story can't explain what is wrong with Jack's response to the situation.

Again, we do not deny that there is something right about Jack—indeed, that there is a sense in which withholding is an appropriate epistemic attitude on Jack's part here. We insist only that this cannot be the whole story, because there is *another* sense—the one we've been calling 'propositional justification'—in which Jack really ought to think that changing the past is impossible.¹⁷

§6. The Problem Generalized

The same considerations that make trouble for Sosa make trouble for Williamson as well.

In his recent work, Williamson (2013) argues that the distinction between a priori and a posteriori knowledge is shallow. Upon closer examination, paradigmatically a priori knowledge isn't, he claims, much different than certain cases of a posteriori knowledge. He illustrates this point with these two propositions:

- (1) All crimson things are red.
- (2) All recent volumes of Who's Who are red.

Williamson suggests that—although (1) is paradigmatically a priori and (2) is paradigmatically a posteriori—knowledge of both these two truths might be acquired in the same way. By imagining an arbitrary crimson thing, one might be able to discern that it is red—and thereby come to realize that (1) is true. Similarly, by imagining a representative recent volume of Who's Who, one might be able to discern that it is red—and thereby come to realize that (2) is true. In both cases, one uses "offline" epistemic competences—or, in Williamson's terminology, cognitive skills—developed and honed by perceptual recognition of crimson things and recent volumes of Who's Who, respectively.

Williamson intends to establish that "although a distinction between a priori and a posteriori knowledge (or justification) can be drawn, it is a superficial one, of little theoretical

story involving your preferred incoherence.

¹⁷ It is in effect for this reason that, in past work, we make a three-way distinction between kinds of epistemic justification, instead of the more standard two. In addition to doxastic justification (whether a token belief is justified) and propositional justification (whether a subject has sufficient reason to believe a given proposition), we recognize a category of ex ante justification, which we gloss as whether a subject has the potential for a doxastically justified belief (in light of her experiences up until the present). See Ichikawa & Jarvis (2013) pp. 32–3, 163, and 306-7.

significance." (p. 291) As such, Williamson commits himself to a somewhat precarious dialectical situation. However many *similarities* Williamson can point to between paradigmatic cases of a priori judgment and paradigmatic cases of a posteriori ones, it will always be open to the defender of the traditional distinction to accept the similarities, but cite other theoretically significant differences that underwrite the distinction.¹⁸ We are happy to agree with Williamson about all of the following:

- There are psychological similarities between certain processes one might use to learn (1) and some one might use to learn (2).
- Knowledge of (1) and (2), reached in certain canonical ways, each require the exercise of a cognitive skill involving the imagination.
- The cognitive skill in question is typically acquired—maybe even could only possibly be acquired—over practice involving perceptual experience.

Williamson suggests that this means there can't be a deep epistemological distinction at play—"The problem is obvious. As characterized earlier, the cognitive processes underlying Norman's clearly a priori knowledge of (1) and his clearly a posteriori knowledge of (2) are almost exactly similar. If so, how can there be a deep epistemological difference between them?" (pp. 296–7) But as outlined above, we do not find the problem at all obvious; it is entirely possible that there is a deep difference that doesn't emerge at the level of cognitive processes involved. Notice that Williamson himself must allow there to be *some* cases like this—compare, for example, a paradigmatic case of knowledge with a paradigmatic justified false belief. The cognitive processes involved between the two may well be 'almost exactly similar'; this shouldn't convince anyone—Williamson least of all!—that there is no deep epistemological difference between knowledge and justified false belief.

We think, with philosophical orthodoxy, that there is a theoretically significant epistemological distinction between (1) and (2). It's not that experiences aren't required to develop the cognitive skills necessary to know (1)—Williamson makes a reasonably compelling case that they are. Rather, the difference is that insofar as an agent hasn't developed the cognitive skills necessary to know (1), the agent is lacking the full set of tools that a rational agent might have merely in virtue of being rational. The fact that some of these tools might need to be acquired via experience rather than as the direct result of the agent's biological heritage is of no consequence. In contrast, the fact that an agent hasn't developed the cognitive skills necessary to know (2) doesn't show that that the agent is lacking any of these tools. Rather, it shows that the agent hasn't acquired further tools beyond those that a rational agent might have merely in virtue of being rational.

exactly similar. Therefore, there can't possibly be any deep biological distinction between them.

¹⁸ Compare this transparently bad argument: although a distinction between cats and dogs can be drawn, it turns out on closer examination to be a superficial one; it does not cut at the biological joints. Consider, for example, a paradigmatic cat, Felix. Felix has the following properties: (i) he has four legs, fur, and a tail; (ii) he eats canned food out of a bowl; (iii) humans like to stroke his back. Now consider a paradigmatic dog, Fido. Fido has *all three* of these properties as well. For instance, Fido also has four legs, and fur, and a tail, and when he eats, it is often served from a can into a bowl. And humans like to stroke Fido's back, too. In these respects, Fido and Felix are almost

To put the matter differently, what would appear to suffice for a deep distinction between a priori and a posteriori is if there were particular patterns of inference that were good for a subject to engage in, but not in virtue of experiencing anything. We could then say that to the extent she can competently reason in these patterns, a rational agent is properly equipped *qua* rational agent.¹⁹ We could give a principled account of the a priori by saying that a belief type is a priori propositionally justified if and only if it can be reached by engaging in these patterns of inference. If (1) is a priori and (2) a posteriori, it is because (1) can be reached by such a pattern of inference while (2) cannot. This fits with what we said last paragraph: an agent incapable of competently reaching (1) by such a pattern of inference lacks the full set of tools that a rational agent might have merely in virtue of being rational.

There are a few ways that Williamson might block the efficacy of this principled account. In order to do so, he must suggest that while principled, the account gets the intuitive cases wrong. For instance, it categorizes (2) as a priori along with (1) and other even more intuitive examples of the a priori. We don't find this last claim very plausible. Consider an agent who knows what Who's Who is—a reference publication put out by A & C Black containing biographical information of prominent British people—but who has never actually seen a volume of Who's Who or heard anything about the color of recent volumes. She hasn't had any experiences that might confirm that recent volumes are red, but she hasn't had any experiences that disconfirm that recent volumes are red either. We take this to be an obvious datum: this agent could not rationally infer to the conclusion (2); she lacks the experiences necessary to apprehend the truth of (2), despite full comprehension of the proposition. The possibility of such agents shows that any pattern of inference delivering a belief of (2) is clearly good in virtue of confirming experiences whether or not this experience is present-to-mind in subjects judging (2) to be true. Thus, (2) is definitively a posteriori, according to our way of classifying.

Might Williamson resist our account by arguing that it renders (1) a posteriori? To argue as much, Williamson must either deny that there are patterns of inference that are good to engage in, or else insist that good patterns are generally good partly in virtue of having some experience. The former would make him a skeptic, which presumably he is not. So, he must opt for the latter.

Cases of lacking full rationality as a result of lacking beliefs are now relevant because they can indicate problems with this latter option. We simply look for propositions—perhaps such as (1)—such that failing to believe them when prompted is not fully rational, but not because of any particular experiences one has had. If we find them, we have found a priori propositions; we have shown that there is a good pattern of inference (from no premises) to these conclusions that is not good in virtue of any experience.

Thus, Williamson must insist that whenever it is not fully rational to lack a belief when prompted this is partly in virtue of having experiences. But which experiences? We're not sure. The only plausible answer that comes to mind: the experiences which contributed to the development of cognitive skills that the subject could deploy to reach the belief in question.

¹⁹ For our purposes here, it doesn't matter if there are other factors that go into being a rational agent so long as being equipped to competently reason in these patterns is one such factor.

Here is where errors of competence—cases where, in lacking a belief, a subject not only errs but cannot do better, due to lack of epistemic competences and cognitive skills—matter again. Suppose, for instance, that an agent—Amber—lacks the cognitive skills necessary to categorize certain shades of crimson as red. Amber isn't sure whether these shades aren't brown rather than red. Given our current assumptions, we can stipulate that Amber hasn't had experiences that would resolve this confusion. However, assuming (1) is indeed a priori, we should judge that that this failure to believe shows that the agent isn't fully rational. She might be better equipped qua rational agent to make various color judgments. (Of course, she might become better equipped by further exposure to color samples and proper training although, in our view, this would not be required. Certain rational agents might be ontogenetically determined to develop the same cognitive skills without exposure to color samples. They might have a more "intuitive" or innate grasp than Amber of the distinctions between crimson, red, and brown.) Rational agents that do judge (1) are doing better qua rational agents than Amber. If this is so, then it would show that it doesn't matter that she hasn't had experiences requisite for developing cognitive skills. The experience isn't what explains why there is a good route, given Amber's evidence, to (1). The good route is there regardless; it's just that Amber can't competently take it.

Of course, Williamson might deny that there is a good route to (1) for this agent; he might deny that, upon prompting, Amber is less than fully rational for lacking a belief in (1). This doesn't vindicate his position, however. It might simply imply that (1) is not a priori propositionally justified, appearances to the contrary notwithstanding. Certain experiences are required to rule out the possibility of a crimson thing that is brown rather than red. In order to be an effective rebuttal, Williamson needs to make this same move for *all* putative instances of the a priori. We think this is implausible. Consider other paradigmatically a priori propositions like <*If* it rains, it rains> or <*If* it isn't raining, then nobody knows that it is> or even <2+2=4>. We might suppose that an agent has not had experiences necessary for developing the cognitive skills to recognize these propositions as true. (Remember: conceding that any experiences would suffice effectively concedes that they are a priori in a way other propositions are not in a perfectly principled sense.) But, we think this is irrelevant when it comes to the question of whether lacking belief in these propositions upon prompting is fully rational in ordinary cases. It isn't.

One might complain that it is impossible to evaluate whether such an agent is fully rational. Only an agent capable of entertaining the propositions can be prompted to consider them in the requisite sense. And, any such agent will, because of her understanding, (rationally) believe them. So, we can't make sense of an agent who lacks these beliefs—and hence, can't evaluate her. This complaint won't help Williamson, because it opens the door to another characterization of the a priori—as those propositions that agents believe when they are prompted to consider them.

In our opinion, the arguments Williamson gives elsewhere make it plausible that there are no such propositions.²¹ In effect, there are no irrationalities that are impossible to manifest. So, one should not try to characterize even some a priori type justified propositions as propositions such

²⁰ Williamson suggests (p. 297) that his remarks about red and scarlet generalize to 'all or most' putatively a priori truths; obviously, we disagree.

²¹ See e.g. Williamson (2007), pp. 86–9.

that it is impossible for subjects not to be inclined to believe them if they understand them and consider whether they are true. But it also follows that it is perfectly coherent to consider agents that fail to endorse (or have any inclination to endorse) even the most obvious truths *even though they are capable of entertaining them and prompted to consider them.* And it is eminently reasonable to conclude that these agents are, in at least some of these cases, not fully rational precisely because of this failure. Moreover, this lack of rationality is not attributable to some particular experiences the agent has had that bestow the obviousness on the propositions in question. Perhaps certain disconfirming experiences would undermine or overrule the justification for believing these obvious propositions so that failing to believe them no longer means that one is less than fully rational. But propositional justification for these obvious propositions is the default situation that an agent can capitalize upon merely by properly equipped *qua* rational agent. On this picture, contrary to Williamson's suggestion, there *is* a principled distinction between the a priori and the a posteriori, having to do with the relationship between experience and rationality.

We're not sure why any hardnosed philosopher would want to oppose this picture. Suppose some such philosopher—Alicia—is at a philosophy conference. And, suppose that she is trying to make a compelling point to another participant. From her perspective, the point is right on—and indeed, objectively speaking; it is correct: Alicia is articulating a proof that her interlocutor's view is incoherent. Unfortunately, the latter participant fails to see it. He doesn't reject the claim in question, but he doesn't accept it either. So it's not that he has unreliable intuitions due enculturation into an unfortunate bias or superstition; his problem is that he lacks good intuitions—perhaps simply because of very ordinary human failings. Suppose Alicia becomes frustrated. The point in question is perfectly obvious. This person is doing philosophy badly; he is exhibiting irrationality. Or so Alicia judges. But what if her interlocutor hasn't had the experiences needed to apprehend the obviousness of the point? How can Alicia be sure that this person has had the requisite experiences? The natural answer is: because no experiences are requisite. The problem isn't lack of experience, but that the subject just isn't up to handling the point in question. Perhaps due to no fault of his own, he isn't sufficiently equipped qua rational agent. We'd expect some philosophers to balk at Alicia's hardnosed position, but we doubt that Williamson would be among them.

In any case, we think the problem for Williamson's approach ultimately has a common source with the problem for Sosa's. Both seem to ignore the importance of rational versus irrational withholding. When it comes to Sosa, the conditions for propositional justification are not evident when one focuses only on cases of token justified belief versus token unjustified belief. They become evident only by considering cases of rational versus irrational withholding. Similarly, when it comes to Williamson, the principled difference between a priori and a posteriori is not evident from how a person reaches a priori versus a posteriori knowledge. Rather, the difference becomes evident only by considering cases of rational versus irrational withholding. We can appreciate that even without any special history of experience some failures to believe appear to be irrational. The beliefs with this feature are a priori. The beliefs without it are a posteriori.

The same kinds of cases demonstrate why we want to resist the Balcerak Jackson suggestion that reasoning is a fundamental source of justification. We agree with Balcerak Jackson and Balcerak Jackson that, in many cases—including prototypical a priori cases—one can reason one's way to

an interesting conclusion without relying on premises that have some independent justificatory status. Consider one of their cases:

Fozzy logic. Fozzy has no evidence one way or the other concerning the question of whether there are any talking green creatures. But he temporarily adopts the assumption that Kermit is a talking green creature. Working under this assumption, Fozzy thinks to himself: in this case there would be at least one thing—namely, Kermit—who is a talking green creature. Discharging his assumption, Fozzy draws the (material) conditional conclusion that if Kermit is a talking green creature, then there is at least one talking green creature. He goes off in search of Kermit to check his color and language skills. (p. 116)

Having presented the case, they argue for the following claims:

- 1. After going through the reasoning, Fozzy ends up with a justified belief that if Kermit is a talking green creature, there is at least one talking green creature.
- 2. Fozzy's justification for the conclusion is not derivative from his justification for premises in his reasoning.

We agree with both of these claims. We do not agree, however, that it follows that "Fozzy's reasoning itself contributes justification for the conclusion he reaches on its basis." (p. 116) Our reason for resisting that conclusion should, by now, sound familiar. We think that Fozzy already had justification for the conditional in question. Perhaps his reasoning helps him to appreciate that he has justification for this conditional, but it does not generate it. Suppose Beauregard, like Fozzy, considers whether the conditional in question is true. But unlike Fozzy, he does not go through the reasoning Balcerak Jackson and Balcerak Jackson describe, and he remains totally agnostic about whether, if Kermit is a talking green creature, there is at least one talking green creature. Beauregard is exhibiting irrationality; he *should* believe the conditional. He has justification for it. But by stipulation, he hasn't gone through the reasoning; so the reasoning isn't what generates the justification. This makes reasoning fundamentally different from genuine sources of justification like perception, where the rational pressure to accept a given claim depends constitutively upon the perceptual experience.

§7. Sense First

Our complaint about the views we've discussed ultimately comes down to this: there is a sense in which a priori propositional justification is thoroughly *objective*. ²² It does not (constitutively) depend on contingencies of psychology as virtues, competences, or reasoning do. In our book The Rules of Thought, we argue, for this and other reasons, that propositions essentially stand in particular rational relations to one another, and that these rational relations are primitive. (We take rational relations to individuate the *Fregean sense* of propositions.) We will not rehearse the case for the view here or consider objections; it will be helpful, however, to outline just what our positive view is, in order to contrast it with the views we've been criticizing.

²² As Jarvis (unpublished) makes clear, there is a related sense in which propositional justification (considered more generally) is objective.

In much the same way that propositions are characterized in part by their truth conditions, so too do we think that they are characterized by their conditions for conclusive rational acceptance. Part of what makes a proposition the proposition that *Kermit is green*> is that there is a *rational entailment* from it to the proposition that *Something is green*>; this entailment commits a rational agent to accepting the latter given acceptance of the former. Some propositions are *rationally necessary*; any arbitrary proposition is rationally conclusive for them and rational agents are committed to accepting them. The canonical cases of a priori propositions we have been discussing here are (arguably) among these rational necessities.²³ These a priori propositions have this status wholly objectively; it has nothing to do with what reasoning is performed or what competences are present. Indeed, it is partly in virtue of their rational profiles that they are the contents they are. It is a straightforward consequence of this approach that all subjects always have propositional justification for rational necessities, regardless of their cognitive skills or any other contingencies of their psychology.

There are many important questions about tying content so closely to objective rational norms, many of which we take up in our book. The important thing to recognize for present purposes, however, is that the approach represents a clear instance of a belief-based epistemology, as opposed to a virtue-based one, in Battaly's sense. Certain belief types have a particular epistemic status, just by virtue of their contents. A view that accepts rational necessities, in our sense, does not succumb to the challenges we've been raising for Sosa and others, precisely because it makes room for important epistemic statuses that do not depend on anything psychological.

A conclusion of the preceding sections is that one must have a place for some kind of psychology-independent, belief-based epistemic evaluation. One might try to do so without going so far as we do in positing rational necessities, but for reasons outlined in the book, we are convinced that this is the best way to account for the cases. We do not think, however, that we can do entirely without the kind of competence-emphasizing virtue approaches we began by discussing. In the final section, we explain why this is so.

§8. Why Sense is Not Enough

Consider again Jack, who is open-minded about his time machine. Our argument against Sosa's virtue epistemology was that it was unable to accommodate the sense in which Jack's withholding is a rationally error. But we admitted, also, that there is another sense in which Jack is right to withhold—given his epistemic shortcomings, trying to form a belief about whether the machine would perform as advertised would have been too risky. This latter sense is difficult to explain, if one only has the resources of a belief-based epistemology.

Consider an example of a *difficult* a priori truth, $\langle p \rangle$. By 'difficult', we just mean, some truth that isn't obvious to typical humans on initial consideration—a nontrivial arithmetical or logical theorem, for example. Because $\langle p \rangle$ is a priori, any failure to accept it manifests a rational limitation. (That $\langle p \rangle$ is both difficult and a priori entails the truism that typical humans have

²³ Our category of 'rational necessities' is similar in extension to what some philosophers have called 'analyticities'. See Ichikawa & Jarvis (2013), pp. 51–2. In the book, we suggest that the a priori propositions may extend beyond rational necessities; see e.g.n p. 171. But we do insist that rational necessity is sufficient for apriority. The examples of apriority we discuss in this paper are plausibly rationally necessary.

rational limitations.) Now suppose that someone believes for some bad reason—for example, by guessing. There is clearly a dimension of epistemic evaluation along which her belief is inappropriate. But, it is not one that a belief-based approach—especially one like ours that invokes rational necessities—is particularly well-placed to explain. For has the same rational necessity status in this case and in the case where someone reasons her way to via competent deduction. Although there is always propositional justification for the belief type , this is not a guarantee that any given belief token with the content will be doxastically justified. There is extra theoretical work that needs to be done. Here, we think, epistemic competences are well-placed to play key roles. There is something right about the virtue approach for *impure* epistemic kinds like doxastic justification and knowledge, where psychology and epistemology are tied up. Although we insist that they cannot provide the whole story—that we need something like our version of a belief-based epistemology—we think that virtue-based epistemology is needed for part of the story as well. This is the sense in which we embrace a *hybrid* epistemology.

Might one try to tell a more thorough-going belief-based story, replacing competences with something else? While we don't have any straightforward argument against the idea, the prospects for such a story do not look particularly strong. One such kind of story might be a causal basing picture: a token belief is doxastically justified if and only if it is caused a state that establishes propositional justification for beliefs of that type.²⁴ But it is difficult to articulate what would be an appropriate cause, in cases of rational necessities, where absolutely anything is sufficient for propositional justification; and even if some suitable cause is articulated, the possibility of 'deviant causal chains' is likely to leave any such account susceptible to counterexample.²⁵ While one might attempt to set out a more sophisticated belief-based story for impure epistemic states, we are sufficiently impressed by the difficulties to prefer a hybrid approach that invokes competences at this level.

There are, of course, in addition many questions about just what epistemic competences consist in. According to the reliabilist virtue-theoretic tradition deriving from Sosa, epistemic competences are aspects of character—stable dispositions of subjects—that reliably (or conditionally reliably) form (and maintain) true beliefs. There are, however, a number of well-known difficulties with this view. Consider, for instance, the mathoids, a hypothetical group of people introduced in a recent paper by Sharon Berry. The mathoids start off like normal humans, but have their brains modified at a young age so as to find certain difficult arithmetical truths intuitively obvious—as obvious as the fact that 2 + 3 = 5 is to us. So they do not seek out further proofs for these 'obvious' truths. Using their starting points, the mathoids are able to

²⁴ Consider, for example, Moser's (1989) theory: S's believing or assenting to P is based on his justifying propositional reason $Q =_{df} S$'s believing or assenting to P is causally sustained in a nondeviant manner by his believing or assenting to Q, and by his associating P and Q. (p. 157)

²⁵ As Korcz (2006) suggests "It is quite difficult to clearly explain what non-deviant causation amounts to, yet without such an explanation causal theories are ultimately unsatisfactory." (§1) There's also the *further* problem created by Lehrer's (1971) Gypsy Lawyer case, which appears to call for an additional counterfactual condition. See, for example, the relevant discussion in Swain (1981).

²⁶ Berry (2013).

offer very short proofs of very difficult mathematical theorems, such as Fermat's Last Theorem. The standard intuition, Berry suggests, is that the mathoids are not justified in their beliefs in difficult arithmetical truths. But it is not at all clear how a reliabilist virtue theorist can respect this intuition, since the mathoids do have stable dispositions to form (and maintain) true beliefs. If this isn't enough for competence, then reliability (and conditional reliability) can't suffice for competence. (Berry's case generalizes beyond reliabilism—the main target of her paper concerns 'default reasonableness' criteria for foundations.)

So, we are inclined against pure reliabilist implementations of epistemic competences in our hybrid epistemology. What alternatives are there? One possible option would be to be primitivists at this level, too—some psychological tendencies constitute competences, and there is no deeper explanation of that fact. This would, however, admittedly be somewhat unsatisfying; one should posit primitive distinctions with care.²⁷ Another possibility would be to give a substantive account of epistemic competence, by drawing a closer connection to general flourishing. ²⁸ For example, one might require that, in order for a stable belief-management disposition to constitute a genuine competence, it is not enough for it to be reliable; it must also be integrated with the subject's capacity for success in engaging with its broader environment. This seems, at least, to get the right result about some of the challenges to pure virtue-reliabilism; the mathoids' reliable arithmetical judgments are naturally thought of as lacking in integration with their practical success in general; they are artificially 'tacked on'.²⁹ The suggestion here is to a considerable degree in the spirit of recent attempts to explicate epistemic statuses by reference to pragmatic considerations—we have in mind particularly that of Enoch & Schechter (2008)—but the present idea would limit the contribution of such pragmatic considerations to impure epistemic statuses.³⁰

These suggestions about how to understand competence obviously comprise a mere tentative sketch, but it seems to us to be a promising avenue for further research. In the context of this paper, the main points of this final section are (a) that competence (i.e. virtue) has important roles to play in impure epistemic contexts; and (b) that there is space—and probably good reason—to explore conceptions of competence that are not merely reliabilist.

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²⁷ Chapter 5 of Ichikawa & Jarvis (2013) argues at length that the move is justified in the case of propositional justification.

²⁸ Cf. Bedau (1992). A third possibility is to give a theory of competences/abilities in terms of *natural selection*—e.g. Millikan (2000), ch. 4—or *design*—e.g. Plantinga (1993).

²⁹ As Elia Zardini reminds us, this needn't be so—we can try to imagine a version of the case with their abilities much further integrated into their practical success. On the picture we're sympathetic to, that might well make a difference for their status as an epistemic competence..

³⁰ The present idea also obviously need not give rise to so-called "pragmatic encroachment" of, e.g., Stanley (2005) and Fantl & McGrath (2007). Aspects of cognitive character might constitute epistemic competences only if, *as a general rule*, they contribute to practical flourishing (whether or not they do in any particular situation).

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