### Virtuous Distinctions

New Distinctions for Reliabilism and Responsibilism

#### Will Fleisher

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#### **Abstract**

Virtue epistemology has been divided into two camps: reliabilists and responsibilists. This division has been attributed in part to a focus on different types of virtues, viz., faculty virtues and character virtues. I will argue that this distinction is unhelpful, and that we should carve up the theoretical terrain differently. Making several better distinctions among virtues will show us two important things. First, that responsibilists and reliabilists are actually engaged in different, complementary projects; and second, that certain responsibilist critiques of reliabilism miss the mark. With these distinctions on the table, we can see that the virtue reliabilist project is in some ways more fundamental than the responsibilist project, since the latter importantly depends on the former. I argue that the distinctively epistemic value of the responsibilist's character virtues is derived from their connections to the reliabilist's constitutive virtues. While this will give us a unified account of the epistemic value of intellectual virtues, it is not a reduction of the responsibilist project to the reliabilist one; rather, it as a way of securing the separate importance of each project by clarifying how they relate to one another.

# 1 Virtue Epistemology: A House Divided

Virtue epistemology is a family of epistemological theories which take some notion of virtue or competence as their central explanatory concept. This family has been divided into two camps. Virtue reliabilism uses the concept of a virtue or, synonymously, a competence to solve traditional problems in epistemology. Ernest Sosa (2007, 2010) and John Greco (2010), for instance, each offer an analysis of knowledge in terms of competences. Competences are dispositions of subjects that serve as reliable methods of belief formation. Virtue reliabilism thus moves the locus of epistemological evaluation from exclusively focusing on belief states and propositions, to focusing on features of subjects and their performances (cf. Sosa 1990 and Battaly 2008).

Virtue responsibilism seeks to push the locus even further onto the subject. Responsibilists, such as Linda Zagzebski (1996) and Jason Baehr (2013), suggest that epistemic evaluation should follow the model of Aristotelian virtue ethics. In virtue ethics, the primary bearers of moral value are character traits of subjects, viz. the virtues. If any states have value, or if there is any rule of right action, these things are ultimately dependent on the nature of the virtues. Correspondingly, responsibilists suggest that the primary bearers of epistemic value are epistemic virtues.<sup>2</sup> Moreover, responsibilists suggest that virtues are character traits for which we can hold the subject responsible (cf. Montmarquet 1993, Axtell 1997). For this reason, they posit a distinction between intellectual character virtues, which are stable, person-level character traits of subjects, and those "virtues" that are mere cognitive faculties. Responsibilists argue that virtue reliabilists (and reliabilists generally) are mistaken in focusing primarily on cognitive faculties instead of person-level character virtues, since it is the character virtues that bear epistemic value.<sup>3</sup>

I will argue that there should be no reliabilist/responsibilist conflict

<sup>&</sup>lt;sup>1</sup>Greco seems to prefer the term "abilities," but we can set that aside for the purposes of this paper.

<sup>&</sup>lt;sup>2</sup>It's worth noting that many responsibilists, including Baehr and Zagzebski, also recognize the value of the truth of beliefs. However, we might distinguish this *alethic* value from epistemic values that go along with notions like *warrant* and *justification*.

<sup>&</sup>lt;sup>3</sup>Though they differ on whether the faculties count as virtues, or are at all epistemically important. For instance, Montmarquet (1993) and Zagzebski (1996) want to limit virtue talk entirely to character virtues, while Baehr (2013) and Battaly (2007, 2008) argue for the importance of such faculties in understanding some kinds of knowledge.

among virtue epistemologists. The apparent conflict arises from the way the character virtue/cognitive faculty distinction has been drawn. I argue that this distinction is unhelpful; we should carve up the theoretical terrain differently. Once we recognize several other important distinctions among virtues, it will be clear that responsibilists and reliabilists are engaged in different projects, and that certain responsibilist critiques of reliabilism miss the mark.<sup>4</sup>

It is worth noting at the outset that I am not suggesting that there is no interesting distinction between the two *projects* that the reliabilist and the responsibilist are engaged in. On the contrary, I think these are two interesting and distinct projects worth pursuing. What I aim to show is that, once we make the right distinctions among virtues, we will see that these two projects are not in conflict. They are not trying explain the same things, nor make prescriptions about the same kinds of things. What I do want to replace is the "faculty/character" distinction. In particular, the notion of a "faculty virtue" should be abandoned, and we should understand character virtues in a different way.

I will also argue that, with better distinctions on the table, we can see that the virtue reliabilist project is in some ways more fundamental than the responsibilist project, since the latter importantly depends on the former. I will suggest that the distinctively *epistemic* value of responsibilist character virtues is dependent on their relationship with the competences studied by the reliabilists. This recognition of the dependence of the responsibilist project on the reliabilist one is not meant as a criticism of responsibilism. Rather, it is a way of securing the separate importance of each project by clarifying how they relate to one another.

<sup>&</sup>lt;sup>4</sup>I am not the first to suggest that the two projects are not in conflict, but are rather complementary (see Axtell 1997 and Battally 2007, 2008 for others making this kind of argument). However, other attempts to bridge the divide have relied heavily on the faculty/character distinction. Battaly, for instance, suggests that reliabilist faculty virtues can be used to explain "low-level" knowledge, and character virtues to explain "high-level" knowledge. I will instead suggest a different relationship exists between instances of knowledge and different kinds of virtues. My approach is thus entirely different, even if some of the goals are shared.

# 2 A Responsibilist Challenge to Reliabilism

Responsibilist virtue epistemology is modeled on Aristotelian virtue ethics and focuses on global character traits of the subject. Call such a trait an *intellectual character virtue* (ICV): a person-level intellectual excellence of character. These are character traits for which it makes sense to hold the agent responsible for having, hence the term "responsibilist." Baehr defines an ICV as "a character trait that contributes to its possessor's personal intellectual worth on account of its involving a positive psychological orientation toward epistemic goals" (2011, 102). This latter notion is akin to personal *moral* worth. Similarly, Zagzebski requires that a virtue be "an acquired excellence of a person in a deep and lasting sense," one which is acquired by hard work over time, is not merely a skill, and is appropriately motivated (1996, 135).<sup>5</sup>

In order to contribute to personal intellectual worth, and for it to be a trait the person is responsible for, an ICV must be one acquired over time through actions of the agent. This is to be distinguished from mere cognitive faculties, skills or even talents, which are not acquired, the agent is not responsible for, and thus do not contribute to the personal worth of the subject. Genuine ICVs involve appropriate motivation: they require the subject to have a love of epistemic value (truth, knowledge, understanding, etc.). Any particular virtue is an excellence of character that allows a subject to gain an appropriate connection with the world, due to the subject's love of epistemic value. Paradigm examples of such virtues are open-mindedness and intellectual courage.

Responsibilists argue that virtue reliabilist views are mistaken in failing to appreciate the importance of character virtues to epistemology. Zagzebski (1996) and Battaly (2008), for instance, suggest that the reliabilist focus on faculties and processes makes it difficult for them to account for

<sup>&</sup>lt;sup>5</sup>Baehr's responsibilism is what he calls "weak conservative VE," and Battaly (2008, 643) calls "virtue-expansionism." The theory is *conservative* in that it has implications for traditional problems in epistemology, such as the nature of knowledge and the normativity of evidence. It is *weak* in that Baehr does not think that it can provide all the answers to traditional problems (e.g., he does not think that there is a plausible analysis of knowledge using responsibilist virtue theoretic concepts). Baehr rejects "strong conservative" views of virtue epistemology. These are views like Zagzebski's, which claim that appeal to ICVs can provide answers to traditional epistemological problems. For instance, Zagzebski provides an analysis of knowledge in terms of character trait virtues (1996). Baehr provides a strong argument against such views in (Baehr 2011).

the way virtues such as "open-mindedness and intellectual courage impact 'high-level knowledge.' "Similarly, Roberts and Wood suggest that faculties can explain only the warrant of "beliefs on the lower end of the knowledge spectrum..." (2007, 109). "High-level" knowledge is supposed to be the kind of knowledge that is distinctively human and more difficult to obtain. This would be, for instance, knowledge gained through science, literature, and deep reflection.

Baehr (2011) offers an instructive version of this kind of criticism. He argues that reliabilists need to alter their theories in order to account for the distinctive way that character virtues can contribute to knowledge. His argument for this conclusion essentially involves two steps. First, he argues that the standard definition of a virtue employed by virtue reliabilists fails to rule out character virtues. He attributes to Greco the view that a virtue is defined as a personal trait that "plays a critical or salient role in getting the person to the truth ... it best explains why a person reaches the truth" (Baehr 2011, 52). Baehr then cites a variety of cases in which he thinks various paradigm character virtues play this explanatory role in knowledge creation: a biologist who gains knowledge because of the two ICVs patience and focus; a reporter who learns the truth because of the ICV intellectual courage; and a historian who (appropriately) admits error because of intellectual honesty and humility. In each of these cases, Baehr thinks, the character virtues play the salient, explanatory role, and should count as virtues in Greco's sense.

Roberts and Wood (2007) and Battaly (2008) make similar arguments, suggesting that character virtues are necessary to explain knowledge. Roberts and Wood, for instance, cite the example of Jane Goodall, suggesting that she could not have gotten the knowledge she did without her many character virtues: "... certain traits of character were necessary for the successful pursuit of Goodall's intellectual practices" (2007, 147).

Baehr's second step in the argument against reliabilism is to suggest that the epistemological task of judging the reliability of such character virtues is fundamentally different than judging the reliability of simple or mechanistic cognitive faculties. Character virtues have, for instance, very different conditions or environments in which they are properly employed. Faculties are only reliable in certain "friendly" environments (e.g., human vision is only reliable under certain lighting conditions). Character virtues, Baehr suggests, are most often employed in just those environments hostile to the reliability of faculties: when the situation is friendly

and simple perception is reliable, a subject does not need to be intellectually determined or courageous. One's intellectual courage will be manifested in difficult situations. Character virtues, then, will be less reliable (obtain the truth less frequently), even when they are appropriately used to obtain knowledge. For this reason among others, Baehr suggests, the relevant criteria for evaluating the reliability of character virtues are quite different than the criteria for evaluating simple faculties. Thus, Baehr concludes, reliabilists must change their theories in order to account for the ways in which character virtues are reliable.

There are several reasons to take issue with this kind of challenge to virtue reliabilism. For one thing, traditional virtue reliabilist accounts do not explicitly exclude character virtues from those which can be evaluated for reliability. Sosa's treatment of the competences required for reflective knowledge in his later work is explicitly concerned with competences that are not merely innate cognitive faculties (2007, 2010, 2015).

Moreover, Baehr seems to misinterpret Greco's salience requirement when he suggests that it is a condition on what counts as a virtue.<sup>6</sup> Greco's requirement is that the virtue should be the salient explanation for the fact that the belief counts as knowledge. This condition is meant to constrain when a virtuous performance counts as knowledge, and was designed to help block some Gettier cases. Being salient to the explanation is not part of the definition of what a virtue is. Instead, it helps us determine when a particular belief counts as knowledge. <sup>7</sup>

A deeper problem facing this kind of responsibilist criticism involves the traditional way of carving up the terrain of the debate. As I note above, this traditional carving draws a distinction between "character virtues" and mere "cognitive faculties" (see Axtell 1997 and Battaly 2008). This way of understanding the terrain fails to recognize a number of important distinctions between types of competences and virtues. Moreover, I think that the notion of a "faculty virtue" is particularly unhelpful.

I will proceed to outline the distinctions that I think we should be making instead, and show how these distinctions a) defuse the challenges presented by Baehr and the other responsibilists, b) show how the reliabilist project is more fundamental than the responsibilist one, and c) secure the

<sup>&</sup>lt;sup>6</sup>I think there is a similar issue with Roberts and Wood's (2007) discussion of this, and Battaly's (2008).

<sup>&</sup>lt;sup>7</sup>Thanks to Megan Feeney for pointing this out to me, and to Lisa Miracchi for helpful discussion.

distinctively epistemic importance of the responsibilist project.

#### 3 Three Distinctions

I am going to treat the terms "virtue" and "competence" synonymously, because I think these terms both pick out the appropriate target of virtue epistemology. I will use "ICV" to pick out the responsibilists' favored notion of virtue.<sup>8</sup>

I will also assume a simple definition of competence. I will make this assumption primarily for ease of exposition, but I take this to be a plausible starting point for a definition of competence.<sup>9</sup>

**Competence:** A competence is a disposition to succeed reliably enough at some type of performance. Each competence will thus be associated with four things:

- 1. A kind of performance.
- 2. A particular success condition.
- 3. A threshold for the degree of reliability required to be "reliable enough."
- 4. A set of environmental conditions under which reliability is judged.

Specifying these four features is necessary in order to individuate a particular competence, as well as to evaluate it.<sup>10</sup>

Here are the three distinctions I want to draw among different kinds of virtues or competences:

<sup>&</sup>lt;sup>8</sup>Although my discussion proceeds in terms of competences, following Sosa, the distinctions below should be applicable to a variety of reliabilist views, especially to any version of virtue reliabilism (e.g., Greco 2010) or classic process reliabilism (e.g., Goldman 1979, 1998).

<sup>&</sup>lt;sup>9</sup>Cf. Sosa (2007, 2010). This definition leaves out some of the complexities in some reliabilist accounts, including those meant to help deal with Gettier problems, and with defeaters. This is done for both ease of presentation and to make the account more ecumenical. I think that the distinctions, and the account I give below of the collective auxiliary competences that are necessary for responsibilist character virtues, are consistent with a variety of views, both reliabilist and otherwise.

<sup>&</sup>lt;sup>10</sup>Note that I am not claiming that such a specification is sufficient to individuate or evaluate competences.

- 1. Constitutive vs. auxiliary competences
- 2. Discovery vs. justificatory competences
- 3. Collective (or aggregate) vs. singular (or narrow) competences.

These distinctions are meant to replace the faculty/character distinction. They offer a better way to understand the differences between the reliabilist and responsibilist projects. I will consider each in turn.

### 3.1 Constitutive/Auxiliary Distinction

Consider a subject, Clara, looking for her cat. She moves from room to room in her house, checking the various places that the cat is likely to be. She finally walks into her office and sees the cat sitting on her computer keyboard. When she sees the cat, she comes to know that the cat is on the computer. There are two kinds of competences that Clara exhibits: first, a competence to find likely cat resting places, and second, a competence to visually recognize cats under standard lighting conditions. Both competences are relevant to an explanation of how Clara came to know the cat was on the computer, but in distinct ways. The first competence is an auxiliary competence; the second is a constitutive competence.

Virtue reliabilists have traditionally been concerned with *constitutive* competences, which I will define thus:

**Constitutive Competence:** A competence is constitutive just when its exercise is part of what constitutes a particular instance of knowledge. The successful manifestation of a constitutive competence results in knowledge.

Constitutive competences are competences of belief formation. The performance is the belief formation, the success condition is true belief, and the threshold of reliability will be some high level (at least > 50%).

Virtue reliabilists appeal to the exercise of competences in giving an analysis of knowledge. This can be viewed as a version of a traditional "JTB" account of knowledge; instead of a justification requirement, however, there is a requirement of what Sosa (2007, 2010) calls "aptness." To be *apt*, a belief must result from an exercise of competence, and there must be an appropriate connection between this exercise and the truth of the belief. Any particular instance of knowledge, then, is constituted by a true

belief, the exercise of the competence that formed the belief, and the fact that an appropriate relationship holds between the truth of the belief and the exercise of competence.<sup>11</sup>

A paradigm example of a constitutive virtue is a fine-grained visual competence, such as Clara's "competence to form beliefs about domestic felines based on visual recognition under daylight conditions." When a subject with normal vision sees a cat sitting on a computer in front of her under appropriate conditions, she forms the belief, and hence acquires the knowledge, that there is a cat on the computer. Her competence to form beliefs about cats via visual recognition is a constitutive competence. The competence figures in the explanation of her having knowledge in a particular way: she knows there is a cat on the computer because her exercise of visual competence partially *constitutes* that knowledge.<sup>12</sup>

Constitutive competences are to be distinguished from *auxiliary* competences, which I will define so:

**Auxiliary Competence:** A competence that assists or enables a constitutive competence, but whose exercise is not a component of an individual instance of knowledge.

Such competences will be associated with different kinds of performances, have distinct kinds of success conditions, and have different thresholds of reliability with respect to those success conditions. Often, they involve putting subjects in a position to exercise their constitutive competences, i.e., they are competences to put a subject in a position to know. The successful manifestation of such competences will not necessarily result in knowledge.

Auxiliary competences come in a number of varieties; they can be typed according to the other distinctions described below, but we can also make more fine-grained distinctions. An important kind for my analysis are competences to *deploy* constitutive competences. (As we will see below, these are a form of auxiliary justificatory competences.) The success condition for such a competence involves effectively deploying constitutive

<sup>&</sup>lt;sup>11</sup>For more on this idea of a competence partially constituting knowledge, see Ch. 1 of (Sosa 2010).

<sup>&</sup>lt;sup>12</sup>Constitutive competences need not be perceptual, or non-inferential in nature, however. A subject might (hopefully!) have competences for evaluating evidence before coming to a conclusion, or competences to perform logical or mathematical deduction.

competences.<sup>13</sup>

Consider again the example above, in which Clara forms the belief that a cat is on her computer. Clara has the constitutive competence to form visually-based beliefs about cats, but she also has a competence to find the right places to look. That is, she has a competence to reliably and appropriately *deploy* her constitutive competence to recognize cats. Her competence at finding likely cat resting places is a competence that puts her in a position to know where the cat is. The auxiliary competence here is a competence to use other competences; the auxiliary competence is manifested by a further exercise of (constitutive) competence. The success condition for this competence is that it deploys this cat-recognizing constitutive competence in the right locations.

In the Clara example, there is some sense in which the competence to find cat resting places is part of the explanation for how the subject comes to know the cat is on the computer. This competence is part of the explanation in a quite distinct, non-constitutive way, however: *it explains how the subject was in a position to know*.

Competences which deploy constitutive competences are just one kind of auxiliary competence. There are many others. Some are enabling competences like alertness or wakefulness, which ensure that the subject is in the right shape for possessing constitutive competences. Others are hypothesis-generating competences, or competences to ask good questions. There are also auxiliary competences which help to develop new competences over time (which we might recognize in a person, and say she is a "fast learner" or a "quick study"). Another type of auxiliary competence would be one to recognize when there are inimical circumstances or other types of defeaters present, and to stop the use of constitutive competences (these are like the reverse of deployment competences). These examples are meant to be suggestive, not exhaustive.

Whether a competence is auxiliary or constitutive may sometimes depend on the content of the belief formed. That is, a particular virtue or competence may be both constitutive of one piece of knowledge and auxiliary with respect to a different bit of knowledge. In our cat-detecting example, the competence to find cat resting places may be constitutive

<sup>&</sup>lt;sup>13</sup>This means that the subject is competent both in getting into the appropriate position to deploy her constitutive competences, and is sensitive to the fact that she is in the proper position.

of knowledge of likely cat locations, while remaining auxiliary with respect to the knowledge that "the cat is now on the computer." An auxiliary competence is thus auxiliary with respect to some particular belief, by assisting the exercise of some particular constitutive competence. The exercise of the auxiliary competence must be, in some sense, prior to the exercise of the constitutive competence. This notion of priority, however, need not be temporal. There will be cases where two competences are exercised synchronically, but the exercise of one of them is a necessary enabling condition for the other. In such a case, the former competence will be auxiliary to the latter.

This distinct way that a competence can be part of the explanation of some piece of knowledge corresponds to one of the senses of "explain" which Baehr appeals to in suggesting that ICVs can serve as the salient explanation of an instance of knowledge (2011). The same can be said for the arguments of Roberts and Wood (2007) and Battaly (2008) that knowledge cannot be gained without certain character virtues. This explains why these claims about subjects believing things "because" of an ICV are felicitous. Nonetheless, this does not mean that we cannot distinguish the ICVs from the kinds of competences that reliabilists are concerned with. The ICVs in the responsibilist's examples are serving an auxiliary role, rather than a constitutive one, in these explanations.

### 3.2 Discovery/Justificatory Distinction

The second main distinction I want to highlight is between justificatory competences and competences relevant for discovery. Consider Amy, who is an experimental physicist. She comes to believe some fact about quantum fields because she came up with a hypothesis, tested it, and then (separately) judged that the test evidence was adequate to justify belief. Rory is a physics journal referee who reads Amy's work. He comes to have the same belief about quantum fields using the same justificatory proce-

<sup>&</sup>lt;sup>14</sup>This distinction is inspired by the old distinction in the history and philosophy of science between the context of discovery and the context of justification. However, I don't mean to take on any commitments from the old debate about this distinction in the HOPOS literature. Specifically, I don't want to take on any of the baggage of the debate dealing with actual history of science vs. our current justification for a theory. Why a theory was historically accepted, for instance, isn't relevant here. The inspiration is the only connection here.

dure, but with an *entirely different method of discovery*. Amy created the hypothesis that her work confirms, and collected the relevant data; Rory merely comes to the idea and the justification from reading. In this example, Amy can be credited as having employed virtues both with respect to discovery and to justification. Rory, however, can only be credited with manifesting competence with respect to the context of justification, i.e., appropriate belief formation.<sup>15</sup>

Amy exhibited a competence in the "context of discovery." Her virtues in this case are relevant to inquiry in a different manner than those that, for instance, deploy constitutive competences. I will call these:

**Discovery Competences:** Auxiliary competences dealing with creativity and inquiry, the success conditions of which involve effective creativity, e.g., novel ideas, new experimental design, or new data.

Competences to creatively come up with new ideas and hypotheses, as well as competences to design experiments and collect data, are discovery-relevant competences. They are employed in the pursuit of knowledge, although they are not constitutive of it, nor do they deploy constitutive competences. The threshold of reliability associated with such competences may be much lower than justificatory competences. For example, the degree of reliability necessary for a disposition to successfully create new hypotheses to count as a competence may be very much lower than 50%.

Such auxiliary discovery competences will account for the way responsibilists such as Baehr, Battaly, and Roberts and Wood say that agents obtain certain knowledge "because" of character virtues. Creatively coming

<sup>&</sup>lt;sup>15</sup>Compare this example with Roberts and Wood's appeal to Jane Goodall's example. They say that certain traits of character were necessary for her knowledge (2007, 109). This seems correct, but I want to suggest that the way the traits in question, like perseverance and courage, were necessary was different than the way her evidence-evaluation abilities were necessary. Her character virtues were needed to put her in a position to know. They involved auxiliary, discovery competences that enabled the formation of her knowledge.

<sup>&</sup>lt;sup>16</sup>It may also be true that some of these competences can be called "constitutive," in that they may be constitutive of some successful creative process, such as in Levi's (1980) notion of abduction. Thus, there is a relevant auxiliary/constitutive distinction with respect to the context of discovery. However, this distinction won't concern us here, as it is not appropriately relevant to knowledge and belief formation. With respect to the reliabilist's concerns, all discovery competences will be auxiliary. The constitutive competences that are relevant are those constitutive of knowledge.

up with new hypotheses helps explain how the subject is in a position to know. That these are a separate kind of competence is evidenced by the fact that it is easy to imagine a subject with excellent constitutive competences for evaluating evidence and arguments for a position, but who is not creative in coming up with new hypotheses which are candidates for becoming beliefs and knowledge.

Justificatory competences, conversely, are those which take place in the "context of justification," i.e., when a subject is determining which hypothesis to believe, after all her evidence has been collected and all her hypotheses generated. In the example above, both Amy and Rory exercised justificatory competences. Such competences are directly related to successful belief formation, i.e., knowledge. This notion of "directly related" is most clearly understood in contrast to the indirect way in which discovery competences assist knowledge: via discovery of new information, the creation of new hypotheses and theories, or the imagining of new ideas.

**Justificatory Competences:** Competences operative when the subject is forming a belief. Such competences are those that constitute knowledge, deploy constitutive competences, or otherwise directly enable knowledge.

The best way to make the distinction clear is to point to additional examples of each kind of competence.

The constitutive competences are those whose manifestations are beliefs with a sufficient degree of justification to count as knowledge. *They are thus all justificatory competences*. The virtue reliabilist project can therefore be described as elucidating the appropriate norms for constitutive justificatory competences. Thus, *pace* Zagzebski, Baehr, Battaly, and the other responsibilists, reliabilists are concerned not with cognitive faculties *per se*, but with constitutive virtues. On my account, we should therefore replace a focus on so called "faculty virtues" with consideration of constitutive justificatory virtues. I will return to this point below.

 $<sup>^{17}</sup>$ Knowledge requires that a belief be true and justified or warranted; hence the title "justificatory."

<sup>&</sup>lt;sup>18</sup>Notice, however, that this category of constitutive, justificatory competences is not exhausted by the so-called "faculty virtues" that responsibilists like Zagzebski (1996) and Baehr (2011) point to as the supposed focus of reliabilists. I give an example below involving the visual competences of a botanist.

In sum, all of the constitutive competences are justificatory, but not all justificatory competences are constitutive. Constitutive competences constitute knowledge by way of contributing to the justification or warrant of a belief in a particular way. In what follows, I will often refer to these as simply "constitutive competences," since all constitutive competences relevant to knowledge are justificatory.

Some auxiliary competences are also justificatory: they are exercised, as in Clara's cat example above, in direct support of constitutive competences. Competences that enable knowledge formation, or put the subject in a position to know, will count as justificatory. Auxiliary competences which deploy constitutive competences are one such variety: they are manifested in situations where the subject is trying to reliably form true beliefs and thus gain knowledge. There are also other kinds of auxiliary justificatory competences. For instance, a competence to be alert or awake may be necessary for the deployment of constitutive competences, but this alertness competence is not itself a deployment competence. A competence for alertness is merely an enabling condition for the operation of a constitutive competence. Still, a wakefulness competence is an auxiliary competence relevant to justification.<sup>19</sup>

The concept of a justificatory competence is not meant to account for every meaning of "justification" that is extant in the philosophical literature. There are, however, at least three types of justification that are well accounted for in terms of justificatory competences. First, some subject might be highly justified in the sense that she has a greater variety of ways to come to know something, and so is less likely to miss it. This sense of justification is accounted for by appealing to the number of justificatory competences (auxiliary and constitutive) available to help her form the belief. Another sense of justification is the strength of the justification a subject has. This corresponds to the degree of reliability that the subject's constitutive competence has, i.e., in just how competent her

<sup>&</sup>lt;sup>19</sup>Consider again our example of Clara attempting to form beliefs about her cat's location. She has a constitutive competence to form visually-based beliefs about cats. She also has an auxiliary deployment competence, which reliably deploys the constitutive competence in appropriate potential locations. Furthermore, she also has a competence for remaining alert, so that both of her other competences are enabled to properly function. Thus, we can describe her as exercising two justificatory auxiliary competences in the service of her constitutive competence.

<sup>&</sup>lt;sup>20</sup>Let alone in vernacular English.

belief-forming performance is.<sup>21</sup> Finally, the subject might have a justificatory competence to recognize defeaters, and to avoid utilizing a constitutive competence when that competence is not in the proper environmental conditions to be reliable. This would make the subject more justified in the sense akin to safety: the subject could not easily have been wrong. Obviously, more would need to be said to support the claim that justificatory competences fully explain these intuitive notions of justification; however, I think that what has been said so far is suggestive, and is sufficient to make reasonable my choice of terminology.<sup>22</sup>

### 3.3 Collective/Singular Distinction

Finally, I will draw a distinction between narrow or singular competences, and competences which are composed of sets or collections of other competences. The following case will help to motivate this distinction. Mickey is a detective, father, and chess enthusiast. He is a perseverant person across a wide range of contexts and circumstances. He keeps trying, even after multiple failures, in a wide variety of intellectual pursuits. He never gives up at trying to figure out how he could have won in a chess match, even after the game is over. He keeps trying to solve crimes no matter how many times he fails to catch the criminals in question, and he spends long hours helping his children with their homework. Being good at each of these disparate activities requires a different skill set (different competences). However, there is something similar in Mickey's epistemically laudable behavior across these circumstances. I want to suggest that Mickey has a collective competence: a set of competences that operate in quite different ways in different circumstances, but with a family resemblance.

<sup>&</sup>lt;sup>21</sup>For these reasons, I have chosen the label "justificatory" for these competences. Note that both of these senses of "justification" refer to kinds of doxastic justification; neither corresponds to propositional justification.

<sup>&</sup>lt;sup>22</sup> It is also worth noting that there might be another sense of being "justified" that corresponds to having excellent discovery-relevant competences. An investigator who is excellent at coming up with hypotheses might be more justified in coming to believe one such hypothesis than another investigator who is less likely to think of all the relevant hypotheses. The first investigator is more justified because she is less likely to miss things. This does not present a problem for my distinctions, though; as I said, justificatory competences are not meant to explain all the senses of "justification" in philosophy or ordinary language.

Here is how I would like to characterize the two kinds of competences to be distinguished in this section:

**Singular Competences:** A competence with a single one of each of the four features that are necessary for individuating competences: a single kind of performance, a single set of success conditions, a single threshold of reliability, and a single set of proper environmental conditions.

**Collective Competences:** A "competence" that is actually a set that is comprised of other competences. It is a family of related competences, each of which has its own four relevant features. A subject's possession of a collective competence will require her possession of large enough subset of these competences.<sup>23</sup>

Constitutive competences are narrow, involving a singular competence to reliably form true beliefs with respect to some subject matter.<sup>24</sup> Auxiliary competences, whether justificatory or discovery-relevant, may be either singular or collective (or, to restate it roughly, narrowly or broadly employed). A singular auxiliary competence is exemplified by the one in the cat example, a competence to *deploy* a small set of constitutive competences.<sup>25</sup>

<sup>&</sup>lt;sup>23</sup> One might begin having worries about the generality problem (cf. Goldman (1979), Feldman (1985), and Conee and Feldman (1998)) here. As I suggest below, I think that my way of distinguishing competences may well help with the generality problem. However, the problem is one that arises for any view of knowledge that requires well-foundedness or doxastic justification (Comesaña 2006). I think there are solutions to the problem, but arguing for them is beyond the scope of this paper.

<sup>&</sup>lt;sup>24</sup> There are, I take it, deep metaphysical waters here with regard to the individuation of dispositions. Furthermore, it is almost certain that any singular, constitutive competence will be describable (even reducible) in terms of the dispositions of sub-personal cognitive mechanisms. Examples of such attempted descriptions abound in vision science, for example. What is important here, however, is that the dispositions that are relevant to epistemological evaluation are singular. It might be that any visual competence can be further reduced to talk of sub-personal cognitive mechanisms. In that sense, it may be that there are a wide variety of such mechanisms, the possession of which are necessary for a subject to possess the visual competence. However, the best description for the purposes of epistemology, the person-level description, involves the subject's singular competence to successfully form beliefs (of a certain type, under certain conditions, etc.). Thus, the sub-personal does not concern us here, and I will set this point aside.

<sup>&</sup>lt;sup>25</sup>Such a competence is still singular, even while deploying a set of competences, be-

Collective competences are sets of widely applicable auxiliary competences that are related.<sup>26</sup> The downstream constitutive competences are not members of these sets, but will be assisted (deployed, enabled) directly or indirectly by the auxiliary competences which are members of the set.<sup>27</sup> I think that the kind of broad, global character trait competences appealed to by responsibilists and virtue ethicists will involve, and even require, that the agent have families of related competences.<sup>28</sup> This is because of the variety of environmental conditions, success conditions, and types of performances in which the same character virtue is implicated. This explains how these virtues are "widely applicable": the collective competences they involve are exercised in a wide variety of situations. More carefully: a collective competence's member competences are active in a wide variety of cases. So, although competences (virtues) are not often thought to be sets, I want to suggest that the responsibilist character virtues must involve sets of competences, i.e., collective competences. This helps to explain how character virtues are "global" character traits: they require the subject's possession of a set of competences, each of which may be exercised in different circumstances, so that the set or family is implicated in many quite different kinds of activities, situations, or environments. Thus, possession of a character virtue requires possession of one or more collective auxiliary competences.<sup>29</sup>

Baehr's account of open-mindedness, Roberts and Wood's account of courage, and King's account of perseverance are all open to this kind of explanation. Each one of these accounts is compatible with, and well sup-

cause it has just one of each of the four features: one kind of performance, one success condition, one reliability threshold, and one environmental standard.

<sup>&</sup>lt;sup>26</sup>Or at least often grouped together in common vernacular, or when investigating character virtues.

<sup>&</sup>lt;sup>27</sup> Since collective competences are sets, this has the result that, in some sense, the collective competence is not itself causally efficacious. Instead, the member competences are the ones which will feature in causal explanations of the subject's behavior.

<sup>&</sup>lt;sup>28</sup>I think that Christine Swanton's (2001, 2003) virtue ethical view is a good example of a virtue ethical view that makes this kind of thinking explicit.

<sup>&</sup>lt;sup>29</sup>I suspect that we might be able to reduce character virtue talk entirely, in favor of collective auxiliary competences. That is, all there is to having an intellectual character virtue is having a certain collective competence. However, arguing for this further, more radical conclusion is beyond the scope of this paper. At the moment, I am simply arguing that character virtues involve collective competences. The benefit of this move will become clear below.

plemented by, this notion of collective competences. Consider Baehr's notion of open-mindedness. Open-mindedness is supposed to be characterized by a willingness to transcend some cognitive standpoint (Baehr 2011, 152). Baehr gives three quite different paradigm examples of open-minded behavior in order to draw out what relates them: 1) willingness to transcend one's own beliefs, 2) ability to think openly or "outside the box," and 3) fairness in adjudicating between two opposing positions. Each of these examples illustrates what appear to be quite different competences, for the following reasons. First, these appear to be very different kinds of performances, with different success conditions, degree of reliability, and relevant environmental conditions. Second, it is very plausible that any subject could have a subset of the competences without having the others. Thus, open-mindedness requires that the subject possess a collective competence, consisting in a set of at least three kinds of auxiliary competence that are interestingly related.<sup>30</sup>

The classification of competences or virtues as being collective or singular is meant to capture something importantly distinct between the reliabilist and responsibilist projects as they have been traditionally understood. Responsibilists, much like virtue ethicists, are interested in broad, global character traits, rather than more localized or specific excellences. Traditionally, responsibilists have expressed this focus by drawing a distinction between character virtues and faculty virtues, but that distinction remains problematic for a number of reasons. When combined with the other two distinctions drawn above, the collective/singular distinction can shed more light on where the two projects differ, and why they should be complementary rather than in conflict.

The notion of a collective competence is not meant to replace the notion of a character virtue; instead, I am merely arguing that recognizing collective competences is necessary to understand ICVs, and to account for their distinctively epistemic value and purpose.<sup>31</sup> Nor am I arguing

<sup>&</sup>lt;sup>30</sup>This relation could be one of mere family resemblance, or it could be something more robust, such as a genus-species relationship (i.e., "open-mindedness" could be a name for a genus consisting in several species of more narrow auxiliary competences). Either of these options is compatible with the distinction I am drawing: collective competences may come in several varieties. Thanks to Georgi Gardiner for pointing out the need to address this point.

<sup>&</sup>lt;sup>31</sup>Although, as I note above, I hope to make the argument that we can reduce the notion of a character virtue to collective auxiliary competences; but that argument is beyond the

that we should eliminate the distinction between reliabilism and responsibilism. I only want to replace the faculty/character distinction as the primary way of accounting for the differences in the reliabilist and responsibilist projects.

### 3.4 In Support of the Distinctions

Presumably, Baehr and other responsibilists might demur about the importance of these distinctions. It is thus worth pausing to give additional consideration to the justifications for making them. First, I think the distinctions have broad appeal based simply on intuitive plausibility. It is highly intuitive that we can distinguish, on the one hand, those competences which serve as part of what provides warrant to true beliefs from, on the other hand, those other competences that simply put us in a position to know (or otherwise enable knowing). After all, everyone recognizes the distinction between knowing and being in a position to know.

The best argument for the distinctions, however, is one of explanatory power. An epistemological theory that posits the distinction between constitutive and auxiliary competences is able to make better predictions of similarity and difference between cases, and *mutatis mutandis* for the other distinctions. One example of this is in the case I cited above dealing with the experimental physicist and her journal referee. Drawing the discovery/justificatory distinction allows us to better explain the similarities and differences between the epistemic conduct of the physicist and her referee. Another example of this can be illustrated by the following three cases.

Careful Engineer: Rose is an open-minded and highly competent engineer considering designs for a bridge over a particular river. She carefully considers all the designs, keeping her mind open until she has considered each available design. She chooses design 12, competently coming to the belief that it has all of the right characteristics to make a safe bridge over this river.

**Quick Engineer:** Martha is another highly competent engineer working in the same office as Rose, tasked with considering the same designs.

scope of this paper.

She walks into the office late, quickly looks at design 12, and competently forms the belief that it has all of the right characteristics to make it a safe bridge over this river.

Careful Intern: Donna is an intern at Rose and Martha's office, considering the same bridge designs for the river. She carefully considers all the designs, keeping her mind open until she has considered each available design. She chooses design 13, coming to the belief that it has all of the right characteristics to make a safe bridge over this river. However, Donna is inexperienced, and is mistaken about the safety of design 13.

A theory that recognizes the three distinctions is better able to account for the differences between these three cases. In the first two cases, Rose and Martha both come to the same piece of knowledge, that design 12 is a safe design. They both come to this knowledge by use of a constitutive competence to form true beliefs about bridge design. Rose also manifests an auxiliary competence to decide when she has considered enough designs, and to carefully weigh each design. This auxiliary competence is part of the set that partially comprises the collective competence of openmindedness. Martha lacks (or at least fails to manifest) this auxiliary competence. Conversely, Donna has the auxiliary competence, but lacks the necessary constitutive competence to form the appropriate true belief. 32

A theory which did not recognize the distinctions would fail to be as predictive and explanatory. For instance, a theory which focused on ICVs would provide no explanation for the similarity between the first two cases, while at the same time also providing no explanation for the difference between the second and third case. Meanwhile, a theory which focused only on constitutive competences would not explain the similarity between the first and third case.

Thus, we are well-justified in making these distinctions based both on intuitive plausibility and, more importantly, on explanatory payoff.

One might worry at this point that the definitions I have offered for the distinctions are inadequate either as necessary and sufficient conditions, or in allowing us to grasp the distinctions. One might even worry

<sup>&</sup>lt;sup>32</sup>If the reader is concerned that it is the falsity of Donna's belief doing the work to distinguish the *Careful Intern* case, we could substitute a version of the case where Donna also chooses design 12, but does so only by luck; she is actually quite unreliable at choosing safe bridge designs. Thanks to Logan Douglass for helpful comments on this point.

that, in particular, the constitutive/auxiliary distinction relies tacitly on a prior grasp of the faculty/character distinction that I am attempting to replace.<sup>33</sup> I will address these concerns in turn.

First, I think that the search for non-circular necessary and sufficient conditions as a conceptual analysis is not really the appropriate methodology here, for several reasons. One reason is that I suspect that the traditional view of concepts as definitions is incorrect, and another reason is that we ought to be engaged in understanding the world itself, and not just our concepts.<sup>34</sup> However, even for those who are on board with the conceptual analysis project, I do not think it is necessary for my project to give the full analysis of each type of virtue. All that is necessary for my purposes is for us to be able to grasp these distinctions, and successfully apply them. To that end, I have offered definitions as characterizations, while also pointing to particular cases that I think should allow the reader to intuitively grasp the distinctions in question.

The examples provided, along with the characterizing (if not fully adequate) definition of constitutive competences, should be enough for the reader to recognize the different kinds of virtues I am suggesting exist. We should be able to recognize the different kinds of relationships it is possible for competences to have to a particular belief by considering cases like those of the cat searcher, or the engineers in this section.

Second, I do not think we must rely on any tacit appeal to the notion of faculties in order to make this distinction. For one thing, I suspect that someone unfamiliar with the traditional distinction will be able to grasp my new distinctions by appeal to the examples given. I don't think familiarity with the notion of a cognitive faculty is necessary for understanding that there are different kinds of competences in play in the engineer examples above.

More importantly, however, none of the competences displayed by the three engineers above are plausibly characterized as cognitive faculties. The engineers' competences to pick safe bridges are acquired competences having to do with recognizing and understanding a number of features of bridges. These features don't seem to be ones our cognitive powers were evolutionarily "designed" to be sensitive to. Yet it is clear there are significant differences in the three cases. There is one kind of relationship

<sup>&</sup>lt;sup>33</sup>Thanks to an anonymous referee at this journal for pressing these points.

<sup>&</sup>lt;sup>34</sup>In support of these claims, see Camp (2014) and Sosa (2015) respectively.

between the competence Rose and Martha share to the belief about the bridge. There is a different kind of relationship between this belief and the competence Rose has and Martha lacks. And it is clear that there is an explanatory benefit to positing that Rose and Martha have different competences, and different kinds of competences, without any of these being mere faculties.

# 4 Diagnosing the Responsibilist Critique

The foregoing distinctions divide up the terrain in the following manner. Virtue reliabilists have been concerned with the appropriate norms for knowledge and belief formation, and have appealed to the concept of a competence to give an account of those norms. For these purposes, reliabilists have been concerned with constitutive competences, all of which are singular and justificatory. Responsibilists have been concerned with the personal worth of the subject, what the subject is personally responsible for, and the value that the subject's epistemic character traits confer upon her. Accordingly, they have been concerned with character virtues which involve collective competences that are exercised in a wide range of performances and contexts. These collective competences have members which are auxiliary competences of both the justificatory and discoveryrelevant kinds. Many of the analyses of particular character virtues that have been provided by responsibilists in recent works make appeal to abilities and skills that the subject must have (cf. Baehr (2011), Roberts and Wood (2007), Battaly (2008), and King (2014)). I want to suggest that these appeals are well explained by the idea that character virtues involve collective auxiliary competences. As I will illustrate below, responsibilist analyses are thus improved by recognition of the distinctions.

The global character virtues analyzed in recent responsibilist works, such as open-mindedness (Baehr 2011), intellectual courage (Roberts and Wood 2007), and perseverance (King 2014), involve collective auxiliary competences. Nonetheless, some competences meet some of the responsibilist criteria for being an ICV, but will count as constitutive competences. Specifically, there are constitutive competences that are acquired, skillful, and that one can be held responsible for having. I take it that the examples involving the engineers in section 3.4 are such constitutive competences. Thus, the distinction between character and faculty virtues fails to track

the differences in the focus of the two projects of responsibilism and reliabilism. As I will demonstrate below, this way of carving the terrain blocks common responsibilist complaints against reliabilism.

With the distinctions in hand, an easy response to common responsibilist criticisms is available for the virtue reliabilist. Virtue reliabilism is concerned with constitutive and justificatory virtues.<sup>35</sup> Although the virtues that the responsibilist points to, e.g., open-mindedness and intellectual courage, do in some sense "explain" how a subject arrives at knowledge, they are not constitutive competences.

Jane Goodall would not have been able to come to her knowledge about chimps without her character virtues. But the way these virtues enable her knowledge is not by constitution. Her student, with many fewer character virtues, might have the same evidence-evaluating competence and thus come to know by appraisal of evidence painstakingly gathered by Goodall herself (recall the discussion in section 3.2). Character virtues enable knowledge because they involve auxiliary, collective, and sometimes discovery-relevant competences. Character virtues are not competences to form beliefs reliably, but rather involve competences to deploy other beliefforming competences. Thus, the reliabilist need not be concerned with fitting such virtues into her account of knowledge-level justification.

Consider Baehr's objection from above (in section 2) as a paradigm example of a responsibilist critique of virtue reliabilism. It is certainly correct that some ICVs may qualify as the same kind as the reliabilist appeals to, but this is because they are in fact constitutive and justificatory. This can be illustrated by consideration of a constitutive competence which meets the criteria that Zagzebski (1996) and Baehr (2011) point to as distinguishing ICVs from faculties. These criteria include that the virtue be something that is acquired and that is creditable to the subject, and which contributes to her personal worth. Such criteria are clearly met by, for instance, a botanist's competence to (non-inferentially) visually recognize particular species of plants. This is a constitutive competence, but one that is both acquired and creditable to the subject. This, however, is not the kind of "character virtue" that would require a different account of reliability. The botanist's competence is a singular competence to reliably form beliefs based on visual evidence. It has a single set of success conditions (believing truly about plant species), and requires a high degree

<sup>&</sup>lt;sup>35</sup>I think they will be narrow or singular (in order to combat the generality problem).

of reliability under a certain set of environmental conditions. It is not a global trait of character that we could include in a short list of virtues necessary for the good life. This makes it much the same as other constitutive competences appealed to by the reliabilist. An account of the norms for belief-forming dispositions to count as constitutive competences requires no revision in the face of this kind of example.

In sum, some constitutive competences are acquired, skillful, and are such that we can hold subjects responsible for having them, but they are not the kinds of global character traits paradigmatically focused on by responsibilists, nor are they mere cognitive faculties. I do think they are well explained by traditional virtue reliabilist accounts, such as found in Sosa and Greco's work, so there is no need for significant revision to account for the way character virtues are deployed in inimical circumstances (see section 2); such virtues are auxiliary competences, which put one in a position to know, but are not the focus of reliabilism.

These responsibilist critiques of reliabilism fall short, in large part, because of a failure to recognize the distinctions above, and a reliance instead on the distinction between character and faculty virtues. This distinction fails to carve up the terrain appropriately, as it mis-characterizes the reliabilist project and its connection to responsibilism. Virtue reliabilists are not chiefly concerned with cognitive faculties as such (though the paradigm examples of faculties, like simple vision or inferential abilities, are explained well by reliabilism). Instead, reliabilism is focused on constitutive virtues, including those which are acquired and creditable to a subject's personal worth. Moreover, alleged examples of character virtues which explain a subject's knowledge are not problematic for reliabilism because they are not constitutive competences; the way they help explain knowledge acquisition is auxiliary. Virtue reliabilists do not claim that ICVs are never reliable belief-forming competences; it is just that the responsibilists' problem examples are not constitutive competences.

Responsibilists are correct that character virtues need some other account in order to explain their relevance to reliability and knowledge. I don't think the way to do this is by appealing to different kinds of knowledge (the way that, e.g., Baehr, Battaly, and Axtell do). Instead, character virtues have a different relationship with knowledge than constitutive competences do. I argue that the way to understand this relationship is by recognizing that character virtues must at least *involve* the possession of collective auxiliary competences. In order to distinguish such compe-

tences from mere collections of dispositions, we need an account of which competences comprise the set, and of the four features associated with these member competences. However, that there is this additional need for such an account does not impugn virtue reliabilism. In fact, as I will argue below, I think that such considerations will highlight the fundamentality of the reliabilist project for epistemology.

It is also worth noting an important point of disagreement between the position I am advocating and some traditional tenets of responsibilism. In giving a more Aristotelian theory, the responsibilists are seeking a close connection between ethics and epistemology. This is illustrated by their concern with the way in which the virtues contribute to the "personal worth" of the subject, and in the way Zagzebski insists that epistemic virtues be acquired over time in a way creditable to the subject's agency. That is, responsibilists want to hold the subject responsible for her character traits, and judge the overall worth of the subject based on these traits. And this leads to a focus on a certain motivational component that they think is required: a subject should be motivated by a desire or love for truth or knowledge.<sup>36</sup>

This notion of personal worth and responsibility is clearly modeled on the notion of moral worth. Indeed, I think that judgments about personal worth as appealed to by the responsibilists just are tracking the moral worth of agents. Trying to assimilate epistemic values and normativity to ethical values and normativity is a mistake, however. The two types of value/normativity can come apart. Following moral rules might lead one to acquiring less epistemic value. Conversely, one can be quite immoral but highly epistemically virtuous. I take these claims to be highly plausible, and quite defensible, although a full defense of them is beyond the scope of this paper. I will offer only a brief defense by highlighting the intuitive plausibility of this idea with some cases.

Imagine an excellent, open-minded scientist who is only in it for the money. She treats others poorly, and seeks new scientific discoveries only for personal gain. But she is open-minded and highly competent, as it turns out this is the best way for her to acquire success and the material goods that come with it.<sup>37</sup> Intuitively, the greedy scientist's open-

<sup>&</sup>lt;sup>36</sup>Each of the responsibilists that we have discussed includes such a requirement. See the overviews of responsibilism in Axtell (1997) and Battaly (2008).

<sup>&</sup>lt;sup>37</sup>See Sosa (2015) for a similar example. Thanks to Ernest Sosa for discussion on this

mindedness does not contribute to her personal worth. Why not? Because she has it for the wrong reasons. But these are the wrong reasons, morally speaking. Epistemically speaking, she is doing as well for science as she possibly could be, and she is contributing greatly to human knowledge. Her failure here is moral.

Or, conversely, consider a person who has some strong but misleading evidence for an immoral discriminatory belief. If she ignores this evidence, she might fail to be open-minded in the epistemic sense, and thus be epistemically less than ideal, but she is behaving in a morally good way.

None of this is to say that being motivated by a desire for the truth cannot be epistemically valuable. Such a motivation might well be a component or basis for a variety of competences that make one more likely to get at the truth. Indeed, Roberts and Wood (2007) treat love of knowledge as a distinct virtue, and this coheres well with my account. My claim is simply that such motivation, and the kind of increase in personal worth that goes with it, is not necessary for distinctively epistemic value.

The responsibilists' focus on personal worth leads them to conflate the moral and epistemic value of intellectual virtues. Being open-minded through intentional effort, for instance, makes one a better person. This seems correct, as stated; however, this notion of personal worth is ambiguous. There is a sense in which one is a better person for being openminded, morally speaking, and a sense in which one is a better epistemic agent for being open-minded. It is worth keeping these two notions distinct in our thinking. For one thing, it seems plausible that one's being open-minded is intrinsically valuable from a moral perspective. Epistemically speaking, however, being open-minded is derivatively valuable: it is valuable because it leads a person to the truth and to knowledge.<sup>38</sup> It is this latter, epistemic sense, in which I will argue that the reliabilist project, and its target of constitutive competences, are more fundamental than responsibilism and its target collective auxiliary competences. Thus, I think we should be careful to distinguish between epistemic normativity and the ethics of belief. In what follows, I will focus on the epistemic domain, and my argument will be for the epistemic fundamentality of reliabilism. I

point.

<sup>&</sup>lt;sup>38</sup>Any account that appeals to derivative value in axiology requires some solution to the "swamping problem" (Zagzebski 1996, 2003). At least, my view here certainly does. Providing one is beyond the scope of this paper, though I am confident that some account will end up being adequate. Cf. Pritchard and Turri (2014).

will thus focus on the epistemic aspects of virtues like intellectual courage, leaving aside their moral value.

As I note above, the justification for the distinctions, and for the understanding of the reliabilist and responsibilist projects they allow us, is largely by way of inference to the best explanation. So, the real argument for this way of understanding the terrain is in how well it allows us to account for different kinds of examples, and for our intuitive judgments about such cases. Although I have adverted to a few cases in justifying the distinction of epistemic value from personal worth, it is largely the explanatory payoff that does the real work of justifying this way of seeing the terrain. In what follows, I will continue to elaborate on how these distinctions provide us explanatory benefits.

# 5 The Fundamentality of Reliabilism

So far, I have elucidated the three distinctions that I think are helpful for a better understanding of virtue epistemology, and then shown how the distinctions help defuse certain objections to reliabilism. In this section, I will argue that these distinctions allow us to see the way the two projects of reliabilism and responsibilism complement one another.

The reliabilist project is in an important sense more *epistemically* fundamental than the responsibilist project. This can be elucidated clearly in terms of the distinctions presented above. Specifically, the virtue reliabilist is concerned with giving an account of those competences which are justificatory and constitutive of knowledge. The responsibilist project is to provide an account of intellectual character virtues. These virtues have epistemic import by way of a different relationship to knowledge: they involve possession of widely or globally active collective auxiliary competences.<sup>39</sup> I will argue that this project is importantly dependent on the reliabilist project.

I want to be clear from the beginning, however, that my argument is not meant to establish that the responsibilist project cannot be pursued at all without first settling all questions about constitutive competences. Rather, I want to suggest that any theory we offer about the nature of the collective, auxiliary, and/or discovery virtues must be constrained by our

<sup>&</sup>lt;sup>39</sup> For explanation of this notion of "widely or globally active" see section 3.4.

theory of constitutive competences (or by whatever ends up being the best theory of doxastic justification). I think it is likely that there is a great deal of fruitful work that can currently be undertaken on collective auxiliary competences. Recent analyses of virtues offered by Baehr (2011), Roberts and Wood (2007), and King (2014) are examples of this kind. This work depends, however, on what I take to be a relatively substantial amount of agreement about the nature and properties of doxastic justification. <sup>40</sup>

The virtue reliabilist project is epistemically more fundamental than the responsibilist project in two ways: normatively and methodologically. First, the subject matter of responsibilism, the character virtues, are *normatively* dependent on the subject matter of reliabilism, the constitutive competences. Second, responsibilism is *methodologically* dependent on reliabilism: any virtue responsibilist account will depend fundamentally on an account of (or at the very least, a sensitivity to) constitutive competences. I will address each of these dependence relations in turn.

Constitutive justificatory competences are normatively fundamental because other kinds of epistemic competences are dependent upon them for their epistemic usefulness, efficacy, and standard of evaluation. In slogan form: Without constitutive competences, auxiliary competences would serve no epistemic purpose. Auxiliary competences gain their distinctively expistemic value in virtue of their relation to constitutive competences. On this picture, character virtues receive their distinctively epistemic value because they involve collective auxiliary competences, which facilitate constitutive competences.

This can be illustrated by appeal to deployment competences. Deployment competences, as I have described them, clearly need competences to deploy. In order to determine whether some disposition is a competence, we need to know its success conditions. The success conditions of a deployment competence will depend, in part, on the nature of the competences they deploy. A disposition to deploy another disposition would not count as an epistemic deployment competence if the deployed disposition were not itself a competence.<sup>41</sup> We cannot give an appropriate ac-

<sup>&</sup>lt;sup>40</sup>I think there is agreement even between reliabilists and evidentialists (who have, after all, the same *explanandum* in mind). For ease of presentation, however, I will assume some form of virtue reliabilism is correct with respect to knowledge and doxastic justification. I think the argument will hold, *mutatis mutandis*, even if the appropriate account of justification turns out to be evidentialist.

<sup>&</sup>lt;sup>41</sup>Or at least the disposition deployed must be a competence most of the time the de-

count of the four features of the deployment competence without appeal to the features of the deployed competences. In particular, the success conditions of the upstream deployment competence will involve appeal to the success conditions and environmental conditions of the downstream deployed competences. The nature of the downstream competences will help determine the success and environmental conditions of the upstream deployment competence.

By similar reasoning, discovery competences would serve no epistemic purpose without justificatory competences. Beliefs are closely linked with behavior: if someone believes a proposition, they will behave as if that proposition is true (ceteris paribus). Mere hypotheses do not have the same effect on behavior. If a subject were excellently creative in coming up with hypotheses and gathering evidence, but ignored the gathered evidence and formed no beliefs about these ideas, the creative excellence would serve no (epistemic) purpose. Forming a true belief is part of the success conditions of constitutive competences; this fact constrains what auxiliary discovery competences can look like.

Thus, the standards by which we evaluate auxiliary and discovery competences will depend on what the standards are for constitutive competences. This is to say, the relevant degree of reliability and environmental conditions for these auxiliary competences will in part depend on the corresponding features of the downstream constitutive competences.<sup>42</sup> Furthermore, collective competences are just sets of auxiliary competences, and so the fact that a collective set of dispositions is a competence will be grounded in the fact that its member auxiliary dispositions are competences, which in turn depends importantly on the fact that their downstream constitutive dispositions are competences. Thus, the constitutive competences, which are the focus of reliabilism, are fundamentally important to determining the four features of auxiliary, discovery, and collective competences. Furthermore, as I will argue at greater length below, collective auxiliary competences, of both justificatory and discovery types, must be possessed by agents as a component of character virtues. And so constitutive competences are necessary for the epistemic value of charac-

ployment competence is operative.

<sup>&</sup>lt;sup>42</sup>Although I have framed this discussion entirely in terms of one subject's competences, there is no reason why there couldn't be a social dimension to this. It might be that one subject's competence is auxiliary to another subject's constitutive competence. At least, nothing I have said rules this out.

ter virtues. That is, the distinctively epistemic value of character virtues is derived from their involving collective auxiliary competences (because possessing a character virtue requires possessing the collective auxiliary competence that partially constitutes it). And the value of the collective auxiliary competence is in turn derived from those constitutive competences it facilitates.

An auxiliary competence will be judged by different standards than a constitutive competence; it will have a different required degree of reliability and different proper environmental conditions. Constitutive beliefforming competences must be reliable in a familiar sense: they must produce true beliefs some high percentage (at least > 50%) of the time under certain specific, favorable environmental conditions. As Baehr (2011, Ch. 4) is quick to point out, the degree of reliability required for auxiliary competences is different. However, the standards by which an auxiliary competence is evaluated are a function of how it interrelates with, and sometimes deploys, constitutive competences. An auxiliary competence, if it is one which concerns deployment of constitutive competences, will only count as a competence insofar as it successfully deploys the constitutive competences with a certain success rate (where a successful deployment is when the constitutive competence is manifested and the subject comes to know); otherwise it is a mere disposition to engage in a certain narrowly described behavior, if it is anything at all. Similarly, a discoverycentric auxiliary competence will only count as being a competence if it produces new ideas that are fit to believe, or if it provides helpful new evidence for use by justificatory competences.

Intellectual character virtues involve, at least as components, collective auxiliary competences. They are partially composed of more locally applicable auxiliary competences, and possession of auxiliary competences depends on possession of constitutive competences. Thus, the normative question of whether a set of dispositions really is a collective *competence* depends on whether the members of the set are competences. And whether an auxiliary disposition counts as a *competence* will depend on whether it assists some genuine constitutive competence.

To illustrate this point about the normative question of whether a disposition counts as a competence, consider again auxiliary deployment competences. Whether some disposition, A, competently deploys another disposition,  $\beta$ , depends on whether  $\beta$  is reliable or effective enough under the circumstances. Moreover, A must be sensitive to  $\beta$ 's reliability. If

 $\beta$  is not often enough reliable when deployed by A, then the disposition A may not be a competence or virtue at all. Of course, auxiliary competences will sometimes be competences to deploy constitutive competences in difficult circumstances. This might mean that  $\beta$  need not be highly reliable by itself under the relevant circumstances. Instead, it might be that A is a competence to deploy constitutive competences  $\beta$ ,  $\gamma$ ,  $\delta$ , and  $\epsilon$  whenever certain, epistemically inimical circumstances arise. In order for A to count as a competence in this case, it must reliably deploy these competences in such a way that the end result is that at least one of  $\beta$ ,  $\gamma$ ,  $\delta$ , or  $\epsilon$  is ultimately successful in forming a justified belief. This might be accomplished by A deploying each of  $\beta$ ,  $\gamma$ ,  $\delta$ , or  $\epsilon$  in turn.

This kind of understanding would provide a nice addition to our theory of a character virtue like perseverance, as analyzed, e.g., by King (2014). Possessing perseverance involves possession of an auxiliary competence A. Whether A is a competence will depend on the degree of reliability of  $\beta$ ,  $\gamma$ ,  $\delta$ , or  $\epsilon$ , the conditions under which they are in fact reliable, how they interact with one another, and how successfully they are deployed by A.

A subject need not *know* how reliable a constitutive competence is, nor be able to make the judgments mentioned above explicitly, in order to possess an auxiliary competence related to them. However, a subject must be *sensitive* to the reliability of the relevant constitutive competences in order to have an auxiliary competence. Such a sensitivity will be part of what it is to have the auxiliary competence.

Thus, the reliabilist project is normatively fundamental to the responsibilist one. Intellectual character virtues count as epistemically valuable because of their relationship to constitutive competences. This is because character virtues involve possession of collective auxiliary competences, and evaluating such things as competences involves appeal to constitutive competences.

One might object that there is another way of seeing the normative priority here: that auxiliary competences are prior. An agent *uses* her constitutive competences for her own ends, via her auxiliary competences. I think this is probably a good way of describing an agent's actions in many cases. However, I don't think this is the right way to understand the normative relationship between the different kinds of virtue, because of the way that the constitutive and auxiliary competences can come apart. A well-functioning constitutive competence can provide knowledge in the

absence of an auxiliary competence, and knowledge (or the truth it ensures) is plausibly at the root of epistemic value. Conversely, an auxiliary competence in the absence of constitutive competences does not have such a link to something epistemically valuable. Now, auxiliary competences are valuable, I suggest, precisely because they are so important in enabling our constitutive knowledge-producing competences. But they aren't strictly speaking necessary (even in cases like those of the engineers in section 3.4).

Reliabilism is also methodologically fundamental to the responsibilist project. Giving an account of the relevant kind of performances, success conditions, degree of reliability, and proper environmental conditions for collective auxiliary competences depends on having an idea (or at least some assumptions) about the requirements of the downstream constitutive competences. For reasons similar to why possession of auxiliary competences depends on possession of constitutive competences, giving an account of the standards for constitutive competence is a necessary prerequisite for giving a complete account of any auxiliary competences. More usefully, any account that we offer now should be constrained by our current account of constitutive competences. That is, when investigating the four features of any auxiliary competence, the epistemologist (or psychologist) should be sensitive to the features of the downstream constitutive competences relevant to the auxiliary competence in question. Therefore, the virtue reliabilist project of explaining doxastic justification in terms of competence should constrain the theories we offer about auxiliary competences of all kinds, including the sorts of collective auxiliary competences that have most concerned the virtue responsibilists. This is true regardless of whether the auxiliary competences are justificatory deployment competences, such as in the cat example above, or whether they are discovery competences to propose new hypotheses.

The *manner* in which accounts of these different kinds of competence will be constrained, however, may be quite different. For instance, our understanding of constitutive competences means that auxiliary justificatory competences will require a certain kind of success rate or reliability. A discovery competence, however, need not have a high degree of reliability in order to count as a competence, at least not in the sense of needing to produce ideas which come to be beliefs a majority of the time. A hypothesis creation competence might produce false hypotheses 99.9% of the time, yet still be an example of an incredible competence if the successful ideas

are excellent, or if the generated hypotheses are very creative. Note also that collective competences may consist of both justificatory and discovery competences, as in the examples of paradigm character virtues. Thus, any collective competence should be evaluated on the basis of the individual auxiliary competences comprising its membership.

In sum, any account of auxiliary competences is dependent upon, and should be constrained by, an account of constitutive competences. In order to illustrate this, in the following section I will provide an example account of a collective auxiliary competence, highlighting the fundamental importance of the constitutive competences and the reliabilist account of them. Following Baehr (2011) and Roberts and Wood (2007), I have chosen to focus largely on an important exemplar character virtue, intellectual courage. This will highlight how appeal to the distinctions offers significant help to the responsibilist project, while not serving as any sort of competition for, or critique of, these traditional accounts.

Before moving on to the example, however, it is worth taking stock of the projects of this paper. First, I have attempted to provide a set of distinctions that more appropriately divides the terrain of virtue epistemology. I then argued that these distinctions show the flaw in standard responsibilist criticisms of reliabilism. These two goals comprise the first, weaker project of the paper. In this current section, I have argued that there is a certain sense in which the reliabilist project of elucidating (and appealing to) constitutive competences is more fundamental than the responsibilist project. I have suggested a way of understanding the character virtues that concern responsibilists by appeal to the idea of collective auxiliary competences. This project is separable from the foregoing ones, though I think it follows quite nicely from them.

# 6 Intellectual Courage

In support of my claim about the fundamentality of reliabilism, in this section I will apply the distinctions to the paradigmatic character virtue of intellectual courage. In order to increase the persuasive power of the argument, I will use Baehr's account of the virtue as a starting point. I will show that his theory is helpfully clarified by application of the distinctions, and that in fact Baehr's account is significantly improved when we appeal to these distinctions. Then, I will argue that Baehr's project is

appropriately constrained by and ultimately dependent on answers to the virtue reliabilist project. I focus on Baehr's account for ease of exposition, and because I take it to be an excellent recent example of a responsibilist analysis of a character virtue. The distinctions, and the connection to constitutive competences that I argue for here, are also applicable to a variety of other recent responsibilist analyses of virtues, for instance those by Zagzebski (1996), Roberts and Wood (2007) and King (2014).<sup>43</sup>

The character virtue intellectual courage (IC) requires possession of a collective auxiliary competence. That is, being intellectually courageous requires having a collection of auxiliary competences that share some important, characteristic traits or properties.<sup>44</sup> Baehr (2011) defines IC as follows:

(IC) Intellectual courage is the disposition to persist in or with a state or course of action aimed at an epistemically good end despite the fact that doing so involves an apparent threat to one's own well being. (2011, 177).

This definition can be broken down into two essential parts, what Baehr calls the *context* and *substance* of IC (2011, 169). The context aspect of the definition picks out the relevant circumstances when IC can be manifested, i.e., those circumstances when there is a threat to the subject's well-being conditional on pursuing some good. The substance aspect of the definition picks out the kinds of actions a subject can engage in or pursue courageously. Baehr spends a significant amount of time elucidating the context aspect of IC. He arrives at the notion of "apparent threat to well being" after analyzing several alternative formulations. He points out that the subject in question need not have any actual fright affect associated with the danger, nor need there be a high likelihood of the danger manifesting. However, there must be some sense in which the subject recognizes some possibility or threat of harm. I take Baehr's account of this aspect of IC to be quite plausible, aptly representing the kind of fruitful positive work that can be accomplished on the responsibilist project.

<sup>&</sup>lt;sup>43</sup>As discussed in the last section, I think it is important to keep the aspects of courage that are morally valuable distinct from those of epistemic value. As such, I will focus on intellectual courage as an epistemic virtue, and not on cases of intellectual courage where one is (only) morally creditable for pursuing truth in the face of danger.

<sup>&</sup>lt;sup>44</sup>Or, as I mentioned above, perhaps these competences are species of the same genus called IC, but I will focus on the former option.

Baehr's difficulties with the positive account of the "substance" of IC, however, illustrate the usefulness of the distinctions, and the fundamental importance of the reliabilist project. With respect to the substance of IC, Baehr suggests that "at a certain level there is no answer to this question, for the substance of intellectual courage is to a significant extent indeterminate" (2011, 173). The problem for Baehr is that the instances of intellectual courage are many and widely varied, and seem to have little in common. The only common features are the involvement of the pursuit of intellectual value and the context conditions described above. He notes that this differs from many other virtues which have some particular kind of activity necessarily associated with them. Here, Baehr's account will benefit from an application of the distinctions above.

According to the current account, IC involves a collective, auxiliary competence. It requires that the subject possess a collection of dispositions to deploy various other constitutive and auxiliary competences. What members of this collection have in common is that they manifest under the circumstances that we have been calling the proper context of IC. Here is an amended account:

(IC\*) Intellectual courage is a disposition which involves a *set* of auxiliary competences to deploy certain other epistemic competences. The members of the set are similar in that they are competences to weigh apparent threat to one's own well being, and to deploy relevant downstream competences despite significant threat.<sup>45</sup>

Including the term *competence* builds in the fact that the deployed dispositions will be aimed, directly or indirectly, toward some positive epistemic value. According to the virtue reliabilists, the end in question will be truth (or perhaps knowledge). IC is thus understood to involve a set of competences to deploy other competences, and we will see below that this helps to better explain the variety of instances of IC. Some competences that are deployed by members of IC's collective auxiliary competence will be

<sup>&</sup>lt;sup>45</sup>The most straightforward amended definition would be to simply identify IC with a collective auxiliary competence, effectively reducing talk of character virtues to talk of such competences. As I note in footnote 29, I think this is probably the right way to go. However, that would require additional argument in favor of such a reduction, which is a separate project for future research. So I am here only endorsing the weaker claim, that IC involves or necessarily requires the possession of a collective auxiliary competence.

constitutive, while others will be auxiliary, and these may be either justificatory or discovery competences.

Thus, by appeal to the appropriate distinctions, it becomes clear that the substance of IC is not significantly indeterminate. While it may be a complicated matter to categorize each of the competences comprising IC, as well as all of the competences deployed by IC, our distinctions at least give us a map of what this kind of elucidation would look like, and takes some of the mystery out of the nature and structure of intellectual courage.<sup>46</sup>

Furthermore, the distinctions clarify the way in which IC is aimed at epistemic goods or intellectual ends: it facilitates the functioning of constitutive, reliabilist competences to get at the truth. When a member of IC is manifested, it deploys some other competence; when this competence is constitutive, it reliably arrives at the truth. When the competence deployed is auxiliary, it will also be aimed at facilitating the truth, though more or less indirectly. For instance, a member competence of IC might deploy an auxiliary discovery competence for discovering new hypotheses, which will later be used by constitutive competences as material to reliably form new beliefs about. As I have suggested, knowing when a disposition A competently deploys another disposition  $\beta$  requires knowing something of the nature of  $\beta$ ; specifically, the success conditions of  $\beta$ , its required degree of reliability, and its environmental conditions. In the case of IC, knowing whether an act of continuing inquiry (for instance) is courageous will depend on knowing whether the kind of discovery competence deployed in the inquiry is effective (enough) under the circumstances to warrant the risk. Otherwise, the auxiliary disposition is not one of courage but of rashness.<sup>47</sup>

Baehr has trouble elucidating the substance aspect of IC because he fails to recognize the fact that it requires a collective auxiliary, deploy-

<sup>&</sup>lt;sup>46</sup>Notice also that there are two distinct possible projects of elucidation that we might engage in. First, we might elucidate all of the competences that comprise IC as such, meaning all of the competences that any subject may have which would count as part of her IC. Second, we might attempt to give an account of all of the relevant competences that an actual intellectually courageous subject possesses. Presumably, we might count a subject as having IC even if she does not have every competence which could be part of that intellectual virtue, so the two projects come apart.

<sup>&</sup>lt;sup>47</sup>For more on the importance of distinguishing rashness from courage, cf. Roberts and Wood 2007, Chapter 8.

ment competence. Seeing where Baehr runs into trouble helps illustrate the fundamental importance of the reliabilist project, concerned as it is with constitutive competences, in giving an account of IC. It is precisely the reliabilist account of constitutive competences, along with the distinctions outlined above, that is missing from his account of the substance of IC. In an attempt to bolster what he sees as the vague and indeterminate account of the substance of IC, Baehr picks out as examples three kinds of disparate activities in which IC can be said to operate. I think these are apt examples, and their aptness actually becomes clearer once we apply the distinctions, and adopt the virtue reliabilist account of constitutive competences. I will focus on two of these kinds of activity.

The first kind of activity Baehr picks out is the quite general category of "inquiry" (2011, 173). A subject can be seeking to find the truth (i.e., trying to obtain knowledge about a particular subject matter) even in the face of a threat of harm. 48 A subject might begin a new inquiry under threat, or sustain an inquiry when a new threat arises, or even abandon a line of inquiry when there is a threat to her well-being in doing so. The current account offers a clear way of understanding this type of IC. IC requires a collective competence, which consists in a set of competences. A subject who possesses this inquiry-relevant part of IC has a competence which is a member of the set IC, call it competence  $\Gamma \in IC$ . This  $\Gamma$  is an auxiliary competence to decide whether the subject should deploy further discovery competences, call them  $\beta$  and  $\gamma$ , in pursuit of some particular epistemic goal. Thus,  $\Gamma$  consists in a disposition to appropriately weigh the threat to the subject's well-being against the potential benefits of deploying  $\beta$  and  $\gamma$ , as well as any deontic duties the subject may have for such deployment. A subject who has  $\Gamma$  will be appropriately sensitive to the situation, and so will deploy her  $\beta$  and  $\gamma$  often enough even when threatened.

We can illustrate this via an example. Amy, an investigative reporter, is considering whether to cover a protest happening in Egypt. Her editor, the police, and the U.S. State Department have warned her that there is a significant threat of harm if she covers the protest (from police, counterprotesters, and even perhaps professional backlash). She recognizes that there is danger. She is an astute observer, and is competent at gather-

<sup>&</sup>lt;sup>48</sup> Roberts and Wood's appeal to the example of Jane Goodall is also relevant, here. She "subjected herself indiscriminately to the dangers of the forest" (2007, 224), not recklessly, but because of the value of the inquiry.

ing evidence with her eyes and camera (call this competence  $\beta$ ). She is also adept at coming up with hypotheses about what she is witnessing: for instance, thinking up the idea that the counter-protesters are really government shills in disguise (call this competence  $\gamma$ ). She is intellectually courageous, and has a particular competence to decide whether and when it is appropriate to risk danger (competence  $\Gamma$ ). Her  $\Gamma$  competence allows her to reliably judge when the benefits of reporting, and her duties to do so, outweigh the significant danger she faces in deploying her competences  $\beta$  and  $\gamma$ . Thus, in this case she aptly goes ahead and attends the protest, using her keen eyes and mind to help her cover the story and fulfill her duties as a journalist, even when threatened with harm.

It is impossible to judge whether Amy possesses IC without also having some understanding of the four features of Amy's competences  $\beta$  and  $\gamma$ . Furthermore, Amy would not be intellectually courageous without herself having some sensitivity to the degree of reliability of these deployed competences, and the circumstances under which they are reliable. She must have some hope of achieving the epistemic end in question in order for her manifestation of  $\Gamma$  to count as competent. Otherwise, she is merely being rash, rather than courageous. <sup>49</sup>

The second example of the substance aspect of IC that Baehr appeals to is belief formation or maintenance: "Any intellectually courageous person might also, it seems, adopt or maintain a belief that he regards as intellectually credible or justified despite the fact that doing so involves certain risk or potential harm" (Baehr 2011, 174). An intellectually courageous person plausibly forms beliefs according to epistemic standards

<sup>&</sup>lt;sup>49</sup>Perhaps one might be concerned here that there is no room for rashness in a purely epistemic version of intellectual courage. That is, from a *purely* epistemic viewpoint it might seem that it is always better to continue inquiry in the face of danger. It is only when we admit moral or practical considerations, the objection goes, that it seems like the epistemic benefit of further inquiry can be outweighed by the danger. I am not convinced of this, however. For one thing, if there really is *no hope* of epistemic benefit from further inquiry, then it really does seem rash to face danger for no reason. It seems like a failure to recognize a *lack* of epistemic value. Moreover, I think there are probably other cases in which the benefit is just not adequate to justify the danger. In such cases, I am tempted to suggest that a small chance of uncovering evidence or otherwise gaining value through inquiry could be outweighed by the danger because the danger would prevent us from gaining other knowledge later. Or one might inappropriately risk losing knowledge from death or other damage. So, I think that it can be rash and not intellectually courageous to engage in risky behavior for slight epistemic gain.

even when faced with threat of harm. This example of the substance of IC is well-explained by application of our distinctions. Some of the members of the set of competences which (partially) comprise IC will be competences to deploy constitutive competences, i.e., reliable belief-forming dispositions. Consider competence  $\Phi \in IC$ .  $\Phi$  is an auxiliary justificatory competence, a competence to deploy constitutive competences  $\chi$ ,  $\psi$ , and a variety of others. Further, let's suppose  $\chi$  and  $\psi$  are competences to form beliefs out of hypotheses based on evidence in the subject's possession.  $\Phi$  is then a competence to deploy other competences like  $\chi$  and  $\psi$  even under circumstances when deploying them incurs significant risk to the subject. Again, whether  $\Phi$  counts as a competence will depend on the subject's sensitivity to the conditions under which, and the degree to which,  $\chi$  and  $\psi$  are reliable.

The aptness of the above analysis can be illustrated by appealing again to the case of Amy. After Amy has attended the protest for long enough, and gathered appropriate evidence, she is in a position to form beliefs about the protest. However, what the evidence she has gathered strongly supports is the belief that her own government, and even the newspaper that employs her, are complicit in atrocious crimes committed against civilians. Coming to believe this would cause Amy to have to radically revise her understanding of her own life, projects, and goals. It would involve significant risk of harm to her own well-being, via her mental health and future employment. Nonetheless, in the face of this risk, she forms the appropriate belief based on the evidence that her employer and government are complicit.

In forming this belief, Amy manifests an auxiliary competence  $\Phi$  when she deploys her constitutive competences  $\chi$  and  $\psi$ . This competence  $\Phi$  is (like  $\Gamma$ , in the previous example) a competence to weigh the risks, benefits, and duties relevant to the situation, and to deploy the relevant competences, in this case the evidence-evaluation competences  $\chi$  and  $\psi$ . Thus, when Amy forms her belief about her employer and government, she does so courageously because she manifests  $\Phi$ , which (in this case) deploys  $\chi$  and  $\psi$ . Again, we see the fundamental importance of the constitutive competences to an understanding of the character virtue of intellectual

<sup>&</sup>lt;sup>50</sup>I will sidestep the issue of doxastic voluntarism. I think Baehr is correct in suggesting that the virtue theoretic account of IC will survive even a pretty robust version of doxastic involuntarism.

courage, and thus we see the fundamental importance of the virtue reliabilist project to the responsibilist project.

Thus, on the present account, IC requires possession of a set of competences. A subject will possess some subset of this set, and if the subset is large enough (or if the importance of certain members is greater than others, if the subset is central enough) she can be considered intellectually courageous *tout court*. If her possessed subset is too small, she may just be intellectually courageous with respect to a few areas. Furthermore, it is intuitively plausible that one can be more or less intellectually courageous in two ways. First, a subject may be extremely courageous in one particular area (like Amy's courage in investigating). Second, a subject may be courageous across a wide range of circumstances. The present account can happily accommodate this intuition by appeal to the collective auxiliary competence necessary for IC. A subject can have a single disposition,  $\Phi \in IC$ , which is highly competent. Or, she may possess a large subset of the members of IC.<sup>51</sup>

A full account of the collective auxiliary competence associated with intellectual courage would require filling out the set of competences of which it is composed, perhaps with an appropriate taxonomy, and (hopefully) with a spate of useful generalizations. This is a significant and worthwhile project, and I think that this is precisely the kind of useful and philosophically interesting account that virtue responsibilism is concerned with. What we have seen, however, is that this project requires some account of constitutive competences, and this is precisely what the virtue reliabilist is seeking to provide.

Any account of intellectual courage should thus be constrained by (at

<sup>&</sup>lt;sup>51</sup>It is worth noting that this last feature of my account makes it compatible with the situationist literature in psychology (see Doris and Stich 2014). Psychological experiments tell us that many people's behavior can be altered by small changes to their environment, and this casts doubt on the notion of global character traits. By explaining global character virtues in terms of sets of auxiliary competences, my account can easily allow for this. What has happened in the psychology experiments is that the environmental conditions have been changed.

Furthermore, I think this might help defuse a complaint that a responsibilist might raise against my account. That is, intuitively, such character virtues are *unitary* features of a subject. However, given the aforementioned situationist psychology literature, this intuition (like many psychological intuitions) turns out to be misguided. My view can easily account for this, while the traditional "unitary" notion of character virtues cannot. Thanks to Eliabeth Fricker for helpful comments on this point.

least what is common to) our best accounts of constitutive competences. Thus, the examination of IC in light of our distinctions has helped to illuminate the fundamental importance of the reliabilist project to responsibilism.

#### Conclusion

There has been a perception of conflict between virtue reliabilists and virtue responsibilists. If what I have argued above is correct, then this perception is misguided: there need be no such conflict among virtue epistemologists. The responsibilist project is an important and potentially fruitful area of philosophical research, but it is not attempting to explain the same things as virtue reliabilism. Once we apply the distinctions between types of virtues, it becomes clear that the two projects are after different *explananda*. Moreover, the responsibilist project importantly depends on the reliabilist project, and the latter is therefore more epistemically fundamental. Let me be explicit that this is not any form of criticism or belittlement of responsibilism: biology fundamentally depends on physics, but this is hardly a complaint against biology. All I want to argue is that the continued sense of conflict between the two camps should be swept away.

I think it is also worth pointing out that the distinctions I draw above could be useful quite apart from this in-house debate among virtue epistemologists. For instance, the distinctions may be helpful in the debate about the generality problem.<sup>52</sup> The distinctions can help the virtue epistemologist narrow down the number of competences or dispositions that might be the relevant one for evaluating the reliability of a particular belief formation. That is, the distinctions help to cut down on the range of generality that needs to be considered. For example, Baehr appeals to intellectual character virtues as being virtues that best explain individual cases of belief formation. This illustrates the way in which highly general virtues or dispositions can be (I think mistakenly) included in those that might be relevant for evaluation of reliability (i.e., as contributing to the generality problem). Once we apply the distinction between auxiliary and constitutive competences, however, we can rule out auxiliary competences

<sup>&</sup>lt;sup>52</sup>See Comesaña (2006), Beebe (2004), and Conee and Feldman (1998).

like IC as being relevant to evaluating the reliability of a particular belief formation. Thus, the distinctions can actually help to narrow down the set of candidate dispositions for reliability evaluation.

Moreover, one need not think that virtue reliabilism is the right account of doxastic justification, or knowledge-level warrant, in order to make use of these distinctions or my account of how intellectual character virtues require certain competences. Anyone who takes the notion of epistemic virtue to be interesting or significant can make use of this account.

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