

Open-mindedness

Why talk about open-mindedness?

One reason to talk about open-mindedness is that there has been a lot of recent interest in the so-called “epistemic” or “intellectual” virtues. It is still early going, but there are already rival accounts of what these virtues amount to, whether they actually exist, what implications they have for other issues and commitments in epistemology, etc. Indeed, many of the standard problematics and disputes one finds in virtue ethics are being recapitulated in the much newer field of virtue epistemology.

One reason for this recent interest in virtue epistemology is that it seems to hold some promise to help us gain a better understanding of some areas of epistemology that have been neglected for a long time, but are now coming back into fashion. Virtues are properties of agents, not of propositions, or beliefs, or belief-forming processes, etc. Insofar as one thinks that epistemology should tell us something about ourselves as cognitive agents, rather than merely help us classify (after the fact) whether our beliefs officially count as knowledge or not, virtue epistemology looks like a promising line of inquiry.

But why talk about *open-mindedness* in particular? It is a common practice for virtue epistemologists to offer a list of some of the virtues they have in mind when they refer to epistemic virtue, to help the uninitiated get a grip on what they are talking about. It is striking how often open-mindedness is at the very top of that list. One might conclude from this sociological fact that open-mindedness is generally understood to be either (a) the most important of the epistemic virtues, or (b) the least controversial example of an epistemic virtue. Either of these conclusions, if true, would make it particularly interesting to talk about open-mindedness. However, I’m not convinced of (a), and I am suspicious of the significance of (b).

As for (a), I strongly suspect that these lists of epistemic virtues are constrained by the fact that we have a somewhat impoverished and confusing vocabulary with which to refer to them. The main problem seems to be that many traits we might naturally count as epistemic virtues have analogues that are moral virtues (or perhaps the same trait is both an epistemic and a moral virtue). Examples of this are intellectual courage, intellectual charity, and so on. While these also usually make the lists, one could imagine that, when one is trying to specify and articulate a set of virtues that are peculiarly relevant to epistemology, one would rather lead with something that doesn’t wear its complicity with ethics on its sleeve. Though, as I will discuss later, I believe that open-mindedness has deep ethical significance, it does not present itself initially as a more virtue. This makes open-mindedness an easy choice to top one’s list. Thus, I rather doubt that it is a general estimation of the greater importance of open-mindedness relative to the other intellectual virtues that is responsible for its pride of place in most lists of such virtues.

As for its controversiality, this is hard to judge because so little has been written about the specific nature of any of the intellectual virtues.¹ Most of the work in virtue epistemology has

¹ An important exception to this claim is the book *Intellectual Virtue*, by Jay Wood and Bob Roberts.

been at a very abstract level, with very little attention paid to understanding individual virtues. This is a problem, because we don't have as firm or precise a pre-philosophical grip, I would submit, on the specifically intellectual virtues as we do on the ethical virtues. This makes it hard to judge the relative significance of various specific proposed virtues. It also makes it hard to judge whether the more abstract accounts of intellectual virtue are on the mark, since we can't easily judge whether the abstract theories count the right traits as virtues.

So this line of thought has led to a reason to talk about specific intellectual virtues. Abstract and theoretical virtue theory of any sort needs to be informed by a clear understanding of the individual specific virtues one means to be giving an account of. I hope to make some headway on this project here.

But still, why open-mindedness particularly? I find open-mindedness uniquely interesting because several puzzles arise about it almost as soon as one begins to think about it. For example, why should anyone *want to be* open-minded? Doesn't open-mindedness imply a lack of commitment to one's own beliefs? But surely being open-minded must be compatible with full commitment to what one takes to be true at the moment. As we will see, this problem is even more acute for people who embody all the other epistemic virtues. Is there any reason at all for such people to be open-minded?

Some of these and other puzzles I will discuss raise deep worries about the coherence of the notion of open-mindedness as a virtue, while others raise serious questions about whether being open-minded is a good thing from the perspective of improving one's own or anyone else's epistemic lot. This is surely a worry for any trait that aspires to be an epistemic virtue.

I will take up the issue of these puzzles shortly, but I want first to say what I take to be some desiderata for an account of open-mindedness that is sufficient to address the motivations I have given for providing such an account in the first place. These desiderata are somewhat tendentious, but for the following reason: I want to know if it is possible to provide an account of open-mindedness that is plausible *and* makes open-mindedness *interesting in its own right*. What do I mean by this? An account of a specific virtue is interesting in its own right if it provides us with a unique way of expressing a worthwhile evaluation of our ethical or cognitive practice. This is completely independent of whether it is possible to provide a definition of any other important evaluative concept in terms of that virtue or any other. My interest in the virtues is in their specificity and distinctness. I value the richness of vocabulary and the precision of expression that one gets from employing the language of individual virtues. Thus, the only accounts of individual virtues that are satisfactory to me are those that preserve these features. If it turns out that open-mindedness cannot be given such an account that remains plausible, then it would not follow that open-mindedness is not a virtue, but simply that it is not a virtue that is interesting in its own right.

The desiderata listed in the following section are motivated by these considerations. Solving the various puzzles I will raise for an account of open-mindedness is, naturally, among those desiderata as well.

Desiderata of an account of open-mindedness

Desideratum 1: “Open-mindedness” should be a “thick” concept

I hesitate to use the notion of “thick” concepts, because there seems to be much dispute over what precisely that means, and I do not want to become an interested party in such a debate. Let me be clear that in what I say here I do not mean to be taking a stand on the proper understanding of “thick concept.” Yet it does seem to offer a way to describe the features that I think a good account of open-mindedness should have. Some of the properties often associated with “thickness” are the following: simultaneous descriptive and normative content, richness of detail or specificity, fairly straightforward application to the way we live our lives. These properties tend to come together anyway. If a concept is both specific and has descriptive content in addition to normative content, it is likely to be easy to see what would count in the real world as falling under it. Contrast this with the concept “the good,” or even “virtue.” The latter is a bit more specific and applicable to real life than the former, but neither goes very far in that respect. But individual virtues can and should be articulated in much finer detail. An account of a specific virtue should provide a rich description of the features of someone who embodies that virtue. Consequently, it will be easier to recognize someone who has that specific virtue on the basis of such an account than it would be to recognize someone who is virtuous on the basis of an abstract and “thin” account of virtue.

A related point is that the resulting description of the virtue should pick out something distinctive. One of the attractions of virtue theories in either ethics or epistemology is that they claim to provide us with a much richer vocabulary for describing and understanding our ethical or epistemological lives. “Virtue talk” allows us to pick out and refer to a variety of uniquely important ways of being good, or of doing well, or of whatever it is you think virtues are indicative and/or constitutive. For a virtue theory to meet this desideratum, the individual virtues must be genuinely distinct as well as sufficiently specific. An account of the virtues according to which each of the individual virtues really just amounts to the same thing would be inadequate on this measure. So would be an account of some individual virtue according to which being virtuous in that particular way was no more than meeting the conditions for being good in some very general way. Such a result would render open-mindedness uninteresting in itself.

Desideratum 2: Virtues as traits of persons

As should be clear by now, I am treating intellectual virtues in much the way that virtue ethicists treat ethical virtues. This is not without its problems. There is a deep divide amongst those who call themselves “virtue epistemologists” over precisely this point. On the one hand are those who envision intellectual virtues as simply abilities, competencies or perfections of a cognitive sort. For these epistemologists, nearly any process that contributes fairly immediately to consistent true belief formation, e.g., eyesight, counts as a virtue. I don’t mean to exaggerate here; there are restrictions as to what can count as a virtue on such views. John Greco, for example, requires that the relevant processes be “integrated” into one’s “cognitive character.”² But this restriction is largely meant to eliminate the possibility of fairly arcane processes that

² See, for example, ???

usually appear only in philosophy papers. Guy Axtell calls this position “virtue reliabilism,”³ and Greco and Ernie Sosa⁴ are prominent examples of proponents of such views.

On the other hand are those virtue epistemologists who take intellectual virtues to be deeply analogous to ethical virtues. Linda Zagzebski, for example, argues that intellectual and ethical virtues are not merely analogous, but in fact different species of the same genus.⁵ Such virtues tend to require much more from the virtuous agent than those of the virtue reliabilist. Zagzebski’s theory⁶, for example, requires reliability just as virtue reliabilism does, but also requires that the intellectually virtuous agent has the right standing motivations, and that such motivations are present and causally active in the production of belief. James Montmarquet requires that one be “epistemically conscientious” in the production of belief in order to be intellectually virtuous.⁷ Guy Axtell calls theories that impose and emphasize these kinds of agential requirements “virtue responsibilist”⁸ theories.

I am not committed to any particular account of intellectual virtue in the abstract. But for the purposes of this paper, I am going to assume that hard-core virtue reliabilism is not correct, and that some degree of agential involvement is necessary for significant cognitive virtue. That is because, if hard-core reliabilism is correct, then the individual virtues are not particularly interesting in their own right. The individual features of different virtues play no important role in such theories. Indeed, the only feature of individual virtues that matters in such theories is their truth-conduciveness.

It is important to note that the purposes of hard-core reliabilists are not necessarily aligned with my own. Their primary interest tends to be providing an account of knowledge that adequately meets the desiderata of such an account. It may very well turn out that what the virtue reliabilists call “virtue” really is a necessary condition for knowledge, yet there is a richer, more agent-involved notion of virtue that is not relevant to most knowledge, but is quite relevant to being an excellent cognizer. So long as I am not committed to providing an account of knowledge in terms of the kinds of virtues I am interested in, there need not even be a conflict between my project and that of the hard-core reliabilists. So it is not so much that I am assuming hard-core reliabilism is false, but rather that I am assuming that something a little closer to virtue responsibilism is (at least also) true.

Desideratum 3: The puzzles of open-mindedness

This brings me to the puzzles that arise very quickly once one begins to think about open-mindedness as a virtue. Any satisfactory theory of open-mindedness must dispel the air of paradox arising from worries such as the following:

- a. Why should anyone want to be open-minded?

³ See Guy’s paper

⁴ See ???

⁵ See *Virtues of the Mind*, ???

⁶ Linda’s work

⁷ Montmarquet, ???

⁸ Guy’s paper

- b. Why should a(n otherwise) virtuous person be open-minded?
- c. How is it possible to be open-minded? (e.g., How is open-mindedness consistent with full-blooded, confident belief?)
- d. How do we determine when and with regard to what we should expend resources in our pursuit of open-mindedness?

(Admittedly, the last of these is not really so much a puzzle as it is a difficult question for any account of open-mindedness. But, as we will see, it arises naturally from attempts to resolve the first three puzzles.)

These puzzles are related, at least in the sense that a consideration of one leads naturally to a consideration of the others. Let us begin with (a). Why should anyone want to be open-minded? In ordinary usage, being open-minded implies being prepared to take seriously the views of others, especially when those views are in conflict with one's own. But what would motivate such an attitude? It would seem that only a lack of full confidence in one's beliefs would lead one to spend any time or effort considering views that conflict with one's own. Indeed, full confidence in one's beliefs would seem to render the attitude of open-mindedness irrational, at least insofar as being open-minded required any effort at all, which it generally does. The obvious immediate response to this worry is to say that we all recognize that we are not fallible, and that even our most strongly held beliefs could be false. Thus, paying attention to alternative views is a good strategy to discover our mistaken beliefs.

This leads us to wonder whether open-mindedness is even consistent with the possibility of full, confident belief. This worry is discussed by Jonathan Adler.⁹ Echoing claims commonly made in the literature in the philosophy of education, he says that "...open-mindedness toward a specific belief is not compatible with holding that belief."¹⁰ Yet it seems that open-mindedness, if it is appropriate at all, is appropriate with regard even to those beliefs we hold most strongly. Indeed, we often think that it is with respect to just such beliefs that open-mindedness is *most* important. I have in mind here religious and political beliefs, and beliefs in the correctness of social norms. These are typically held very strongly, and yet it is often with respect to these beliefs that we take the charge of closed-mindedness to be most damning. So, if we are not to be so open-minded that our brains fall out, we must still be capable of strong belief. Yet this seems impossible if we are to be open-minded with regard to those strongly held beliefs.

All of this is even more problematic when we consider someone who is an exemplary epistemic agent in every way save being open-minded. Here the motivation question is especially daunting. Recall that the initial response to the motivation problem was a recognition that one's beliefs could be wrong, even when one is confident in them. But a highly epistemically virtuous agent has no reason to expect that anyone in her epistemic community is likelier to get to the truth than she is. Obviously, there will be exceptions with regard to highly specialized fields in which the virtuous agent has no expertise, but otherwise she has every reason to think that her own views are much more likely to be true than any other views she is likely to find represented among those around her. Why should she be open-minded? Indeed, why would it be a good thing for her

⁹ Adler

¹⁰ Adler, p. 128

to be open-minded? It doesn't look as if being open-minded is a good way to improve her epistemic situation.

So we have two distinct problems here, one of which comes in two different varieties. There is the problem of motivation, both for normal believers and for otherwise epistemically virtuous believers. Then there is the problem of the compatibility of open-mindedness and strongly held belief. A solution to the motivation problem requires showing that it is worthwhile for us to be open-minded. More specifically, it must be shown that being open-minded is a better way for us to get to the truth¹¹ than the alternative, or else we will not have shown that open-mindedness is an *epistemic* goal. This will depend, of course, on what is required of us to be open-minded. If the demand is too great, there will presumably be more efficient ways of expending our resources to achieve our goals. Thus, the resource allocation question must ultimately be addressed in order to resolve our original puzzle.

In the remainder of this paper, I will consider a succession of accounts of open-mindedness, assessing them both in terms of their ability to resolve these puzzles, and their success in preserving a sense of open-mindedness that is interesting in its own right.

Accounts of open-mindedness

It is interesting to note that so much of the discussion of open-mindedness has taken place in the field of philosophy of education, rather than in epistemology. Their purposes are different from mine, but it is still instructive to look at their work. I will look particularly at William Hare's and Jonathan Adler's discussions of open-mindedness.

According to Hare,

a person who is open-minded is disposed to revise or reject the position he holds if sound objections are brought against it, or, in the situation in which the person presently has no opinion on some issue, he is disposed to make up his mind in the light of available evidence and argument as objectively and as impartially as possible... [W]e may adopt the attitude of open-mindedness with respect to highly particularized and specific beliefs or to more general and wide-ranging hypotheses, theories, and conceptual frameworks. The *object* of one's open-mindedness varies, but the *meaning* of open-mindedness remains constant.
(1979), p. 9

This might seem a very natural way to characterize open-mindedness, at least on a first pass. However, as Hare describes it, open-mindedness seems nothing short of rationality itself. That is, if someone is "disposed to revise or reject the position he holds if sound objections are brought against it, or... make up his mind in the light of available evidence as objectively and impartially as possible," what is left to say about the quality of his reasoning? Hare seems to virtually equate being open-minded with being intellectually virtuous tout court. This runs afoul of the first desideratum of an interesting view of open-mindedness: that it be a distinct and specific kind of excellence.

¹¹ Or achieve other epistemic goals, if there are others.

Moreover, this seems to just get open-mindedness wrong. There are a great many ways one can fail to be disposed to respond properly to cogent objections to one's view that do not amount to a failure of open-mindedness. One might consistently make mistakes in one's reasoning, such that cogent objections do not appear to be so. One might be unable to keep all the relevant considerations in mind at once, hence unable to formulate opinions on the basis of all the relevant evidence. It might simply be easier to remember certain kinds of considerations rather than others, and hence one might fail to be impartial in one's evaluations, but not in the kind of biased way that seems necessary to being closed-minded. None of these failings seems incompatible with being open-minded. Hare's account would implausibly count a great many quite distinct objective cognitive failings under the rubric of a failure of open-mindedness.

Let us, then, turn to an alternative view. In "Reconciling open-mindedness and belief," Jonathan Adler proposes a very different way of understanding open-mindedness. It focuses more on the attitude of the agent than his characteristic reactions to evidence that runs counter to his views. As we shall see, one can develop the account in ways that make it easy to explain why open-minded people are likely to act in those characteristic ways, but we get a much deeper understanding of open-mindedness itself.

In his paper, Adler is concerned specifically about one of the puzzles mentioned at the outset of this essay, which has been debated amongst philosophers of education. It is encapsulated by the following question posed by Adler: "*How can one be open-minded about a strongly held belief; and why should one?*"¹² The question makes evident a tension between two plausible claims. On the one hand, it seems as though strong belief in a proposition implies that one regards it as "not seriously possible that it is wrong."¹³ On the other hand, as Hare says, being open-minded appears to require that we are "prepared to entertain doubts about our views."¹⁴ It would appear that either one cannot be open-minded about one's strongly-held beliefs, or else one cannot hold any belief both open-mindedly and strongly.

Let us look a little more closely at why this seems to be so. Suppose we believe that p very confidently and strongly. To be open-minded about p seems to imply that we should take challenges to p seriously. In other words, we should take seriously the possibility that ~p is true. But this seems tantamount to having actual doubts that p is true, which suggests that we aren't really as confident about p as we assumed at the beginning. Thus, strongly believing p and being open-minded about p seem incompatible.

This certainly could be an accurate description of someone's reaction to being challenged regarding one of her beliefs. The challenge itself might be enough to lower the believer's confidence in her belief to the point that it is no longer correct to say that she believes it strongly. But that seems less a description of open-mindedness than a description of epistemic insecurity or even cowardice. Thus, there must be a way to reconcile strong belief and open-mindedness.

¹² Adler, 128 emphasis original

¹³ Adler, 128

¹⁴ Adler quoting Hare, p. 128 in Adler

What needs to be done is to block the chain of reasoning that leads from the stipulation of being open-minded about *p* to having significant doubts about *p*, rendering the belief no longer strongly held. The beginning and end of that chain seem unassailable. Being open-minded surely requires at least that we take challenges to our beliefs seriously, at least sometimes. And having significant doubts about whether *p* is true does seem to undercut the possibility of believing *p* strongly. The weak link is the inference from one's taking a challenge seriously to one's entertaining doubts about the truth of *p*.

I think the reason we find it so easy to move from the one to the other is that it seems as though the only explanation for one's taking some challenge to her belief that *p* seriously is that she has doubts about the truth of *p*. Why bother worrying about the challenge otherwise? The key to breaking the above chain of inference is to provide an alternative explanation for taking such challenges seriously.

Adler's account of open-mindedness provides us with just such an explanation. The key move is to define open-mindedness as "a second-order attitude toward one's beliefs as believed, and not just toward the specific proposition believed, just as fallibilism is a second-order doubt about the perfection of one's believing, not a doubt about the truth of any specific belief."¹⁵ The idea here is that open-mindedness is primarily an attitude towards oneself as a believer, rather than towards any particular belief. To be open-minded is to be aware of one's fallibility as a believer, and to be willing to acknowledge the possibility that anytime one believes something, *it is possible that one is wrong*.

When an open-minded person encounters a challenge to one of her beliefs, she responds by (at least sometimes) taking such a challenge seriously. This can be so even if she believes the challenged belief quite strongly. But what explains her willingness to take the challenge seriously is not any sudden or latent doubts about the truth of the belief, but rather her acknowledgment that, being human, she could always have gotten things wrong in this case. This need not affect the strength of her belief at all. If it did, then the mere commitment to fallibilism would render strong belief impossible.

It may still sound strange to some that one can seriously consider the case for $\sim p$ when one strongly believes that *p*. To address such lingering doubts, Adler offers a powerful analogy. Consider the position of a quality-control officer in a factory that makes widgets. The officer knows that the factory is highly reliable, and hence that nearly every widget that comes down the assembly line is non-defective. But, to safeguard against even the occasional defective widget making it to market, it is the officer's job to inspect one of every ten widgets before it leaves the factory. Suppose the officer selects widget number 30. Before inspecting it, he confidently believes that it will be non-defective. The fact that he is willing to check to see if it really is non-defective does not indicate some doubt about widget 30. It is not insecurity about widget 30 that prompts the check, but rather an awareness of the possibility, albeit low, that the factory might produce a defective widget. Consequently, his belief that widget 30 is non-defective is no weaker than his belief that widget 29 is non-defective, even though he checked one but not the other.

¹⁵ Adler, 130

The Puzzles

Adler's definition, then, does what he intended it to do. It explains how open-mindedness is compatible with strongly held belief, thus solving the first of the puzzles posed for accounts of open-mindedness. Can it also address the motivational puzzle? For instance, why should anyone want to be open-minded in Adler's sense? How is it good for us epistemically?

We have to keep in mind the assumption that everyone has similar cognitive goals, which include having true beliefs and avoiding false ones. Given these goals, simple awareness of our fallibility (a condition of open-mindedness) should motivate us to be open-minded. We can be nearly certain that some of our beliefs are false, given our fallibility. We want to be rid of those, and paying attention to evidence that indicates we are wrong about something is a good way to do so. At the very least, it would seem that being closed-minded virtually guarantees that you are stuck with whatever false beliefs you get on your own.

Once again, we can appeal to the widget example. There is no puzzle about why the officer is motivated to check the widgets (besides the fact that it is his job, which we will conveniently ignore for the moment). He could say to himself, "I'm sure of each widget that it's non-defective, so there's no reason to check any of them." But he knows that this is a losing strategy if his goal is to keep any defective widgets from making it out the door.

What, then, of the otherwise virtuous believer? Has she reason to be open-minded? This is a much more difficult question. The answer given above for why a normal cognitive agent should want to be open-minded is a little strained when applied to the otherwise virtuous believer. She, too, is fallible, and will have false beliefs, but the likelihood of her discovering these by engaging with other, generally less virtuous, believers seems very low indeed. Even at best, she likely wastes her time, and at worst she is misled into exchanging a truth for a falsehood.

I believe that an account of open-mindedness along the lines Adler describes can answer this question. However, Adler does little to develop the characteristics of the open-minded agent. He does not offer details about how having the appropriate second-order attitude leads consistently to the kind of unbiased, objective assessment of beliefs and views that is characteristic of the open-minded person. But these are the details we need in order to assess whether open-mindedness remains a virtue if one has mastered the other cognitive virtues. To that end, I will offer a characterization of the open-minded agent, taking Adler's definition of open-mindedness as a starting point.

The open-minded agent

Our starting point is Adler's characterization of open-mindedness as "a second-order attitude toward one's beliefs as believed, and not just toward the specific proposition believed." But this attitude alone will not constitute open-mindedness. The attitude must be efficacious in our cognitive lives. It must intrude upon our habits of thought consistently and productively to produce the cognitive and overt "behavior" typical of those we take to exemplify open-mindedness. Though I make no claims to offering a complete description of this, I will propose

two general characteristics of thought that one must have in order to translate one's second-order awareness into genuine open-mindedness.

Self-knowledge

The first, and most important of these characteristics is the disposition to seek, and when found, accept, self-knowledge about one's cognitive weaknesses and strengths. Most of us are prone to many bad habits of thought or simply imperfect cognitive equipment. For instance, I am prone to making careless mistakes when adding more than two or three numbers in my head. If I and another person were both calculating the same sum in our heads, and our answers came out different, I should seriously consider the possibility that I made a mistake. But, of course, this is not the typical situation in which questions of open-minded arise.

In those situations where one's more significant beliefs are challenged, one is subject to different cognitive weaknesses that can keep one from seeing the truth of an alternative view. These weaknesses include bias, overconfidence, wishful thinking, etc. These habits tend to be domain-specific to a certain extent. For example, I might be overconfident when defending my beliefs about the domestic economy. Or, I might have a bias in favor of the United States, so that I will be unmoved by any considerations that suggest the U.S. suffers by comparison with any other nation. Rarely does someone exhibit these bad habits of thought across the cognitive board (overconfidence may be an exception.)

To the extent one defeats these habits of thought, one is more open-minded. But to do this requires that one be aware of when and with regard to what one is likely to fall into these habits. This is hard knowledge to come by, and harder still to accept. We all think that we have come to our beliefs in a rational, objective manner. But the open-minded person is moved by her awareness of her own fallibility to search for domains and situations in which she is prone to these habits of thought that produce closed-mindedness.

Self-monitoring

But supposing one comes by such knowledge, what is one to do with it in order to be open-minded? Gaining the knowledge may be the hardest part, but having it is not enough. This knowledge must be efficacious in the moment that one is facing the challenge to one's beliefs. For it to be so, one must self-monitor for signs that one is in a domain or situation in which one is likely to be biased, say. The signs might be the subject matter of the discussion or reading matter or whatever prompted the challenge to one's beliefs. Or it might be the tone of your voice as you respond to someone. If you are really self-aware, you might even notice characteristic gestures or body postures that you tend to adopt when overconfident, for example.

When one "catches" oneself at engaging in one of these bad habits of thought, one should take whatever prompted the habitual response seriously, out of an awareness not just of your general fallibility, but of your particular fallibility under these sorts of circumstances. It's important to note here that catching oneself in one of these bad habits of thought regarding one's belief that p does not imply that one's belief in p is false, or even that you don't have excellent reasons for

believing it. As Adler says, one can be prompted to take a challenge seriously without lowering one's confidence in the belief itself.

So, it is through gaining self-knowledge, which one applies in the moment of challenge through self-monitoring, that the open-minded person makes her awareness of her own cognitive fallibility efficacious in her cognitive practice. One nice feature of this understanding of open-mindedness is that it makes sense of how it is possible to strive to become *more* open-minded. Self-knowledge is something that can be sought and cultivated, and self-monitoring can be practiced. Of course, there is the problem that our biases and tendencies to overconfidence and wishful thinking tend to be hidden from us. How can we become better at discovering these? The obvious answer is through exposing oneself to a variety of ideas and worldviews. Closed-mindedness can be the result of taking one's own assumptions to be obvious and universal, hence incontrovertible. To discover that those assumptions are not shared by people across time, place and culture can help one see that one's assumptions are controvertible after all. These are, of course, truisms about open- and closed-mindedness, which makes it all the more important that an account of open-mindedness being able to explain them.

How does this account fare with regard to our initial desiderata? Though it is still just a sketch, I think the description of open-mindedness that has emerged is very richly detailed, with both descriptive and normative elements, and gives us a great deal of guidance about how to become more open-minded. It is also clearly a trait of the person. That is, one is the sort of person who is aware of her fallibility and self-monitors to combat it, or one is not. Yet we can also make sense of the common usage in which people are accused of being closed-minded about something in particular. Even a generally open-minded person can be closed-minded about some specific domain or in some specific situation. In that case, while the *person* remains open-minded, she is clearly not exhibiting her open-mindedness in that circumstance.

The final test is that of the puzzles. We have already dispensed with the first two, which brings us back to the difficult problem of why an otherwise cognitively virtuous person should be open-minded. What has she to gain? I think it is fair to say that even the most excellent cognizers are still subject to the bad habits of thought alluded to above. A thinker who is sober, careful, conscientious, thorough, etc. can still be subject to things like bias, overconfidence and wishful thinking. Indeed, we are likely to pick up some of these habits of thought from the intellectual community we grow up in. Because of the self-disguising nature of these habits, nothing short of the kinds of self-knowledge and self-monitoring that are constitutive of open-mindedness will serve to eliminate them.

And these habits of thought can affect not just how we assess the evidence we have, but also what we take to be evidence in the first place. If we have a bias, say, to the effect that people under 30 don't know anything, we will dismiss testimony from such sources as even being relevant to anything we believe or are considering. Thus, having the virtues relevant to assessing evidence well will not redress all the effects of such bias. Only coming to recognize that it exists and learning to recognize when it is affecting our deliberations can offset its perverse effects on our cognition.

This may sound like an awful lot of work, and this brings us back to the issue of resource management. Even given the payoffs for the virtuous agent, is it worth it? There are really two questions being asked here. One is a question about the relative benefits of developing the self-knowledge and habits of self-monitoring that have been described. The other is a question about the relative benefits of spending the time to take challenges seriously as they arise.

As to the first question, I would say the answer is clearly “yes.” The cognitive virtues other than open-mindedness will not guard against bias, and avoiding such bias is an important cognitive good. So the otherwise virtuous agent should develop the self-knowledge and self-monitoring necessary to do so. The second question is the harder one, and the one that has been hanging over these accounts of open-mindedness from the beginning. Why should an otherwise cognitively virtuous person pay any attention to challenges to her belief, given that she is so much more likely to be right than her compatriots?

At the very least, we can say this: the open-minded person will have the self-knowledge to discriminate those situations and domains in which she is more likely to go astray due to her bad habits of thought. This allows her a fair degree of latitude about which challenges she should invest resources in and which she needn't. If she is fairly confident that she is not in a situation in which she is likely to exhibit her bad habits of thought, then there is less pressure on her to bother with the challenge. She can fairly confidently brush it aside, assuming that her confidence in her belief is already very high.

But if one has not already invested resources in gaining the self-knowledge about one's bad habits of thought and developing the good habits of self-monitoring, then one has less latitude about this. For any given challenge, one cannot be confident that one is not in a domain or circumstance within which one is likely to exhibit bad habits of thought. This puts more pressure on the otherwise virtuous person who lacks open-mindedness to invest resources in each challenge that comes along, just in case. Of course, the closed-minded person will not actually feel this pressure, as that is part of what it means for them to be closed-minded. But, given that they have the same cognitive goals of gaining truths and avoiding falsehoods as the rest of us, they will be worse off by remaining closed-minded, even given the investment of resources necessary to do so. Thus, the otherwise cognitively virtuous agent is better off by becoming open-minded as well.

Conclusion

A great deal remains to be said about open-mindedness, but I hope to have made a start at developing an account of it that is interesting in the sense I articulated at the outset, and that has promise for solving the puzzles unique to the virtue. This has obvious ramifications for so-called “virtue epistemology,” but open-mindedness is a cognitive virtue that might well have import for other normative domains. I will close with just one example for future elaboration.

Being open-minded might be necessary, not just for cognitive excellence, but for civic excellence as well. Tolerance is an important civic good in modern pluralist democracies. It depends upon the conviction that everyone has the right to pursue the good as he or she sees fit, so long as this does not violate certain side constraints (harming other, for example). This

conviction is hard to maintain if too many citizens begin to lose sight of their fallibility. Open-mindedness is an important personal virtue for such societies. No doubt this is one reason that much of the debate about open-mindedness takes place in the philosophy of education literature. For those who agree that the personal virtue of open-mindedness is necessary for the civic virtue of tolerance, the state has a legitimate interest in promoting the personal virtue in the institutions of public education. All the more reason to get clear on what it is we want to inculcate in future generations of excellent citizens.