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## **Epistemic Virtues in Understanding**

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### **Epistemic Virtue**

Virtues are relatively stable propensities to think or act well. They are, as Aristotle maintains, not merely conducive of human flourishing, but in part constitutive of human flourishing (1962). They figure in a good life for beings capable of rational and moral agency. Virtues are not mere abilities, for an agent could have an ability that she had no inclination to use. Someone who was able to reason rigorously but rarely did so, even on the occasions where rigor was called for, would not count as epistemically virtuous. Nor, according to virtue epistemologists, would a justified true belief that happened to emerge from her cavalier thinking count as knowledge. Indeed, even an out of character bit of rigorous thinking that produced a justified true belief would be found epistemically wanting. Although such thinking would accord with virtue, it would not manifest virtue. This parallels what virtue theorists maintain about morality. An agent who has the ability to act magnanimously but instead regularly acts selfishly is not virtuous. Even when their outcomes are morally good, his actions are not done from virtue. Here I will focus on epistemic virtues, those that bear on thinking and acting well insofar as one's goals are cognitive. But as will emerge, some virtues that are standardly construed as moral are also epistemic.

It is useful to divide virtue epistemology into two camps: virtue responsibilism and virtue reliabilism (Axtell 1997, Battaly 2008). Virtue responsibilists hold that epistemically virtuous agents are those who form, sustain, and revise their views as they should. Virtue reliabilists hold that what makes a propensity epistemically virtuous is that it is reliably truth-conducive.

According to the virtue reliabilist, the propensity to amass and assess evidence is an epistemic virtue just in case exercising that propensity is more likely to result in true conclusions than ignoring evidence or its bearing on an hypothesis would be. Relibilists recognize that not every exercise of a virtuous propensity yields the truth. Even a reliable procedure sometimes fails. Still, the criterion by which a propensity is to be judged is truth-conduciveness. Reliabilists are veritists. They maintain that our overarching cognitive goal is true belief. That being so, they maintain, the faculties and traits of character that are conducive of arriving at truth are the ones that are virtuous (see Sosa 2007, Greco 2010).

Although this seems initially plausible, problems quickly arise. I will defer until later the question whether our overarching cognitive goal is, or should be, true belief. But other issues also need to be addressed. One turns on the fact that we do not know whether the traits we consider epistemic virtues are in fact truth-conducive. Open-mindedness qualifies as a reliabilist virtue only if people who pursue inquiry open-mindedly are more likely to arrive at the truth than those who take a different path, perhaps relentlessly attempting to demonstrate the truth of an hypothesis, garnering positive evidence but ignoring diverging opinions and negative evidence. It seems likely that the open-minded will fare better; but the question is empirical, and we do not know the answer. In any case, it is doubtful that individual character traits are on their own truth-conducive. Whether the open-minded inquirer is likely to arrive at the truth depends on

what other character traits he possesses. Does he get distracted by enticing but unpromising alternatives? Is he likely to get confused by massive amounts of data that pull in different directions? Is he easily taken in by intriguing but distorting orientations? Evidently, truth-conduciveness has to be the product of a cluster of epistemic virtues. This is why virtue reliabilists like Sosa accept a unity of the virtues hypothesis (2007). Rather than a plethora of individual virtues that have somehow to be interwoven into a truth-conducive whole, they maintain that there is a single complex propensity that is truth-conducive. This approach may, however, simply sweep the problem under the rug. How the various sub-propensities have to relate to one another remains an issue whether they are construed as components of a single virtue or as separate virtues.

A second worry is illustrated in skeptical scenarios (see Montmarquet 1993). In a demon world, only by luck would an epistemic agent arrive at the truth. Putative epistemic virtues like rigor, conscientiousness, and attentiveness to evidence would not be truth-conducive. In such a world, there would be little or no knowledge. With respect to the dearth of knowledge, reliabilism is no worse off than other epistemological positions. A demon world is a maximally hostile epistemic environment. But the demon world raises an additional problem for the virtue reliabilist. In such a world, the scrupulous, diligent, rigorous investigator is not epistemically virtuous, for her efforts are not truth-conducive. Nor is she more virtuous than the gullible, cavalier jumper to conclusions. The fact that the scrupulous investigator did the best that could be done in the epistemic circumstances makes no difference. In such a world there is nothing epistemically admirable about her.

This might seem not a dreadful outcome. Perhaps we should agree that in a demon world, all pretensions to epistemic achievement are vain. In that case, epistemic agents are

hostage to epistemic fortune. Being virtuous is not wholly in their control. It requires an alignment of their character with the epistemic environment in which they find themselves. This is so even if they do not know and cannot know whether, or in what respects their epistemic environment is hostile. As a result, they do not know what, if any, epistemic character traits to foster.

Typically epistemic agents take responsibility for their beliefs, and other epistemic agents hold them responsible for their beliefs. In a demon world, Fred's belief that owls prefer chipmunks to field mice, although grounded in considerable, careful, cutting edge research in the feeding habits of owls, would be false. He and his compatriots have no reason to think it is false, however, and plenty of reason to think that it is true. Still, he is wrong. There are no such things as owls. Nevertheless, he investigated the issue responsibly. He reported his finding, and other birders took his word for it. Should they discover that they had been living in a demon world in which the things that look to be owls are actually holograms, they would conclude that his findings were false. But they would not hold him responsible for his error. He did, we may suppose, the best that could be done. Arguably, a reliabilist could agree. But he would have to say that whatever credit Fred is due, it is not strictly epistemic credit. For his efforts, despite what he and his peers had reason to think, were not truth-conducive.

Does virtue responsibilism fare better? It maintains that epistemically virtuous agents are agents who form, sustain, and revise their views as they should. More, of course, needs to be said to explicate as they should. But before doing so, we can note a few features of the position. Responsibility is keyed to obligation. If an agent ought to  $\phi$ , it is her responsibility to  $\phi$ , and *ceteris paribus* she can be blamed for failing to  $\phi$ . In a demon world, nothing epistemic agents

can do is truth-conducive. In such a world, then it is not their responsibility to discover and transmit truths. They cannot be blamed for failing to arrive at the truth (see Montmarquet).

A world that is not as a whole a demon world can be demonic in some respects. Then some, but not all methods or approaches we have good reason to think are truth-conducive are not. A character trait like open-mindedness or a method of inquiry like conducting randomized controlled clinical trials might, despite what we believe, fail to be truth-conducive. Nevertheless, the responsibilist would consider an agent epistemically virtuous if she formed her beliefs open-mindedly, while taking into account the results of randomized clinical trials, given that they are, as far as we can now tell, among the ways she ought to form her relevant beliefs. Ought implies can. If there was no way that an agent could have discovered that her methods were inadequate or her conclusions were false, she is not responsible for her failures. Epistemic responsibilism does not require truth-conduciveness<sup>2</sup>. The upside is that responsibilism does not issue impossible to satisfy demands. The downside is that it offers no assurance that by behaving in an epistemically virtuous way we improve our prospects of arriving at truth.

To decide whether a belief or action is responsible, we look at local, accessible aspects of the belief and its context. Even though we cannot be confident that an action or inference is truth-conducive, we can often tell whether it is epistemically responsible. Open-mindedness then can qualify as a responsibilist virtue even though we have no assurance that beliefs formed and sustained open-mindedly are any more likely to be true than beliefs formed narrow-mindedly. That is because open-mindedness figures in the constellation of attitudes that, as far as we can tell, promote our epistemic ends. Because the criteria for responsibility are local and accessible, epistemic agents are in a position to take responsibility for their own views, and to hold one another responsible for their views. Responsibilism thus can recognize epistemic virtue even in

demon worlds. Although neither agent arrives at the truth, and neither used methods that could, given the circumstances, arrive at the truth, the scrupulous investigator is epistemically more virtuous than the cavalier jumper to conclusions because she made the best use she could of the epistemic resources available to her -- information, methods, standards, and so forth. What makes her virtuous then is that she behaves responsibly. Epistemic responsibility does not construe agents as hostages to fortune. They ought to think and act responsibly, and will be counted as virtuous to the extent that they do so. If by behaving in an epistemically responsible manner they arrive at a true belief, that belief will qualify as knowledge (see Zagzebski 1996, Montmarquet 1993).

I have not yet said anything about what it is to form, sustain, and revise one's views as one should. The answer might seem clear. Even if truth-conduciveness itself is too much to demand, perhaps reasoning and acting in a way that one has good reason to think is truth-conducive could be the criterion of epistemic responsibility. Then true belief would remain our epistemic goal. This might be plausible if we thought that knowledge was the only epistemic achievement, since knowledge requires truth. But the purview of epistemology is broader than that.

## **Understanding**

Understanding is surely an epistemic achievement. The question is what sort of achievement it is. Some maintain that understanding is a sort of knowledge. In particular, it is knowledge why (see Kelp 2014, Sliwa 2015). Then to understand that faulty wiring caused the house to burn down is to know why the house burned down (see Pritchard 2010). On this construal, understanding is propositional. The understander believes the proposition that

expresses why something is the case. If this is right, a virtue epistemology of knowledge immediately and directly yields a virtue epistemology of understanding. Whatever virtues figure in knowing why the house burned down figure in understanding that faulty wiring was the cause. But whether understanding is primarily propositional is not obvious.

Kvanvig distinguishes between propositional and objectual understanding (2003). Not surprisingly, propositional understanding takes a proposition as the object of understanding: S understands that p is q. Objectual understanding takes a topic or subject matter as its object: S understands t. An epistemic agent then objectually understands chemistry, or feudalism, or the team's defensive strategy. Presumably if Mariah understands chemistry she knows why various chemical reactions occur, why various chemicals bond, and so forth. But it is unlikely that her understanding is exhausted by the relevant why-propositions she knows. Objectual understanding is holistic. In understanding chemistry, Mariah appreciates how a variety of epistemic commitments hang together in a mutually supportive network. These commitments are not just statements of fact; they include methods for assessing whether particular facts hold, whether they are relevant, and whether they support each other, as well as orientations toward the phenomena, and standards of acceptability that determine whether the system as a whole is worthy of reflective endorsement. Nor need each separate propositional element be acceptable on its own. Elsewhere, I have argued that an acceptable system of thought is in reflective equilibrium. Its commitments are reasonable in light of one another, and the system as a whole is as reasonable as any available alternative in light of our antecedently accepted commitments about the topic and the appropriate methods and standards for evaluating it (see Elgin 1996).

Not all elements of such a system are independently acceptable; some derive their standing from their place in the system. Were it not for the overall acceptability of the system,

there would be no reason to credit them, but the system is stronger and more creditable by virtue of their contribution. Initially there was no direct evidence of positrons. Nevertheless, physics was ontologically committed to their existence because there was strong evidence of electrons, and a strong commitment to symmetry. If symmetry holds and negatively charged electrons exist then, whether we can detect them or not, there are positively charged counterparts, that is positrons. A theory that endorsed the as yet undetected particle was deemed more plausible than a theory that violated symmetry, denying the existence of positrons or suspending judgment as to their existence.

I suggest that understanding is fundamentally objectual. Propositional understanding is derivative from objectual understanding. The explanation of Mariah's propositional understanding that hydrogen and oxygen bond to form water is that she objectually understands chemical bonding. An understanding, on this view, is an epistemic commitment to a relatively comprehensive, systematically linked body of information that is grounded in fact, is duly responsive to evidence, and enables non-trivial inference, argument and perhaps action regarding the phenomena it pertains to (Elgin 2017). Objectual understanding comes in degrees. Mariah can have some understanding of how oxygen and hydrogen bond even if she does not understand all of chemistry – indeed even if she does not understand everything about chemical bonding. But if she has no clue how hydrogen and oxygen together constitute water, she does not understand the phenomenon. In what follows, when I use the term 'understanding' I will mean objectual understanding.

The initial acceptability of the positron shows that understanding a subject can involve being committed to the truth of a proposition even if we lack direct evidence for it. But, I suggest, understanding requires distancing from truth itself. Science is one of humanity's

greatest epistemic achievements. To deny that the sciences embody understandings of their subject matters would be unreasonable. But scientific disciplines regularly and unblushingly use models and idealizations that are known not to be true. They invoke harmonic oscillators, ideal gases, infinite populations, and so forth. Such strategies are not mere heuristics or shorthands. They are currently ineliminable. Moreover, although scientists anticipate that current models and idealizations will be replaced by better ones, they do not expect and do not desire to eliminate such devices altogether. Because the devices provide good ways to represent complex phenomena, because they highlight factors that matter and marginalize factors that do not, even an ideal science would deploy them. I have labeled such devices felicitous falsehoods. They are felicitous in that they exemplify important factors that they share with the phenomena they concern in an epistemically tractable way. Nonetheless, because they streamline, simplify, amplify and omit, they are strictly false or (if not truth-apt) inaccurate representations of their objects (see Elgin 2017).

### **Normativity**

To endorse felicitous falsehoods requires abandoning or at least weakening our commitment to truth and truth-conduciveness. What then is the basis for epistemic normativity? One possibility is to immediately endorse virtue responsibilism. We might, for example, extend or amend Sosa's aptness criterion, according to which apt performances are accurate because adroit (2007). Then we could say that an epistemic propensity can be apt even if it is not truth-conducive, so long as it is conducive of an appropriate sort of epistemic accuracy. This is not my way. We need a criterion that specifies what makes something an epistemic virtue -- that is, a reason why particular modes of thought and action are what an epistemically responsible agent ought to do. For that I turn to Kant (1993).

One version of the categorical imperative is that a maxim is acceptable only if agents could endorse it as legislating members of a realm of ends. Such a maxim is not just a law that agents are subject to, it is a law that they make themselves subject to. And they do so because they think it appropriate that they be bound by such laws. I suggest that the same holds in the epistemic realm. An epistemic commitment is acceptable only if it would be accepted by a legislating member of a realm of epistemic ends. It is a commitment that the agent reflectively endorses because she believes that it is appropriate that her serious cognitive reasoning and action be bound by it. Let us call this the epistemic imperative.

In making and reflectively endorsing epistemic commitments -- practices, methods, standards of acceptance, models and modes of reasoning -- agents set constraints on their epistemically serious behavior. They agree to reason within the bounds they set because they think that their epistemic goals will be fostered by their being so bound. It is up to them to decide whether to reject every proposition they believe to be false. The scientific community has refused to impose such a restriction, thinking that its goals are better served by accepting felicitously false models and idealizations. By respecting the self-imposed constraints members of an epistemic community arrive at conclusions they can stand behind. Even if their goal is to believe the truth, their relation to that goal is different from the reliabilist. The Kantian responsibilist sets the goal for herself; the reliabilist takes it as given.

Kant does not maintain that an agent should act only on such maxims as he could reflectively endorse were he the philosopher king. Nor should we. In reflectively endorsing a commitment, an epistemic agent takes it that the other members of her intellectual community should consider it worthy of endorsement as well. In assessing probabilities, she adopts a policy of attending to base rates because she recognizes that ignoring base rates leads to error. She does

not think that attentiveness to base rates is a personal predilection, one that some responsible epistemic agents might favor while others do not. She thinks that everyone assessing probabilities ought to attend to base rates. Thus she thinks that her policy should be binding on the other members of the community who engage in probabilistic reasoning. But she also recognizes that her compatriots ought to act only on commitments that they can reflectively endorse. So, if they had insufficient reason to attend to base rates, they would be entitled to ignore them. And if she was wrong to think that her compatriots ought to appreciate the need to attend to base rates, she would be wrong to think that she ought to do so. In effect, she cross-calibrates her commitments by attending to the verdicts that would be given by other members of the community.

It might seem that the role of the community is relatively minor. At best, it shores up what the agent independently has reason to think and do. On the one hand, considering the reactions of other members of the community is a useful check. If others agree with me, it is less likely that I have made a mistake. But, on the other, if each of us carefully and responsibly amasses and assesses the same evidence and uses the same methods and standards to derive our conclusion, it is no surprise that we agree. Each of us, individually, reasoned correctly.

I suggest that the role of the community runs deeper. The need to be able to justify our commitments to others and to assess our judgments from other perspectives provides a measure of protection against failings that we would be hard pressed to discover by ourselves. Without the input of others an agent cannot, for example, discover that he is color blind, and would be unlikely to discover that he is prey to confirmation bias. The requirement that we be able to publicly articulate and justify pushes in the direction of clarity and rigor, forcing us to confront the question whether our commitments satisfy the standards we set for ourselves.

The epistemic imperative does not mandate that all epistemically responsible members of an epistemic community agree about everything in their joint purview. Some commitments are obligatory, some forbidden, some permissible. Any member of the community who violates an obligatory commitment, or endorses a forbidden one is in error. In reasoning probabilistically, one ought to respect the probability calculus; to do otherwise is a mistake. One ought not ignore base rates; to do so is a mistake. In other cases, though, the community sets bounds on the epistemically permissible, recognizing a range of cases that fall within those bounds. The community may agree that an acceptable conclusion must be highly probable. But they may disagree as to whether having a probability of .93 probable is good enough. Still, there are limits. Even the most tolerant of communities is apt do consider a probability of .47 to be outside the range of permissibility.

Legislators, whether political or epistemic, work together to enact laws. To be effective, they must convince their colleagues of the acceptability of the legislation they propose. This requires that the basis for a recommendation be publicly articulable and justifiable to other legislators in light of the commitments they share. Moreover, the realm of epistemic ends is the arena within which agents live their epistemic lives. So it is not enough that a proposal be independently acceptable. It must be integrable into a constellation of commitments that are collectively acceptable. There are strong coherence and consistency requirements on what they can endorse.

Who belongs to a realm of epistemic ends? Kant might say that every rational agent throughout history is a member. If so, this approach to epistemic normativity looks hopeless, since there is little we could justify to everyone. Rather, I suggest, a realm of ends is an idealization of what we standardly count as communities of inquiry. Epistemic agents constitute

realms out of shared epistemic goals, methods, standards and aspirations. The communities are largely self-constituting and self-regulating. The particle physics community gets to decide who has the qualifications to count as a particle physicist. The community of auto mechanics, who share expertise about how to fix cars, gets to decide who has the qualifications to count as an auto mechanic. Other realms are more fluid in their membership. But for a community of inquiry to be a realm of ends, it must satisfy certain epistemic/moral demands.

There is no guarantee that a suitably constituted community will not at some point endorse epistemically vicious ends. They might, for example, take as their end believing the deliverances of an oracle. This would run into trouble if those deliverances could not be supported by or mesh with what they gleaned from other sources – e.g., their own eyes, their experiments, the reports of other agents. They might try to preserve their commitment to the oracle by downplaying the tension or the trustworthiness of the other sources, but ultimately, if believing the oracle is epistemically vicious, the strategy will likely prove unstable. So long as the ends are cognitive, there will be pressure to repudiate epistemically vicious ends because they cannot be woven into a fabric of enduringly tenable commitments. Endorsing them will too greatly interfere with the realization of other cognitive ends and the use of available cognitive means..

Might a community set the standards too high? They could, and they have done so. Descartes set standards for knowledge that could not be met. The standards were at the outset plausible, and had they been met, we would have far greater epistemic security than we actually have. So, I suggest, the Cartesian goal was attractive. But when an epistemic community learns that Cartesian standards cannot be met, it devises other standards that, as far as possible, achieve

its epistemic objectives. To stick with Cartesian standards is to sacrifice resources for cognitively serious inference and action. For skepticism, by requiring us to suspend judgment, paralyzes.

Legislating members of a realm of epistemic ends must be in a suitable -- political -- sense, free and equal. Agreement among free and equal inquirers enhances the epistemic standing of a claim; coerced agreement does not. If inquirers are free, they can entertain any hypothesis, adopt any perspective, and advocate for any consideration they favor. If they are equal, they have equal opportunities to venture their opinions, to raise objections, and provide reasons for them. They have equal right to be heard, and have their views seriously entertained (see Longino 1990). This of course does not mean that every seriously proffered suggestion is equally worthy of reflective endorsement. Some are quickly, decisively and, given the commitments of the community, rightly dismissed. But if voices are silenced, or the epistemic value of their proposals is unduly deflated or inflated, the fact that a community of inquiry reaches consensus is not a sign of epistemic acceptability; nor is the fact that the community rejects a claim an epistemically sound reason to dismiss it (see Fricker 2007). Such epistemic injustice not only deprives individual agents of full participation in a realm of epistemic ends, it also deprives the community of information and insights that might be gleaned from their contributions.

It does not follow that an epistemic agent must submit every relevant consideration to a jury of her peers. If she has internalized the standards of her community, she can subject a consideration to implicit peer review. Nor need she vet routine commitments one by one. The community has developed heuristics that enable her to justifiably accept wide swaths of considerations at the same time. If she seems to see a not unexpected, reasonably large object in the center of her visual field in broad daylight, she is within her epistemic rights to judge that she

sees it, since she belongs to a community -- in this case a very broad community -- that credits the deliverances of vision in such cases. The critical point, though, is that the community she relies on must be one whose commitments she reflectively endorses. The fact that some community or other accepts a consideration does not give her sufficient reason to accept it.

Still, there are communities and communities. We might be willing to agree that the community of particle physics or the community of auto mechanics comes close enough to the ideal of a realm of epistemic ends that we should reflectively endorse their deliverances. But what about the astrology community? Even if they have managed to develop and reflectively endorse a coherent constellation of commitments, we ought not accept their claims. Luckily, we do not have to. Epistemic communities overlap and share commitments. Although novices are in no position to vet the findings of particle physics, members of other scientific communities can do so. Because they accept many of the same methods, laws, and standards of acceptance, they can judge whether the common commitments are being respected. Since astrology and astronomy share an interest in celestial bodies, astronomy is likely to be well positioned to raise doubts about the causal claims astrology makes and endorses. Moreover, inasmuch as astrology makes predictions, even novices can judge whether the predictions are clear enough to be tested, are borne out often enough when they are tested, and predict things that would not have been expected to happen if the causal claims of astrology were not true. Broader communities of inquiry thus have resources for evaluating the claims of specialized communities. Sometimes, to be sure, we will be wrong. And the experts will explain why we are wrong. This is one of the powers of the publicity requirement. It provides a basis for intersubjective evaluation and correction.

### **Virtue Redux**

We have not left virtue responsibility behind. 'Free and equal' is a requirement on the political structure of a realm of ends. It specifies the relations in which compatriots should stand to one another. It says nothing about what is required for agents to members of an epistemic realm. Members of a community with no epistemic aspirations could be free and equal. Their verdicts might be completely, unobjectionably arbitrary. 'Free and equal' only insures against bias; it does not insure against caprice. For a community to be a realm of epistemic ends, its members must reflectively endorse the commitments they accept because, they think that accepting those commitments fosters their epistemic ends. Epistemic virtues underwrite decisions about what considerations it is appropriate to proffer, how it is appropriate to present them, and how to properly conduct deliberations. In proffering a consideration as worthy of acceptance, an agent has the responsibility to insure, as far as possible, that her proposal is worthy of being accepted, or at least seriously entertained, by her compatriots. That is, she puts it forth as satisfying the epistemic standards that they share.

Some virtues directly follow from the nature of the realm of ends. For a commitment to be acceptable, an agent needs to be able to reflectively endorse it as a member of a realm of ends. But to be in a position to do that, she needs to be able to consider how the proposal looks from the perspective of her epistemic compatriots. She thus needs to be open-minded. This is not to say, of course, that she needs to, or even ought to, have a propensity to assess a proposal from every possible perspective. She is at liberty to ignore the perspective of space aliens since no one in her community can give a cogent reason for taking that perspective seriously. But in order to reflectively endorse her proposal herself, she must consider how it looks from a suitable variety of points of view. As we learn more about a topic, we learn more about what perspectives on it ought to be entertained.

A measure of intellectual tenacity is also mandatory. If an agent is to responsibly proffer a consideration as worth of the community's acceptance, she must be willing and able to stand behind it -- to defend it long enough and well enough for it to get a fair hearing. If she is intellectually irresolute, if she readily abandons an idea when it meets the least resistance, her compatriots have no reason to take her proposal seriously. Nor does she. For she has no reason to think what she offers is a candidate for epistemic commitment rather than a passing whim. Her recognition that she can give her compatriots solid reasons for her contention gives her reason to think it is worthy of her own reflective endorsement.

Other virtues emerge from our evolving understanding of the phenomena and how to investigate them. Once we recognize that empirical claims should be backed by evidence, we take attentiveness to evidence to be a virtue. Once we recognize that evidence can be biased, we fine-tune that virtue so that it includes conscientiousness in amassing and evaluating evidence. Once we recognize a general human proclivity to make certain sorts errors, there emerge virtues of favoring strategies that protect against such errors. So, for example, a propensity to recast a probabilistic inference in terms of relative frequency comes to be recognized as an epistemic virtue (see Gigerenzer 2000).

Legislating members of a realm of epistemic ends must be, and be recognizable as trustworthy. For they depend on one another to underwrite their judgments and serve their collective epistemic ends. Trustworthiness would normally be characterized as a moral virtue. But since it figures ineliminably in the collective deliberations of epistemic agents, it is also an epistemic virtue. If members of an epistemic community did not consider their colleagues trustworthy, they would have no reason to credit their claims or to adjust their own beliefs in light of their colleagues' responses. For agents to be trustworthy, they need to be competent and

sincere (Williams 2002)<sup>3</sup>. A variety of virtues figure in epistemic competence. Epistemic agents should display a propensity to properly wield the community's relevant epistemic commitments in their cognitively serious reasoning and action; they must be willing and able to deploy the commitments properly. But they do not owe slavish allegiance to those commitments. So they must have and use critical thinking skills that enable them to reason rigorously both within the framework the commitments set and about the adequacy of the framework itself. Moreover, an epistemic community's constellation of commitments must admit of expansion, elaboration, and correction. It must be feasible to discover problems in the current commitments and feasible to devise, propose, and implement changes. This requires both intellectual humility and intellectual courage.

The requirement of sincerity is the requirement that the considerations proffered for acceptance by the realm of epistemic ends be sincerely offered -- that is, the proposer must think that she has reasons or evidence that make them worthy of being accepted, or at least seriously entertained. She must also be sincerely willing to rescind her endorsement or challenge received commitments if the verdict goes against her. On this view, the central role for the epistemic virtues is that they are what it takes to be capable of functioning as a legislating member of a realm of epistemic ends.

The account I've offered does not yield a single epistemic virtue or list of epistemic virtues. What virtues are needed to promote its goals is going to vary with the ends the various realms of ends set and the resources they have at their disposal. So the emergence of new virtues goes hand in hand with a deepening and broadening understanding of the subject matter.

## **Related Topics**

Epistemic virtue reliabilism

Epistemic virtue responsibilism

Virtue and Knowledge

## **Further Reading**

Battaly, Heather (2008). 'Virtue Epistemology', *Philosophy Compass* 3: 639-663. Discusses the various approaches to virtue epistemology.

Elgin, Catherine Z. (2016). 'Understanding', *Routledge Encyclopedia of Philosophy*. London: Routledge. Gives a general overview of contemporary debates on the nature of understanding.

Greco, John and Turri, John, "Virtue Epistemology", *The Stanford Encyclopedia of Philosophy*. Winter 2016, <<http://plato.stanford.edu/archives/win2016/entries/epistemology-virtue/>>.

Gives a good overview of the current state of virtue epistemology.

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1 There are hybrid positions as well. For current purposes it does no harm to ignore them.

2 Zabzebski thinks that reliability is required for epistemic virtue. If so, one cannot be epistemically virtuous in a demon world.

3 Williams focuses on truthfulness. But the importance of competence and sincerity (construed as being well-intentioned) extends to the broader category of trustworthiness.