

The virtue of curiosity¹

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Abstract:

A thriving project in contemporary epistemology concerns identifying and explicating the epistemic virtues. Although there is little sustained argument for this claim, a number of prominent sources suggest that curiosity is an epistemic virtue. In this paper, I provide an account of the virtue of curiosity. After arguing that virtuous curiosity must be appropriately discerning, timely and exacting, I then situate my account in relation to two broader questions for virtue responsibilists: what sort of motivations are required for epistemic virtue? and do epistemic virtues need to be reliable? I will sketch an account on which curiosity is only virtuous when rooted in a *non-instrumental* appreciation of epistemic goods, before arguing that curiosity can exhibit intellectual virtue irrespective of whether one is reliable in satisfying it.

Keywords: Curiosity – Virtue epistemology – Responsibilism – Motivation – Reliability – Epistemic value – Inquiry

0. Introduction & Preliminaries

A thriving project in contemporary epistemology concerns identifying and explicating the epistemic virtues.² Although there is little sustained argument for this claim, some prominent sources have suggested that curiosity is one such virtue.^{3,4} In this paper, I outline a theory of the virtue of curiosity—attempting to clarify how it relates to recent psychological work on the *state* of curiosity (§1), outlining and hazarding an explanation for the ways in which curiosity can exhibit excess and deficiency (§2), investigating what sort of motivations are compatible with virtuous curiosity (§3), and finally by rejecting the need for any reliability condition on the virtue of curiosity (§4).

¹ Forthcoming in *Episteme* – please cite published version!

² Throughout, I use ‘intellectual’ and ‘epistemic’ virtue interchangeably.

³ For example, some of the most influential monographs on virtue responsibilism suggest that curiosity is a virtue such as Baehr (2011: 19, 21) and Zagzebski (1996: *passim*). Furthermore, it has been categorised as an intellectual virtue in the (2017) *Stanford Encyclopedia* entry on Virtue Epistemology—unfortunately, the citations provided for this claim are Whitcomb’s (2010) paper dealing with the nature of curiosity rather than its status as a virtue, and an exegetical piece on Nietzsche.

⁴ Baumgarten (2001) treats the *moral* dimensions of curiosity, whilst Manson (2012) also discusses the moral contours of curiosity in outlining a virtue he calls ‘epistemic restraint’. Other purported virtues that are plausibly related to curiosity, such as ‘inquisitiveness’, have also been subject of some discussion: e.g. Watson (2015).

Before we begin, some brief theoretical orienteering. Within virtue epistemology, there are two broad approaches.⁵ One approach—often called ‘virtue reliabilism’ and exemplified by Greco (2010) or Sosa (2007)—discusses *faculty*-virtues such as the faculty of memory or eyesight. This approach often seeks to understand these faculty-virtues primarily in order to argue that certain epistemic states, paradigmatically knowledge, are a result of appropriately employing our faculties. A second approach—often called ‘virtue responsibilism’ and exemplified by Zagzebski (1996) or Baehr (2011)—seeks to identify and understand *character*-virtues that are the intellectual analogues of familiar virtues (like benevolence or courage) discussed in moral philosophy. Broadly speaking, the latter approach has a greater concern with evaluating agents rather than the aetiology of individual epistemic states. My approach here falls under the responsibilist banner and, furthermore, is not at all concerned with providing a reductive account of knowledge—or any other epistemic state—in terms of intellectual virtue.

1. Curiosity: state, trait, and virtue?

The first important disambiguation we should make is that attributions of curiosity have a dual-meaning. When we say that someone is curious, we might either refer to a *state* or a *trait*. Put roughly, the former is the occurrent affective experience that one has when presently curious about something, whilst the latter is a standing disposition or propensity for experiencing curiosity.

Although there is not a great deal of consensus on the schematic criteria that must be satisfied for something to count as an epistemic virtue, the responsibilist orthodoxy—drawing on the veritable Aristotelean tradition—agrees that virtues are a class of intellectual character traits: they are *enduring dispositions* (virtues are stable; they cannot be a one-off), they are *cultivated* (in that their possession depends, loosely, on one’s effort and choices over the course of a life), and they are *excellences* (insofar as they are amenable to, and receive, positive normative evaluation). Therefore, we should be focusing on the *trait* of curiosity—individual episodes of experienced state-curiosity cannot qualify as cultivated, dispositional excellences.

So, what sort of standing disposition might the virtue of curiosity amount to? In this paper, I will be operating with the natural assumption that the virtue of curiosity will, at least, involve excellence with respect to one’s disposition to experience curiosity. That is, I will assume that: (i) the trait of curiosity is possessed by agents with some sort of disposition to be in the state of curiosity, and (ii) if we can identify an *intellectually excellent* disposition to be curious—one that captures and explains our normative judgements about certain good and bad forms of intellectual conduct—then we will have identified a plausible candidate epistemic virtue. Of course, one might adopt an alternative approach that seeks to trace normative judgements about curiosity back to the exercise or absence of other

⁵ The extent to which these approaches are complementary or in tension is a matter of debate. See Fleisher (2017) for discussion.

independent epistemic virtues. On such an alternative view, there would be no distinct ‘virtue of curiosity’; rather, our ordinary practice of praising (and dispraising) agents for their (lack of) curiosity could be explained by citing other intellectual excellences and deficiencies. This is not the approach I take here.⁶ Rather, I provide a way to vindicate the idea that curiosity is a virtue by investigating the idea that it involves an excellent disposition to be curious. Given that this will be my approach, it is worth briefly characterising the nature of state-curiosity.

Whilst curiosity is a relatively underexplored topic, there is some extant debate in philosophy, psychology, and cognitive science on the nature of occurrent or state curiosity.⁷ One area of consensus is that curiosity is a very basic mental state or attitude that is widely present in the animal kingdom.⁸ Secondly, it is often observed that curiosity has a desire-like and emotion-like profile: to be curious involves both a distinctive feeling, and elicits a motivation to improve one’s epistemic standing.⁹ And thirdly, in the philosophical literature, two popular ideas are that curiosity is particularly concerned with the answering of *questions* and the acquisition of *knowledge*.¹⁰ For our purposes, the main lesson from the literature is that the state of curiosity is an affective state that is: *directed* at some object, *motivates inquiry* in all sorts of creatures, and is *satisfied* by acquiring information (e.g. by knowing it).

With this rough characterisation in mind, it is easy to see why you could be tempted to think that experienced curiosity has an intimate relationship with epistemic virtue. Curiosity, one might think, is normatively important because it *motivates* us to engage in epistemically valuable projects of inquiry. We often assign value to epistemic projects that do not merely service practical or prudential goals—it is eminently plausible to think that curiosity plays an essential role in prompting these sorts of inquiry that would not otherwise be motivated by different affective states such as hunger or cold. Insofar as the intellectually virtuous agent is someone who is motivated to engage in epistemically valuable projects of inquiry, it is natural to suppose that such a character will, by the same token, be a curious agent.

⁶ However, I do not reject this approach out of hand. I am starting from plausible assumptions, rather than applying any comprehensive theory of virtue-individuation. It remains open that someone with such a comprehensive theory might reject the suggestion that curiosity is a distinct virtue. Nonetheless, I take it that the burden of proof is with the proponent of such a view to motivate it. Given that we routinely praise agents for their curiosity, several influential theorists already endorse the claim that curiosity is an intellectual virtue, and I am not aware of any already-theorised virtues that can do the fine-grained work of capturing our normative judgements about curiosity better than the account I outline in this paper, there are strong—albeit defeasible—reasons for holding that curiosity is a distinct virtue.

⁷ Loewenstein (1994) provides an excellent overview of psychological approaches to curiosity. Some more recent developments are discussed by Silvia (2006) and by Kidd & Hayden (2015).

⁸ In particular, see Carruthers (2018) for philosophical discussion.

⁹ This characterisation elides certain complexities that need not detain us here. For example, one challenge within the literature is rendering the content of the desire elicited by curiosity consistently with the conceptual limitations of various simple creatures that can experience curiosity.

¹⁰ See Whitcomb (2010) for thorough discussion of curiosity’s connection with knowledge, and Friedman (2013) or Carruthers (2018) for the connection with questions.

However, this promissory vindication relies on the vague idea that epistemically virtuous curiosity is some sort of disposition to experience curiosity. To make further progress we must clarify what sort of curious disposition should be merited as a virtue.

2. Excessive, deficient & skilful curiosity

A very simple attempt to identify the relationship between the state and virtuous trait of curiosity might start with the following proposal, the failure of which will inform our later discussion:

? Liberal Disposition: The virtue of curiosity is a disposition to frequently experience, and attempt to satisfy, curiosity.

In favour of this proposal is the observation that it accords with a plausible rendering of the relationship between certain other affective states and traits. For instance, it is natural to say that an angry person is just someone with a disposition to frequently experience and be moved to exhibit anger.

However, **Liberal Disposition** clearly fails to constitute an epistemic virtue. Simply experiencing curiosity is sufficient to exhibit such a disposition. But, other canonical epistemic virtues cannot be attributed *merely* on the basis of a subject having an experience. Rather, a subject exhibits virtue only when their response to a situation stems from an ability to appropriately regulate their intellectual conduct and affective responses. Unlike the descriptive observation that a subject is disposed to have certain experiences, virtue-attributions are inescapably *normative*. Consider: on the traditional account derived from Aristotle, virtue lies at a mean between vicious excess and vicious deficiency. Conscientiousness is a paradigmatic epistemic virtue. One cannot, for instance, exhibit *too much* conscientiousness because, as a virtue, conscientiousness lies at the mean between the vicious excess of fussiness and the vicious deficiency of carelessness. This highlights the fatal flaw with **Liberal Disposition**. It is easy to conceive of ways one might manifest a liberal disposition to curiosity that: (i) betrays vicious excess or vicious deficiency to the detriment of your intellectual character, or (ii) whilst not obviously vicious, does not plausibly count as intellectually excellent either.

In order to refine our discussion, we can use common-sense judgements to identify prominent types of intellectual failure that can beset the disposition to be curious, before looking for a unifying story below.

Discernment. Curiosity can aim at different things. In light of this, consider the following normative observation: it is intellectually better to be more disposed to curiosity about certain things and less

about others.¹¹ So, one can exhibit excess by being disposed to curiosity about epistemically trivial topics: overweening obsession with football transfers does not exhibit epistemic virtue, whilst the same degree of curiosity regarding a fundamental question of science is grounds for intellectual admiration. Our normative evaluations, in this sense, do not just respond to our disposition to a certain quantity or degree of curiosity—they are also sensitive to what we are curious about. And one can exhibit deficiency through being insufficiently disposed to curiosity about significant epistemic topics. Whilst we don't expect that every agent will be curious about every significant area of inquiry, it is implausible to think that an agent can exhibit intellectual excellence if they routinely fail to exhibit any curiosity about nature, the sciences, philosophy, the arts, history, and so forth. Here, such mild epistemic elitism is rather plausible: we typically take an intellectual life filled with wonder about art and science to be more intellectually valuable than one preoccupied with sports and gossip. Of course, this isn't to say that it is vicious to be periodically curious about sports, only that one's overall disposition towards curiosity must typically be oriented towards the right sort of objects. Furthermore, we shouldn't suppose that the appropriate objects of curiosity can be fully settled with reference to topics or subject-matters. One can exhibit a failure by only ever becoming curious about rather basic questions, regardless of what subject-matter one is curious about. For instance, a student who is preoccupied with the dates of significant historical events but never their causes seems to exhibit an epistemic deficiency. Therefore, the virtuous agent (if we assume the view that curiosity aims at questions) will possess the disposition to be curious about certain significant questions rather than others—we can call this the requirement of *discernment*.

Exactingness. Even if one reliably shows discernment in becoming curious about the right questions, one can exhibit an intellectual failing by possessing the disposition to cease curiosity prematurely, or to continue to experience curiosity to the point of pathology. One important variety of this failing concerns when we take our curiosity to be satisfied. Consider that—on any plausible semantics—why-questions generally admit of more or less comprehensive true answers. For instance, a student of 20th century European history might be curious: why did the Weimar Republic undergo hyperinflation in 1918-1924? They might receive the true answer, via reliable testimony, that the Republic adopted imprudent economic policies. However, whilst true, this answer doesn't afford any insight into the nuances or distinguishing features of this historical episode. Routinely taking such information to satisfy one's curiosity would not yield any deep knowledge or insight into any topic—one's intellectual life would be well suited for trivia, but little else. The corresponding excess here is perhaps less common, occurring when one's curiosity leads them to be preoccupied about small and

¹¹ This should not be read as a claim about *degrees* of occurrent curiosity, but rather about one's disposition to be curious about certain things *tout court*. Whilst there may be something to be said for this idea, I do not wish to claim that virtue requires any particular degree of curiosity. For instance, if two agents differ in their degree of curiosity, but whatever degree of curiosity they experience suffices to motivate them to inquire, this seems on a par from the perspective of normative evaluation. Thanks to an anonymous referee for pressing me to clarify this point.

insignificant details. For instance, there will be some items in a complete causal explanation for some phenomenon that are simply too trivial—in the sense of being uninformative—to spend time inquiring into. Another related type of failure concerns inappropriate cessation and continuation of curiosity in response to difficulties and obstacles. Again, this most often manifests itself as a deficiency—ceasing curiosity as a result of being overly susceptible to minor setbacks. At least insofar as we consider paradigmatically praiseworthy intellectual characters, their curiosity will not evaporate at the slightest indication of difficulty in completing their inquiries. Less commonly, it is arguably possible to also be inappropriately curious by persisting in the face of truly insurmountable adversity—for instance, one should not be consumed with curiosity about ‘whether I can build a perpetual motion machine’ over the course of many years, refusing to acknowledge the overwhelming evidence that it will be impossible.¹² In these sense, virtuous curiosity must be *exacting*: it should prompt the inquirer to overcome reasonable difficulties and attempt to acquire comprehensive answers to significant questions.

Timeliness. Thirdly, there also seems to be a form of excess in being motivated by curiosity in the wrong circumstances. Curiosity exerts a powerful motivating influence, and makes demands upon our cognitive resources when it goes unsatisfied—as such, the virtuous agent will regulate their curiosity accordingly. One controversial form of this excess is curiosity impinging upon non-intellectual matters—for example, encroaching on your valuable personal relationships. Whether this sort of consideration precludes an instance of curiosity from exhibiting *epistemic* virtue depends on whether such excesses can be explained away as *moral* vice, and subsequently, on whether it is legitimate to cleave apart the intellectual and moral virtues into distinct evaluative spheres.¹³ Without settling this controversy, there are clearly cases where curiosity can exhibit vice by motivating inquiry in circumstances that are inappropriate from a purely intellectual perspective. This occurs in the following common scenario: when you are engaged in some valuable intellectual inquiry into *x* but your curiosity about *y* interferes with your inquiry.¹⁴ Oftentimes this takes the form of banal, recalcitrant curiosity into trivial matters—the latest gossip, football scores, and so forth. But you can also be curious about the right thing in the wrong circumstances. For instance, it is not a virtue if incessant curiosity about novel ideas prevents the academic from ever completing any rigorous research project. Curiosity in inappropriate circumstances amounts to a distinct regulative failure—a virtuous trait will involve the disposition to *timely* curiosity.

¹² Strangely, this example is not an entirely idle worry. Such is the volume of applications, some international patent offices have adopted exceptions (that do not apply to any other type of patent) to discourage attempts to register perpetual motion machines.

¹³ Whilst Aristotle suggests that the intellectual and moral virtues are different in kind, some contemporary philosophers have doubted this claim. For instance, some of Aristotle’s motivations for his view arguably stem from the dubious division of the soul into distinct thinking and feeling parts. See Zagzebski (1996: 137-158) for a thorough discussion and critique of Aristotle’s arguments on this front.

¹⁴ Some psychologists, such as Berlyne, call the drive for novel stimuli ‘diversive curiosity’.

In short, we have found that intellectual virtues cannot *merely* be dispositions to certain experiences. Rather, virtues must be determined by what Aristotle calls an *orthos logos*—a sort of skill in regulating one’s feelings and issuing responses that are appropriate to the circumstances. Just as experienced anger must be regulated by a virtue of the temperament, so we have found that experienced curiosity must also be regulated by some virtuous intellectual disposition. In order to get a better grip on the virtue of curiosity, it is worth asking whether the considerations identified above have provided us with any purchase on whether there is any broader account unifying these regulatory failures?

Here is the sketch of an explanation: It is the role of curiosity to motivate inquiry. A common theme running through the failures identified above is the observation that certain approaches to inquiring are ineffective ways securing of *valuable epistemic goods*. This coheres with the rough and commonplace intuition—albeit hard to precisify—that certain forms of intellectual activity are more epistemically fertile than others: one can come to know or understand *more* in virtue of engaging with certain questions and topics over others, by engaging in sustained rather than superficial inquiry, and by exhibiting reasonable tenacity rather than dilettantism or flaccidity. Quantifying epistemic states such as knowledge or understanding is a difficult project that has been largely neglected by epistemologists—after all, you might come to know a vast *number* of propositions about football transfers, whilst still naturally being thought to have learned less than had you spent the same time studying chemistry.¹⁵ Nonetheless, even in lieu of a full account of how to measure epistemic states, the general idea still fits: virtuous curiosity will be regulated by a sensitivity to the fact that certain inquiries are epistemically more fertile than others—given our limited intellectual energy and cognitive ability, the virtuous agent will tend to experience curiosity in such a way as to motivate them to substantially improve their epistemic position, rather than be moved to merely acquire inconsequential and fragmented pieces of information.

Our discussion, then, has suggested the following dispositional excellence regarding curiosity:

? Skilful Disposition: The virtue of curiosity is a disposition to experience, and attempt to satisfy, curiosity that is appropriately discerning, exacting and timely.

By exhibiting this disposition, an epistemic agent will be characteristically motivated to engage in projects of inquiry that will be epistemically enriching—thus, at first pass, this is a plausible presification of the virtue of curiosity.

Having made some progress in refining the virtue of curiosity, we can now turn to consider it in light of two theoretical issues that have been discussed by virtue-responsibilists. Firstly, in §3 I will discuss

¹⁵ Treanor (2013) provides the best discussion of this issue that I am aware of.

the relationship between curiosity and motivation, before turning to the relationship between curiosity and reliability in §4.

3. Curiosity & Motivations

Within responsibilist virtue epistemology, one popular idea is that motivations play an important role in determining the status of an intellectual trait as a virtue. For instance, Zagzebski claims that is *constitutive* of intellectual virtues that they “are all based in the motivation for knowledge”, where ‘knowledge’ should be read as encompassing epistemic goods in general.¹⁶ At first pass one might think this criterion unequivocally supports the contention that the disposition to curiosity can count as intellectually virtuous, given that by its very nature curiosity is a motivational state aimed at improving one’s epistemic position—it seems to involve motivation for epistemic goods *par excellence*.

However, whilst agreeing with the general thought that facts about motivations are important for delineating virtues, I suggest that reflection on the different motivational structures an agent might possess yields a rather more complex picture that we might initially have expected. Indeed, I will suggest that motivational facts can actually *debar* certain dispositions to curiosity from manifesting intellectual virtue (§3.1) before attempting to sketch a more precise account of the required motivational structure for virtuous curiosity (§3.2).

3.1. Vicious Motivations

An agent can experience motivating affective states in virtue of underlying facts about what they value and care about. For instance, someone might feel disgust directed at a piece of meat as a result of their long-standing belief that carnivorous diets are immoral. Interesting, such underlying explanatory facts might be rather idiosyncratic and even non-transparent to us—e.g. one might be angry at the smell of a cigar because it unwittingly evokes an association with a much-disliked family member. This is just to say that our tendency to experience many basic emotions admits of explanation. Furthermore, these further explanatory features of our psychology—the vegetarianism, the dislike of the family-member—can themselves be evaluated as to whether they can undergird positive evaluation in some domain or other. For instance, as we will discuss below, there is a long-

¹⁶ See Zagzebski (1996: 167). Similar thoughts are to be found throughout Baehr (2011). And Montmarquet (1993: 21) emphasises similar motivations regarding the acquisition of truth and avoidance of error. Others—such as Roberts and Woods (2007)—disagree with this line of thought, suggesting that there is no single motivation unifying the intellectual virtues.

standing discussion in moral philosophy as to what sort of motivations one must have in order to warrant praise for one's conduct.

In light of this, consider the following typically Hobbesian passage on how we might explain differences in intellectual character:

The passions that most of all cause the differences of wit are principally more or less desire of power, of riches, of knowledge and of honour. All of which may be reduced to the first—that is, desire of power. For riches, knowledge and honour are but several sorts of power. [Hobbes 1998: 48]

Zagzebski (1996: 169-170) claims that the truth of such a view would not impact any determination of epistemic virtue, suggesting that it is irrelevant if the motivation for knowledge is *derivative* on the desire for power. However, I disagree—attributing the disposition to curiosity as an intellectual virtue cannot be reconciled with certain motivational structures, such as being entirely derivative on lust for power. This can be appreciated by considering the following scenario:

Desire of Power. Clement is a scientist who reliably becomes curious about the latest scientific controversies and inquires into them in order to acquire knowledge. However, this disposition has been cultivated at length by Clement as it enables him to realise his intense desire for intellectual recognition by his colleagues, to trump the achievements of his rivals, and to gain professional influence. His underlying motivations are apparent when, if a puzzling scientific phenomena is explained by an 'opponent', Clement experiences bitter regret rather than taking any pleasure in the satisfaction of his curiosity.

I suggest that in such cases—when an agent's motivation for epistemic goods is counterfactually dependent on their desire for acclaim and social standing—their disposition towards curiosity does not manifest epistemic virtue, even though it might be skilful in the sense of being appropriately discerning, exacting and timely.¹⁷ A rough way to explain this thought is with the observation that such cases feature a motivation to acquire epistemic goods, but without showing any appreciation of them. Consider this by way of the analogy with anger suggested above. If an agent feels anger and contributes money to anti-smoking causes solely in virtue of the smell of cigar smoke reminding them of a much-disliked family member, then on many accounts they lack moral virtue—they are motivated to act morally without any appreciation for the relevant moral factors making the tobacco industry immoral. Similarly, when you feel curious and conduct scientific research from a deep-seated desire to dominate your opponents, you lack epistemic virtue because you are motivated to acquire knowledge without displaying any appreciation for the relevant epistemic factors making scientific

¹⁷ I leave the question of how such motivations affect the attribution of other intellectual virtues as an interesting question for future research. For instance, whilst it seems that one can possess the *trait* of conscientiousness even if this is derivative from power-lust, it is an open question whether the possession of this trait ought to count as a *virtue* in such cases.

research valuable. Below, in the next section, I will substantiate this thought in more detail. But first, a potential objection.

A fatal—although I think misguided—objection to my line of thought denies that such discreditable motivations can engender genuine curiosity. This is an interesting worry because little philosophical attention has been devoted to what separates curiosity from merely desiring to answer a question.¹⁸ Brief reflection suggests there *is* a clear difference between curiosity and desiring to answer a question. Whilst we can form epistemic desires directly from external influence, curiosity seems to paradigmatically arise endogenously. Consider: you might desire to find out the answer to a question— “how many reams of paper are in the cupboard?”—simply because your boss requested you to find out the answer. It seems obvious that such a desire does not *entail* curiosity about how many reams of paper are in the cupboard. Given that there is such a distinction, we need to be sure that curiosity really can be borne from non-virtuous intellectual motives.

In fact, curiosity can stem from a variety of motivational structures, not all of which warrant virtue-ascription. Inquirers with a diversity variety of peculiar motivations exist, and it is rather implausible to deny that they can experience curiosity about the progress of their endeavours. For instance, if a Bond villain wakes up and, without any external pressure, is consumed with the desire to find out whether 007 has fallen into his trap, it is difficult to motivate the view that this attitude cannot possibly count as curiosity just because it stems from a motivation for world-domination. Notably, experiencing curiosity about some question *does not require considering, or inferring from, one's background motivations*. Regardless of whether one's preoccupations are with advancing scientific knowledge or with world-domination, long-running interests and goals simply tend to generate—and form the explanatory basis for—curiosity relevant to these goals and interests. Indeed, this holds for entirely mundane cases of curiosity that are neither virtuous nor vicious. For instance, the explanation for my occurrent curiosity about the Blues football score is the fact that I support the Blues and desire my team to perform well—yet, I don't entertain these motivations prior to experiencing curiosity on Saturday afternoon about the score. Rather, my curiosity just arises as a predictable result of these concerns. Such examples show that intellectually pure motivations are not constitutive of, nor necessary for, experiencing curiosity. This intuition is vindicated by the consensus in the psychological, neuroscientific, and philosophical literature that curiosity can be experienced by cognitively unsophisticated animals. It is implausible to claim that the curiosity of the fieldmouse is explained by any appreciation of intellectual goods.

¹⁸ For example, each of Whitcomb (2010), Friedman (2013) and Carruthers (2018) attempt to pin down the nature of curiosity by identifying it with an attitude or desire that aims at answering questions.

In summary: there is no reason to think that curiosity cannot be rooted in inappropriate motivations, such a lust for power. When curiosity is dependent on such motivations, it does not manifest intellectual virtue—even if it otherwise exhibits a skilful disposition.

3.2 Virtuous Motivations

In this section I will try to refine our understanding of what the right sort of motivational structure is for virtuous curiosity, and distinguish it from a different way to exhibit epistemic virtue.

One thought that appears throughout the responsibilist literature is the idea that intellectual virtues should be grounded in something like a ‘love’ of epistemic goods, where this is taken to be a sort of appreciation of the value of knowledge, understanding, and so forth.¹⁹ In light of this, we might wonder whether inquiry is virtuous when it is motivated by this sort of epistemic love? Whilst this is a suggestive idea, it is not yet sufficiently precise to clarify the preconditions for virtuous curiosity. For, it seems that one can be curious—in an appropriately discerning, timely and exacting way—without ever entertaining any thoughts about epistemic value. This is because, as we have discussed, curiosity often arises spontaneously rather than from any sort of inferential reasoning. Therefore, we need to clarify the sense in which curiosity can rightly be said to be motivated by an appreciation of epistemic value.

To sharpen our investigation, it will be helpful to further consider a rough parallel with a motivational debate in moral philosophy alluded to earlier. An ongoing controversy concerns what sort of motivations are required in order to deserve moral praise for performing an action—what motivations have moral worth?²⁰ Philosophers have divided into broadly two camps on this issue: the *de dicto* and the *de re*. The *de dicto* side claims that morally right actions are praiseworthy when they are motivated specifically *by the concern to do the morally right thing*. That is, this position holds that morally worthy motivations are motivations that refer to morality. This position, in addition to being rather intuitive, has the advantage of capturing our deliberation in cases of moral dilemma; we are uncertain what to do, because we are uncertain what the *right thing* to do is.²¹ However, a number of criticisms have been raised against this view. Some have argued that *de dicto* motivations are inappropriately ‘fetishistic’.²² For example, it has been suggested that you have “one thought too many” if you bring moral concepts into your deliberation about whether to alleviate someone’s immediate suffering—shouldn’t one just be motivated to act directly by the suffering?²³ Another related criticism is that being motivated by the thought of doing the right thing doesn’t display any responsiveness to the salient features of the situation, leaving open the possibility of only accidentally

¹⁹ E.g. see comments throughout Baehr (2011) and Roberts and Woods (2007), especially chapter 6.

²⁰ The modern precursor to this debate is often taken to be Smith (1994), though this is of course a question that has a long pedigree—for instance, found in the Kantian claim that one should act from moral duty.

²¹ Sliwa (2016) presses this point.

²² See Drier (2000) for discussion.

²³ This general thought is due to Williams (1981), though the precise interpretation is controversial.

reaching the morally correct conclusion.²⁴ These worries suggest an alternative *de re* view of appropriate motivations: roughly, that one ought to be motivated by the morally salient features of the situation—e.g. the suffering of the person—rather than by entertaining any moral concepts.

I suggest that a roughly analogous distinction can be drawn regarding one's motivations to inquire.

Firstly, one can engage in a valuable epistemic activity from the very thought that so doing is an intellectually good thing to do. Consider two examples:

Logic: Miles is practicing some logic exercises. He isn't a natural and finds the practice frustrating, but recognises that going through a large number of exercises is the best way to become proficient and that it will be intellectually good for him to overcome this challenge.

Project: Julie has been working on an article about Roman history and been made aware of some evidence that might be difficult to explain on her view. Hearing about this new evidence was disheartening, but Julie recognises that it is important to be rigorous when engaging in academic inquiry.

Here, we have examples of the motivation to inquire from the very thought that certain projects have epistemic value for ourselves or for others. These are not cases of curiosity. Sometimes when we are motivated by the very thought of doing an intellectually beneficial thing—when we take our epistemic medicine, so to speak—we are not curious at all. However I think that such motivations are an important part of being a virtuous inquirer, because sometimes grit and determination are required for intellectual flourishing. It is unreasonable to expect that every epistemically important project of inquiry will be one we happen to have sustained curiosity about. We need not insist here, as has been implied in the ethical debate, that only one type of motivation for inquiring can be praiseworthy.²⁵ One can inquire from a virtuous appreciation of epistemic goods, despite lacking curiosity. This occurs when one reflects on what is in the epistemic interests of yourself or your community, and acts accordingly.

In contrast, curiosity often arises without reflection on any distinctively epistemic or intellectual concepts. Indeed, not only does experiencing curiosity not require one to consciously infer from any consideration of epistemic value, we often become curious without having any particular justifier for our curiosity in mind. Consider the following routine and appropriate case of curiosity:

Hiking: On a hiking holiday, Hamish becomes curious about a number of geological questions regarding the landscape: “what causes Earthquakes?”; “is Ben Nevis growing or shrinking—and why?”; “how do geologists distinguish different types of rock?”

²⁴ E.g. see Arpaly (2002) or Markovits (2010).

²⁵ Although, to the extent that virtue-based approaches emphasise the importance of harmony between one's desires, emotions, intentions and actions, it will certainly not be *optimal* for an agent to be motivated, across the board, by *de dicto* epistemic considerations. One is more likely to have a healthy appetite for inquiry when one inquires from curiosity and takes pleasure in learning, compared to the agent who is motivated by the thought of intellectual duty.

Whilst such curiosity will not—at least not typically—result from any inference, it is still possible to cite certain reasons as explanations for one’s curiosity. Furthermore, it is perfectly intelligible to ask *why* someone is curious about something, and be impressed or unimpressed with their response. This further supports our thought that curiosity can be evaluated against the deeper values, interests and concerns an inquirer has. Often, the reasons we cite for curiosity will be rather general and basic. For instance, Hamish might simply say: ‘I like to learn about nature’, ‘I enjoy knowing why things are the way they are’, or ‘it’s fun to find out how geologists think about the world’. Despite their simplicity, I suggest that these commonplace responses are precisely the sort of considerations that bespeak a virtuous appreciation of inquiry and the epistemic goods it yields. That is to say, these answers show a sensitivity to the reasons why such inquiry into geology is epistemically fertile: it will provide you with explanatory knowledge about the natural world, a deeper appreciation of the processes shaping our environment, and acquaintance with new ways of categorising and investigating different phenomena. Plausibly, it is the promise of these epistemic goods that explains why inquiring into geology—rather than into the latest football gossip—holds considerable epistemic value. So, one’s curiosity can exhibit an appreciation of epistemic goods just through showing a sensitivity to the very general reasons for why some project of inquiry is likely to be intellectually valuable. This doesn’t require any sophisticated consideration of the epistemic good; we can exhibit this sensitivity just by accurately making use of very general abilities to identify fruitful areas of inquiry. A welcome upshot of this view will be that it avoids requiring an agent to hold any high-level theoretical beliefs about epistemic value in order to qualify as holding a virtuous motivation for inquiry.

An agent’s curiosity will be virtuous, I suggest, to the extent that it is *non-instrumentally* motivated by these their appreciation of epistemic goods.²⁶ This aims to capture the intuitive thought that an agent who is motivated to understand the natural world for its own sake displays intellectual virtue, but not the agent who views understanding the natural world as a means to acquiring lucrative employment (such as the geologist motivated by the prospect of winning a job with an oil prospecting company). I do not think there is any single test that we can apply in order to discern whether an agent’s underlying motivations are really rooted in their appreciation for epistemic goods, rather than in their concern for something else. We are left with the procedures that we use in ordinary circumstances to try and work out what an agent really values. That is, we look at what they say (can they give an account of why they care about a given topic?), at how they act (do they inquire when there is no prospect of admiration?), we reflect upon the sort of things that seem to provide them with pleasure (do they relish personal glory or contributing to the success of a project?), and we speculate as to how

²⁶ In reality, agents will likely often have mixed motivations—this is why I suggested that one is virtuous *to the extent* that one is motivated by epistemic goods. Very few agents will entirely exclude self-interested considerations—such as how they are perceived by others—from the development of their intellectual character. We shouldn’t require perfection in order to ascribe intellectual virtue. But, given the difficulty of measuring the influence of various motivations on our intellectual character, I express no view on whether and how we should determine a *threshold* for epistemic virtue.

they would behave in certain counterfactual scenarios (would they still be so interested in that project if it was not currently academically fashionable?). In this, we determine whether curiosity stems from virtuous motivations just like we consider whether an agent has morally virtuous motivations—we examine the agent’s self-reports in light of their behaviour and other values, before consulting our considered intuitions about the normative status of their character.

In summary, curiosity needs to be situated in the right sort of motivational orientation in order to be virtuous. I’ve suggested that this motivation is a non-instrumental appreciation of intellectually valuable inquiry and the epistemic goods it promises—and one can show this appreciation just by exhibiting a sensitivity for the very general reasons for why certain forms of inquiry are intellectually good to engage in.

4. Curiosity without Reliability

Our discussion has yielded the following account of the virtue of curiosity:

? Virtuous Disposition: The virtue of curiosity is the disposition to experience appropriately discerning, exacting and timely curiosity, motivated by a non-instrumental appreciation of epistemic goods.

Must we further augment this account? One topic of debate amongst virtue responsibilists concerns whether dispositions and traits need to be ‘reliable’ in order to qualify as intellectual virtues. For instance, Driver (2001) and Zagzebski (1996)—contra Montmarquet (1993) and Baehr (2011)—have suggested that virtues need to be reliably successful in achieving the epistemic ends they are motivations for. This position aims to capture the thought that epistemic virtues only deserve to be identified as such due to their connection with facilitating us achieving our epistemic goals, such as acquiring knowledge or true belief.

How does this commitment sit with curiosity? As we have mentioned, curiosity is quite clearly a motivation for epistemic goods. Dominant approaches will unpack this as a motivation to answer particular questions. And, as was clarified above, virtuous curiosity will stem from being non-instrumentally motivated to acquire these epistemic goods. Furthermore, we have already posited a number of excellences that will be involved in having a disposition to skilful curiosity. The question now is whether virtuous curiosity requires further excellences of being reliable in securing epistemic goods? Whilst there is no straightforward way to settle this issue, I will now argue that this is not an attractive requirement on the virtue of curiosity.

An initial argument against the reliability requirement concerns whether it can explain our normative judgements. We can, and do, evaluate an agent’s curiosity (or lack of it) *before* and *irrespective of* whether they have engaged in any inquiry. Indeed, this paper has been replete with such judgements.

Persistent and overweening curiosity about football transfers is less admirable than discerning curiosity about the sciences. These normative judgements are available to us without considering whether the agent will be *reliable* in acquiring knowledge or not. Such normative judgements cannot be explained if we impose a reliability requirement on the virtue of curiosity, because there has not yet been any attempt to acquire epistemic goods whether reliably or unreliably. This is *prima facie* evidence that the question of whether a given instance of curiosity exhibits intellectual excellence is distinct from the question of whether the agent will then be reliable in securing certain epistemic goods.

A second observation is that insofar as it is plausible to think that epistemic virtues have certain *roles*—for instance, in governing certain parts of our intellectual conduct, or protecting us from certain forms of intellectual deficiency—it does not seem to fall under the ambit of a virtue of curiosity to ensure that our inquiries are successful. Put simply, whilst the possession of a curious disposition is crucial in *motivating* inquiry, it seems to have little to do with *regulating* it. In this sense, it is quite consistent to imagine someone who is both appropriately curious yet inquires in a haphazard and unskilful way. Furthermore, there are already a number of virtues in the literature that are aimed at ensuring our inquiries are successful—conscientiousness, impartiality, tenacity, and so forth—so it would be seem to be redundant to insist that a virtue of curiosity must range over the same territory. The natural thought here is that curiosity is important in spurring inquiry, and then it is the exercise of other epistemic virtues that determine whether that inquiry goes well or badly. Indeed, *regardless* of whether one's inquiry is motivated by curiosity or by something else, it is still the exercise of other epistemic virtues that will determine whether or not our inquiry is successful. And if an agent fails to be reliable, this will be in virtue of intellectual failings independent of their curiosity. So, given that it is the presence or absence of other epistemic virtues that determine whether or not we are reliable in securing epistemic goods, this raises the question as to why reliability should be taken as a requirement for virtuous curiosity at all—after all, the issue of reliability must be settled by looking at facts about the agent that have little connection with the fact that their inquiry was motivated by curiosity.

Thirdly, it seems that curiosity can be unreliable in virtue of it stemming from *admirable* epistemic tendencies. For instance, an inquirer might tend to be curious about novel questions at the forefront of scientific research that are extremely challenging. This seems to be an intellectually praiseworthy disposition. However, even if they are an entirely responsible inquirer, the difficulty of these questions might make it rather unlikely that such an agent will uncover the correct answer in any given inquiry. Whilst this sort of research might incidentally yield epistemic goods ‘along the way’, this sort of agent will not be reliable in achieving the true answers that their curiosity is a motivation for. Regardless, it seems compelling to think that their curiosity is epistemically virtuous. This can be

further supported by considering intellectual exemplars who happened to get things wrong.²⁷ An example: it seems right to praise Ptolemy for his curiosity about the cosmos despite his wholesale unreliability in reaching the correct conclusions. Having lofty intellectual ambitions that negatively influences your overall reliability does not preclude a high estimation of your intellectual character. This is further evidence that curiosity can amount to an intellectual excellence irrespective of whether it is reliable. Imposing a reliability requirements seems to involve endorsing a tension between what counts as a genuine display of virtue on the one hand, and what conduct attracts positive intellectual evaluation on the other.

Of course, none of these are knock-down objections to the reliability requirement—such a requirement could be maintained on broader theoretical grounds, regardless of how it pans out for any particular epistemic virtue. However I do think that, by showing the reliability requirement to be rather implausible when applied to individual excellences that seem to be compelling candidates for qualifying as epistemic virtues, we strike at the overall plausibility of such a requirement. Whilst we might baulk at attributing any sort of virtue (such as curiosity) to a hopelessly poor inquirer, we should remember that such agents will not be deemed intellectually virtuous *overall*. All we need to concede is that such a figure is closer to being considered epistemically virtuous than someone who is both a hopeless inquirer *and* exhibits no tendency to be curious in an appropriate manner. Absent any persuasive argument to the effect that we should take the intellectual virtues to be unified in such a way as that you either possess or lack them all, as a package-deal, it seems more reasonable to accept a position whereby one can possess the virtue of curiosity without being reliable in securing epistemic goods.

5. Conclusion

This paper has provided an account of the virtue of curiosity. Starting with the observation that curiosity is both a state and a trait, we attempted to identify an excellent disposition to experience curiosity. Taking our cue from various deficiencies and excesses that a curious inquirer can display, we found that the virtuous agent will exhibit a *skilful* disposition to be curious: they will experience curiosity that is appropriately *discerning* (in being directed at the right object), *timely* (in arising in appropriate circumstances), and *exacting* (in not being satisfied too easily). In this way, the inquirer will be characteristically moved to engage in epistemically valuable inquiry. Then, drawing on debates within the responsibilist literature, I identified two further challenges to the sufficiency of my account: (i) concerning what sort of deeper motivational orientation is required for virtuous curiosity, and (ii) concerning whether one's curiosity needed to be reliable in achieving particular epistemic

²⁷ This type of argument appears in various discussions stemming back to, at least, Montmarquet (1993: 21).

goods. Contrary to what some have held, I argued that the virtue of curiosity is incompatible with a range of motivations such as an underlying desire for power. Rather, I suggested that virtuous curiosity must be rooted in a *non-instrumental* appreciation of epistemic goods. And finally, I provided a number of reasons for thinking that curiosity does not require reliability in order to count as an intellectual excellence—thus putting some pressure on those have claimed, schematically, that all epistemic virtues require reliability.

We have managed to vindicate the suggestion that curiosity is an epistemic virtue. Moving forward, it will be fruitful to consider how one might *cultivate* this virtue. Empirical work on curiosity is undergoing a modest renaissance, and it will be useful for philosophers to attend to future developments in psychology and cognitive science to reflect upon what explains differences in our tendency to be curious and, more importantly, how we can influence and refine this disposition.²⁸

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