Virtuous Knowledge:
An Account of Virtue Epistemology

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By

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Abstract

Throughout history, virtue has out-stepped the bounds of ethics and entered other philosophical venues such as epistemology. Just as a person is responsible for exhibiting virtuous behavior, so is he or she responsible for virtuously attaining and holding beliefs in the quest for knowledge. In virtue epistemology, epistemic virtues are the fundamental mediums through which one's beliefs are justified. They are similar to moral virtues in definition and consequences, but differ in function in that epistemic virtues direct beliefs while moral virtues direct behavior. Some virtues to be described are openness, epistemic conscientiousness, epistemic courage, introspection and the skilled use of reason.
Like all epistemic theories, virtue epistemology must establish criteria and goals necessary for one to meet so knowledge can be achieved. Knowledge is a true, justified belief, and in the case of virtue epistemology, the cognitive virtues are the basis and source of justification. The virtue approach will adopt some of the justification tenants of traditional epistemology, such as foundationalism and coherentism, but will still contrast enough to require its own considerations. For the purpose of this epistemic account, I appeal to an Aristotelian definition of virtue, in that a virtue is a trait that habitually manifests itself in the actions and beliefs of the person possessing it (Rachels 177).

Before we begin this account of virtue epistemology, a brief discussion of the two traditional epistemic theories, foundationalism and coherentism is needed. How virtue theory relates or fails to relate to traditional views will also be considered. The starting point of foundationalism is a group of beliefs known as basic beliefs. Basic beliefs are those from which inferential beliefs can be made, but are not inferential themselves. Their justification comes not from other justified beliefs, but rather they are justified simply because of their own nature, or because of their relation to those beliefs justified by their own nature. For his account of contemporary foundationalism, Robert Audi "concludes that if – as common sense would have us suppose – some of our beliefs are justified or constitute knowledge, then some of our beliefs are justified, or constitute knowledge, simply because they arise . . . from experience" (Audi 205). He designates four experiences that serve as this justification for basic beliefs: perception,
consciousness, reflection and memory. Audi continues, noting that foundationalists see experience as an exact reflection of what happens in the world, and is therefore reliable. While foundationalism holds onto definite starting points through basic beliefs, coherentism has no such beginning. The structure of coherentism yields from a system of beliefs and their coherence to one another; reflection, or introspection can begin with any belief within the system. The system depends on the coherence of all beliefs contained within it, not one beginning belief. While coherence remains necessary for justification, coherentism accepts degrees of coherence within a given system.

This account of virtue epistemology appeals to the standards of epistemic foundationalism by requiring that some basic beliefs be established in the form of presuppositions. These are beliefs that the epistemic virtues exist, dependably lead to knowledge, and are good; the goodness of these virtues is discussed later. However, this account of virtue theory cannot be a coherentist theory because the virtues function as, not the best, but the only means for justification. Hence, the act of justifying a belief cannot begin with any cognitive faculty or any other belief in a system, as coherentists believe. Rather, all beliefs must be individually sifted through the virtues in order for them to receive justification.

It is unreasonable to require the epistemically virtuous person to hold true beliefs alone, as will become apparent as this discussion progresses and particular virtues are described. Thus his or her intentions while forming and holding beliefs determine the level of epistemic responsibility. In his article entitled "Epistemic Virtue," James Montmarquet writes, "as long as an agent is trying his best to arrive at the truth, it follows on this account that he is epistemically responsible" (483). When a virtue or many virtues play a role in the belief-forming process, it is evident the “agent” maintains the goal of truth, for the ultimate goal of the virtues themselves is

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1 Audi's view is not universally accepted by foundationalists.
truth. Montmarquet continues by writing that "knowledge of the truth-conduciveness of genuine . . . epistemic virtues is, and can only be empirical, based on observation of their workings in our own and others' lives" (488). He also suggests that a commitment to truth may be a virtue itself. However, the issue under deliberation at this point is the virtues' credibility. Why are epistemic virtues found desirable to the responsible believer? In his account concerning epistemic reliability, Alvin Goldman writes that what makes the virtues adequate for justifying a belief is their "truth ratio." He continues by explaining that "'good' processes are ones whose belief outputs have a high ratio of truths; 'bad' processes are those with a low truth ratio" (A Companion to Epistemology 434). Goldman uses the word "processes" to describe models of justification, and although that does not exactly equate with talk of individual virtues, it nonetheless helps to explain how one may accept the virtues as trustworthy.

First, consider moral virtues, and the effects they have on human behavior. We observe that Ron possesses the moral virtue of generosity because he is always willing to make sacrifices for the benefit of others. We observe that Julia possesses the moral virtue of loyalty because she is habitually present, forgiving, and honest in her relationships (Rachels 175-93). The same is true for epistemic virtues. We observe their goodness by observing the beliefs of those people known to possess them, noticing that people who are examples of epistemic virtuousness arrive at the truth more consistently than those who are not. Virtues have an inherent inclination toward the truth, just as those possessing them are habitually inclined to use them. Like a foundational basic belief, this, its own nature, justifies a virtue.

In his article entitled "Recent Work on Virtue Epistemology," Guy Axtell insists that "an intellectual virtue is a cognitive disposition utilized or exercised in the formation of beliefs" (1). John Greco also uses the word "disposition" in his descriptions, but he more strongly insists that
virtues are abilities. Axtell challenges Greco's characterization of "virtue" by describing the actual differences between the two terms, virtue and ability. A virtue, Axtell explains, directs the action one would take in any given situation, no matter how appropriate or inappropriate it may be. Ability, however, can be possessed by a person and never utilized. I propose that a given faculty can be both an ability and a virtue. Openness, for example, is an ability possessed by practically everyone, although some are not inclined to use it, but rather resort to close-mindedness when taking a stance or forming beliefs. Nonetheless, just because someone does not exhibit openness to the ideas of others on a regular basis, does not entail that the same person is unable to do so. Once again, the Aristotelian definition of virtue holds true, equipping a virtue with potential to realize its most basic function within an individual, and that is its feature of predisposition.

Cognitive functions such as sense perception and memory remain important to all believers, while they operate only as aids for gathering and revising information as the process of belief-formation proceeds. Greco's examples of cognitive virtues are sight, hearing, memory, introspection, deduction and induction. His inclusion of the senses such as sight and hearing in his proposed list is questionable. They are definitely abilities, as Greco describes all virtues, but I contend that it is not appropriate to call them virtues, no matter how valuable they may be in gathering information. In reference to the nature of virtue already briefly discussed, senses are exempt from discussion of habitualness. The issue is not whether the senses are themselves used habitually, but rather how the information they gather is digested and employed by the virtues in order to arrive at truth. For example, at this moment I am sitting in an office, one in which I have worked for three years and am familiar with. I hear a steady ticking sound. If this was my first time alone in this room, I may consider the idea, without looking around, that it is caused by
rain on the roof outside, or maybe water dripping in the pipes in the wall. I would look around and eventually see the clock, realizing it must be the source of the sound. However, hearing the tick was not nearly enough for me to claim knowledge as to its source. Nevertheless, in reality I am familiar with this room, and many things happened that led to my knowledge that it was, in fact, a clock ticking. I will limit my explanation to Greco’s proposed cognitive virtues; I heard the noise, I remembered there is a clock in here and what it sounded like in the past, and then I deduced that it was a clock that I heard, which happens to be true. Notice, I would have been unable to have knowledge about the world around me if I had depended solely on hearing; many faculties were needed for this simple deduction. After my true belief was acknowledged, I continued to justify it via introspection. I now hold a true belief justified through my cognitive virtues, according to Greco, and I therefore have knowledge.

Now suppose, for example, I came into this same room, and the clock I knew so well had been replaced by one looking exactly the same, but instead of ticking, it made the sound of water running from a faucet. My eyes see a clock, but my ears hear water, and I then form a belief that the faucet should be turned off. This is due to my fully functioning hearing capabilities, memory that there is a sink in the room, and recognition, through memory, that the sound I hear matches the sound of running water. I turn to the sink, and upon seeing no water, I deduce that my belief is false, and eventually realize I am misled by the clock. All of Greco’s proposed virtues are functioning properly, but that is not sufficient to achieve knowledge. Considered independent of all other “virtues,” sight would have yielded a true belief, but I was separated from truth because the information I was receiving from all my senses in conjunction with my virtues was contradicting. Sight alone was unable to provide me with knowledge, and neither was hearing. However, sight and hearing were good assets in acquiring the information needed to eventually
achieve knowledge, but were not sufficient until combined with virtues such as deduction and introspection, which ultimately procured justification. Nonetheless, I was epistemically virtuous in my forming of beliefs, for my final analysis depended on virtues rather than sense perception or any other possibly cognitive faculty. Fallibility of the virtues will be addressed momentarily.

In yet another objection to Greco's list of cognitive virtues, I propose that, along with the senses, memory should not be included. This denotes some difficulty, for as Louis Pojman writes for his discussion of the ethics of belief, we do not choose to believe our memory, but rather we cannot help but believe it (Pojman 577). I contend that memory is a potential obstacle to truth, but not an unconquerable one, for yet another function of epistemic virtues is to harmonize the relationship between what we are inclined to believe and the truth. Memory is not always false, but merely inconsistent to the point that it cannot be relied upon by itself. An epistemically virtuous believer may find his or her memory has an excellent truth to falsity ratio, but even virtuous memory must be cycled through the virtues for justification. For instance, memory coupled with introspection should appropriately lead to knowledge.

Epistemic virtues, while maintaining a different function, share many characteristics with moral virtues. A moral virtue is a habitual inclination to do good, and is apparent in a moral agent most often when he or she is driven to make a decision concerning a course of action. A morally virtuous person need not to have always exhibited a certain virtue, rather he or she may observe this virtue in others, come to a realization that it is a desirable trait, and utilize it in every necessary circumstance so that it becomes habitual. This person, then, has acquired a moral virtue that will guide decisions for action. Similarly, epistemic virtues need not be innate inclinations; they also can be acquired as a believer matures and becomes a serious investigator into the realm of knowledge.
Defined literally, a moral virtue is a general moral excellence, or a specific moral quality, regarded as good. In moral ethical theory, as well as in virtue epistemology, the role of virtues is to be means to eternally good ends. Epistemic virtues specifically are traits of character that consistently lead the individual possessing them, eventually, to knowledge; they serve as epistemic justification due to their dependability and their appeal to truth. As in all epistemic theories, truth is the goal of virtue epistemology. For truth to be a desirable goal, it must be considered good, and adequate justification of a belief must be a medium through which good, in the form of truth, is achieved. The epistemic virtues serve as this medium.

Axtell writes that the “virtues are dispositional states of character or inner nature conceptually bound up with the good, and their attribution to agents as motivations contributing to . . . the formation and acceptance of beliefs, may also reflect praise or blame upon us” (2). Aristotle, in Book II of his Nicomachean Ethics, calls these inner natures “potentialities,” suggesting that they may be possessed by a certain thinking person, and still not be used at the discretion of the person, an idea that seems consistent with Greco’s characterization of ability. (Barnes 1742-52). By labeling this branch of the theory of knowledge virtue epistemology, the implications are present that the way in which one proceeds in attaining knowledge could possibly be judged good or bad depending on criteria such as the epistemic virtues. Essentially, an explanation concerning the necessity of each or any of the virtues is warranted. However, this assumes that improper use or lack of intellectual virtues leaves blameworthy those who lack them. Perhaps Linda Zagzebski resolved the dilemma by writing that “natural faculties, capacities, and talents may be praised in the same way we praise natural beauty or strength, but we do not blame the lack of them” (Virtues of the Mind 104). This suggests that a finite list of cognitive virtues is undesirable. Rather, I find it imperative that the list of virtues remain open
so that intellectually, one cannot be blamed for not exhibiting a certain recognized virtue $A$. For the person may possess a similar, although not exactly identical, virtue that is equally trustworthy, and would be considered a virtue if it were recognized as such.

The cognitive virtues are also uniquely human traits separating us from other thinking beings, allowing us to obtain knowledge; they are the purest, most basic aspects of the human mind. Plato considered moral virtues in themselves citizens of his world of Being, and epistemic virtues must be viewed accordingly. Just as love and justice are ideal and intangible Forms, so are the cognitive virtues flawless and absolute. In the *Meno*, Plato suggests that virtue is the power of attaining good, and called goodness the "cause of knowledge and truth" (Jones 133). Goodness is Plato's most fundamental Form, having the broadest scope, and all other Forms are assessed based on their association to Goodness. Likewise, all true beliefs are deemed rightly justified according to their association with epistemic virtues, which are assessed in turn by their correlation to Goodness. In *Magna Moralia*, Aristotle also discusses the virtues and contends that they are means, not ends, and are not necessarily good in and of themselves (Barnes 1868-74). Rather, they are good because of the creation of knowledge, which is a good end.

Senses work in the stage of belief formation while virtues operate in the justification stage. Beliefs about sensory information are not sufficient for knowledge because they must pass through the virtues to be justified. In this sense, I propose, it is not possible for young children to have knowledge, only beliefs based on external information. For example, reason is a tool used often to sort and classify information so that it can be used to arrive at a true, valid conclusion. However, while reason itself is not an epistemic virtue, the skilled use of reason is. Appealing to psychologist Jean Piaget's theory on early childhood cognitive development, a child experiencing objects in the world for the first time will use his senses to gather basic
information about the object, and group objects sharing characteristics into categories which Piaget called “schemata” (Lay-Dopyera 126-28). For instance, a child sees the neighbor’s dog and tabulates that it has fur, big ears, a tail, and moves as if it were crawling. This group of sensory perceptions is now developed into the schema labeled “dog.” The child is then shown a picture of a bear and notices that it also has fur, big ears, etc. and reasons to a false belief that the animal in the picture, as well as his neighbor’s pet, is a dog. The child used reason to arrive at beliefs about both the dog and bear, and although the belief about the dog being a dog is true, it cannot be considered knowledge because he did not use reason skillfully. The child exhibits a kind of fallacious reasoning, which leads him to make an inference from only one or few cases. As our minds and virtues develop, we learn to transcend this tendency. However, reason, in this example, is not a virtue and cannot, therefore, justify the true belief.

Since reason in the above example, although utilized by the child, is not a virtue, I propose that it is more closely related to instinct than to anything one may learn. In “The Raft and the Pyramid: Coherence versus Foundations in the Theory of Knowledge,” Ernest Sosa addresses the question of the reliability of the senses, and suggests a comparison between how they are utilized in animals and in humans. Animals, like humans, constantly receive sensory information about their environment. They may form beliefs, but they do not acquire knowledge. Animals differ from humans, in that their beliefs are based solely on their senses and instinctive reactions to that sensory information. (“Virtue Epistemology”) I may touch a hot surface and instinctively pull my hand away. However, I do not have knowledge that the surface is hot based solely on my instinctive action. Many cognitive functions must take effect to turn the information into a justified belief that will become knowledge that the surface I touched was hot.
One important aspect of obtaining knowledge is the willingness to take in the opinions and beliefs of others, with the purpose of revising and developing one’s own beliefs further. This is known as \textit{epistemic conscientiousness}. An epistemically conscientious person will use this faculty consistently whenever appropriate in belief formation. If one has a strong cognitive faculty that one considers trustworthy in determining right from wrong, and true from false, he or she will use it to analyze all kinds of information from the world (i.e. sensory information, other points of view). For example, a morally conscientious person would seek information that would lead him or her to accurately distinguish a right action from a wrong one and choose to pursue the one that is right. One who is epistemically conscientious will acknowledge via his or her conscience whether a belief is true or false, and believe accordingly. Montmarquet adds that epistemic conscientiousness is the central intellectual virtue, and as its consequence, a person conveying it will desire acquisition of all the other virtues as well. Realizing the need for it and abstaining from utilization may rightly result in epistemic irresponsibility and unjustified belief (\textit{Epistemic Virtue} 484).

American philosopher William James wrote: \textit{“We must know the truth; and we must avoid error”} – these are our first and great commandments as would-be knowers; but they are not two ways of stating an identical commandment, they are two separate laws” (\textit{The Will to Believe} 17). There may come a time when epistemic conscientiousness leads one to become vulnerable to false beliefs. \textit{Openness} to beliefs contrary to one’s own, or “impartiality” as writes Montmarquet, is a virtue only if used wisely. It ceases to be a virtue when extreme openness leads to acceptance of only the opinions of others to the extent that one’s own judgments hold little or no weight. Openness as a virtue is meant only to aid the individual in analyzing previously held beliefs and revising them, if necessary, so they become as close to truth as
possible. Nevertheless, if one is presented with opposing views, and does not reject them based on proper reasons, openness brings with it the consequence of temporarily leading the person to hold a false belief. But this false belief may be a necessary interlude between the believer's original belief and the truth. As long as the person accepts outside information in an epistemically responsible fashion (e.g. uses the virtue of openness), he or she will eventually arrive at a true belief, which is justified because of the method by which it was obtained.

To illustrate, Mindy begins every morning by listening to the local weather on the radio. The weatherman is disarmingly accurate, and Mindy often notes this accuracy through observation of the daily weather in accordance with his predictions. She awakes one morning to find the weather unseasonably sunny and dry, but listens to the weatherman's forecast of afternoon thunderstorms. Although Mindy recalls that most days, which began in this fashion, did not end in rainstorms, and so believes that the weatherman made a mistake in his forecast. Nevertheless, it rained as predicted. However, had she been open to the weatherman's belief and considered his past accuracy, she would possess knowledge of the threat of rain, for her belief would not only be true, but justified as well.

The disposition to hold to one's own justified beliefs in the face of opposition is labeled epistemic courage. From an Aristotelian standpoint, courage is the mean between the two extremes of cowardice and foolishness (Rachels). Person A has previously formed a belief that \( p \), but has recently considered person B's argument that not-\( p \). A holds a true belief, but still considers the evidence presented by B that would make A's belief false. After much reflection on the evidence for and against \( p \), A, who is not swayed by B's account, continues to believe that \( p \) is, in fact, true. A has expressed the qualities of both conscientiousness and courage. If A had
changed his belief from true to false without a reasonable rationale formed from B’s evidence, A would no longer be considered epistemically courageous, but rather cowardly.

The skilled use of introspection may be appropriately called the adhesive virtue for its connection with the other virtues in use by way of examination. It is liberally defined as a close examination of one’s thoughts and feelings. Often, beliefs are formed instantly, and their justification is determined immediately depending on whether or not virtues were applied. The believer may not always be aware of the cognitive process at the moment of belief, but via introspection, beliefs can be examined post-formation, and evaluated more accurately. Unlike most of the other virtues, introspection is likely to be exercised consciously either after the belief is formed, as mentioned above, or used in analyzing already-accepted beliefs to form new ones. While I am not proposing that introspection is always necessary to have a justified belief, knowing when introspection is necessary or helpful is a virtue in itself.

Another example of the utilization of cognitive virtues lies in Krista’s expectation that I will meet her after class in front of the library. Krista’s belief that I will be there does not waver, even though I am five minutes late, since I was not punctual the last time we planned to meet, either. Matt, a mutual friend, sees Krista waiting patiently and realizes for whom she is waiting. Before that time, Matt and I spoke. I had completely forgotten my arrangement with Krista, something he knew nothing about, and I explained to him my plan to leave town immediately. Matt tells Krista of our conversation, so Krista’s belief changes, and she now believes that I am not meeting her because of her openness to Matt’s contradicting information. Before Krista leaves, however, I arrive. So Krista’s new temporary belief, formed based on Matt’s information, is false. However, she exhibited epistemic openness in revising her belief according to Matt, who, in similar situations regarding me in the past, possessed a history of dependability.
Therefore, Krista was justified in her belief, but did not have knowledge due to the fact that her belief was false, and was, in the sense of openness, epistemically virtuous.

The virtues discussed so far are also effective if several are used before, during or after a single belief is formed. For instance, Deidre, the standard mature thinker has the ability to be open to the beliefs of others that may oppose her own. It is one of her epistemic virtues because she habitually utilizes it in appropriate situations. While debating a political issue with David, who does not habitually utilize his ability to be open, Deidre considers his opposing views and revises her own according to elements of the opposing view she finds acceptable. David refuses to consider any of Deidre’s views, and therefore does not possess the epistemic virtue of openness. Further, Deidre’s epistemic courageousness is apparent, since while she could have conformed to David’s beliefs that she found false by appealing to epistemic conscientiousness, she did not conform, but rather courageously held to her own. Even if, later, she doubts her final stance, her epistemic virtuousness will bind her to truth, for introspection will serve as her final affirmation.

It appears paradoxical that Krista, in the above example, holds a false belief but remains epistemically virtuous. An explanation to this apparent inconsistency is based in the idea of epistemic fallibility, and it is necessary to recognize that the heart of fallibility is not found in the virtues themselves, but rather the imperfect beings exhibiting them. Just as Plato explained that material objects we experience on Earth are rough copies, not perfect representations, of their respective Forms, so are virtues as we experience them through observations of others, are not perfect images of the actual essence of virtues. The cognitive virtues, in their purest actuality, can only result in their ultimate goal, which is truth. However, since we use and experience them only through the medium of human behavior and belief, fallible human nature becomes a
possible obstacle to the goal of truth. In his book, *Objective Knowledge*, Karl Popper writes that our beliefs about the world are "a kind of tentative adaptation to reality . . . and that we are searchers, at best, and at any rate fallible. There is no guarantee against error" (41). Popper continues his discussion of fallibility by contending that our ability to arrive at the truth matures as we mature. Our direct experiences with the world do not produce beliefs about the world without first being somehow "decoded." He explains that "we learn the decoding by *trial and error examination*, and although we become extremely good and quick at experiencing the decoded message . . . there are always some mistakes, usually corrected by special mechanisms of great complexity and considerable efficiency" (64). I maintain that these "mechanisms" he speaks of are the cognitive virtues.

In his essay, "Discursive Knowledge," presented at the 1999 Rutgers Epistemology Conference, Keith Lehrer proposes that on the path to knowledge, we must "understand the relationship between acceptance, preference, reasoning and justification" (1). According to Lehrer, the role of acceptance arises when one forms a belief and must then consider his or herself trustworthy in accepting that belief. When objections to one's belief are presented, preference becomes essential. As Lehrer writes, "if in defending what I accept, I reject some objection because it is more reasonable to accept the denial of the objection, that may result from my preference for accepting the denial of it" (6). This has an impact on the virtue of openness, as well as how virtues in general are able to justify. An objection to a belief can be beaten if and only if it would be more reasonable to reject said objection than to retain acceptance of the belief. Lehrer explains the method that ensures acceptance, preference and reasoning are trustworthy; "The answer," he writes, "can only be a list of intellectual virtues" (9). If one can
meet and counter the objections to his or her belief via these virtues, one is justified in accepting the belief.

Conclusion

Virtue epistemology, as it is laid out in this discussion, adheres somewhat to the principles of traditional foundationalism by requiring presuppositions about the only justification devices, namely, the cognitive virtues. Just as basic beliefs in foundationalism require no justification outside themselves, virtues are likewise justified simply because they are virtues. The believer must recognize them as such if he or she is to develop them properly and use them to gain knowledge. I contend that epistemic virtues, including some or many not addressed in this account, are necessary for justification to occur.

This account of virtue theory also emphasizes the similarities between the characteristics of moral and epistemic virtues. I have accepted the claim that relevant virtues are abilities, or potentialities, in that anyone is capable of exercising them, but only when a believer projects a certain ability in a habitual motion toward truth can that ability be termed a virtue. Although I agree with Greco's account of ability, I strongly disregard his appeal to sight, hearing and memory as virtues. As René Descartes writes, "senses are deceptive, and it is wiser not to trust anything by which we have once been deceived" (Key Philosophical Writings 135). The senses (memory included) often deceive, and, I believe, have no place in a discussion of habitual inclination.

Epistemic virtues are "bound up with the good" (Axtell 2), a trait expressed through their inclination to transport the virtuous believer to truth. They are the medium through which unjustified beliefs are filtered to come out fully justified on the other side, and are traits desired by the virtuous believer, while not necessarily recognizable. However, even the virtuous
believer, being an imperfect thinking being, may not arrive at truth directly, even when the virtues are used properly. But rather a commitment to the virtues will lead the believer eventually to truth, and since that true belief is justified because of the nature of the virtues, the virtuous believer will repeatedly hold true, justified beliefs. Openness, conscientiousness, the skilled use of reason, courage and the skilled use of introspection are but some genuine epistemic virtues required to turn true beliefs, even those based on the senses alone, into knowledge.
Bibliography


