Epistemic Value
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For *The Continuum Companion to Epistemology*

0. Introduction

Epistemology is normative. This normativity has been widely recognized for a long time, but it has recently come into direct focus as a central topic of discussion. The result is a recent and large turn towards focusing on epistemic value.

I'll start by describing some of the history and motivations of this recent value turn.[1] Then I'll categorize the work within the value turn into three strands, and I'll discuss the main writings in those strands.[2] Finally, I'll explore some themes that are ripe for further development.

1. Motivations

The value turn has numerous motivations; I'll discuss three of them. The first of these motivations consists in the ancient roots of the idea that epistemology is in some important way value-theoretic. Plato and Aristotle both took epistemic states such as knowledge and understanding to have particular and distinctive value. So too did their immediate and medieval followers (Zagzebski 2001). These historical foci on value in epistemology have played a role in motivating some current writers to develop similar foci (Zagzebski 1996, Roberts and Wood 2007).

A second motivation for the value turn consists in certain recent debates about the nature of knowledge and justification: debates about the Pyrrhonian problematic, the Gettier problem, naturalism, contextualism, epistemic goals, and eliminativism about justification.

As for the Pyrrhonian problematic, early forms of virtue epistemology were designed (in part) to resolve it by giving virtuously produced beliefs as special role in blocking the epistemic regress (Sosa 1980).

As for the Gettier problem, certain later forms of virtue epistemology were designed (in part) to resolve it. The central idea here is that in some cases one's belief is true *because* it was formed via one's epistemic virtues. It is said that in these sorts of cases the truth of one's belief is to one's *credit*, and moreover that the credit at work here is precisely what we lack in Gettier cases but have when we know (Sosa 1988 and 2003, Zagzebski 1996, Riggs 2002, Greco 2003 and 2010).

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[1] The phrase "value turn" comes from Riggs (2006), and it echoes back to the "linguistic turn" of the 1950's through the 1970's. Sometimes, the term "value" is used in a restricted way so that it refers only to the subject matter of axiology – the "good" as opposed to the "right". Other times, the term "value" is used more broadly to refer to everything normative – the good, the right, virtues, and so on. It is in this latter, broader sense that I will use the term in the current paper.

[2] Alternative overviews of work within the value turn include Pritchard (2007a and 2007b) and Greco (forthcoming *a*).

As for contextualism, some theorists have entertained the thought that there might well be different values, or at least different degrees of value, attaching the referents of "knows" in ordinary contexts and philosophical contexts. This thought naturally suggests questions about what kind of values knowledge has in the first place, and (if there are several such values) about which of those values are more important than which others (Sosa 2000).[3]

As for naturalism, some epistemologists have pursued value-focused themes in part as a reaction against epistemological naturalism, which they think renders humans and their mental states too much like machines and mere objects, and too little like agents and their genuine achievements, to have the sort of value we associate with knowledge, understanding, and other epistemic goods (Zagzebski 1996).

As for epistemic goals, many theorists hold that belief and justification have goals or aims. Debates about what these aims are (truth, avoidance of falsehood, knowledge, justification, etc), and what their relative weights are, amount to debates about what has epistemic value and what has more epistemic value than what else (Feldman 1988 and 2002, DePaul 2001, David 2001, Kvanvig 2005).

As for eliminativism about justification, Alston (1993, 2005) has argued with some persuasiveness that the notion of epistemic justification should be abandoned because it has no unique referent, and because this lack of a unique referent regularly leads theorists to talk past one another. Now, suppose we follow Alston in eliminating the notion of justification in our theorizing. What do we do next? With what do we *replace* debates about justification? Here Alston's answer is that in the place of justification we should theorize about a full range of "epistemic desiderata" – things that are good epistemically, such as true belief and belief in accordance with one's evidence. This replacement project squarely deals with epistemic value, and it is motivated by eliminativism about justification.

A third motivation for theorizing about epistemic value consists in the idea that epistemology should evaluate various "applied" phenomena like reasoning and research design. Early partisans of this idea (Goldman 1978 and 1986, Kitcher 1992) developed it far before the value turn began in earnest. In doing so they explored many of the themes the current trend is now beginning to explore again. For instance, they expanded the so-called epistemic goals to include, not only truth and the avoidance of falsehood, but also significant as opposed to trivial belief and even such higher states as understanding. These themes naturally arose in the course of trying to apply epistemology to evaluate reasoning, research design, and other similar phenomena. More recent attempts to apply epistemology to such phenomena can by found in work by Bishop and Trout (2005), Laudan (2007), Roberts and Wood (2007), and others.

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[3] This connection between the value turn and contextualism has been underappreciated in the literatures on both of those topics. Another such connection, also underappreciated in both literatures, can be found in recent work by John Greco. In that work Greco develops a version of contextualism which takes the referent of "knows" to shift via facts about credit, as opposed to shifting via facts about required amounts of sensitivity or safety or evidential support. See Greco (2003 and 2010).

Now that I've outlined some of the main motivations for the value turn, I'll go on to discuss the main branches of theorizing within that turn.[4]

2. Main Branches of Work

There are three main branches of writings within the value turn. The first branch – "value-driven epistemology" - addresses the *nature* of states like knowledge, justified belief, and understanding, and in doing so it places a particular focus on the idea that these states have epistemic value.[5] The second branch – "epistemic value theory" - focuses on epistemic value directly, and for its own theoretical sake, as opposed to focusing on it for the purpose of theorizing about the nature of states (like knowledge and justified belief) that exemplify it.[6] The third branch – "applied epistemic value theory" - stands to epistemic value theory as applied ethics stands to normative ethics. Applied ethicists focus on the ethical status of particular types of acts (e.g. abortion), whereas normative ethicists focus on the normative status of acts *in general*. Similarly, applied epistemic value theorists focus on the epistemic status of particular phenomena (e.g. the instructions judges give juries), whereas epistemic value theorists focus on the epistemic status of phenomena in general. So, to repeat, *value-driven epistemology* addresses epistemic value in an attempt to illuminate the nature of epistemic states instantiating it, *epistemic value theory* addresses epistemic value for its own theoretical sake, and *applied epistemic value theory* addresses the epistemic value of particular types of phenomena.

2.1 Value-driven epistemology

Value-driven epistemology addresses many epistemic states, but most of it focuses on knowledge. In the *Meno*, Plato claims that knowledge is better than true belief. There are three important questions about this claim: the questions of whether it is true, why it is true, and what follows from the putative fact that it is true. These three questions are complicated in four important ways.

First, they are complicated by the fact that theorists sometimes replace "true belief" with a term like "proper parts of knowledge", the idea being (roughly) that the questions should be asked not only about true belief, but about every state that, like true belief and justified belief, features some of the necessary conditions on knowledge but not others. Other times, theorists replace "true belief" with some very general term like "everything in the ballpark of knowledge", the idea being that we should ask if (and why, and what follows from the putative fact that) knowledge is better than every other epistemic state.

The second and third complications have to do with the notion of betterness. Different theorists can mean to invoke different *dimensions* of betterness by the term "better than": they can mean to invoke prudential betterness, moral betterness, epistemic betterness, or all-things-considered betterness. Also, different theorists can mean to invoke different *kinds* of betterness: betterness as a means, and betterness as an end (as well as more exotic kinds of betterness such as contributory and final betterness – see Whitcomb 2007 and Pritchard forthcoming *b*). The second and third complications, then, are that different theorists invoke different dimensions and kinds of value.

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[4] Pritchard (2007b) further discusses the motivations behind the value turn.

[5] The label "value driven epistemology" is often used with a less restricted meaning than I am stipulating here, a meaning that counts as "value driven epistemology" each of the three branches of what I am calling the value turn.

[6] Thanks to Don Fallis for suggesting the term "epistemic value theory" for this branch of thought.

The fourth complication arises from the issue of which items of knowledge are supposed to be better than which items of true belief (or whatever true belief has been replaced by). In some cases, theorists seem to be comparing every item of knowledge to every item of true belief (etc). In other cases, they just try to compare items of knowledge and true belief (etc) of a certain class, for instance the class of pairs of these items across which *other things are equal*. And in other cases still, the authors just take the relevant betterness to hold generically, as e.g. it holds generically that grizzlies are bigger than black bears.

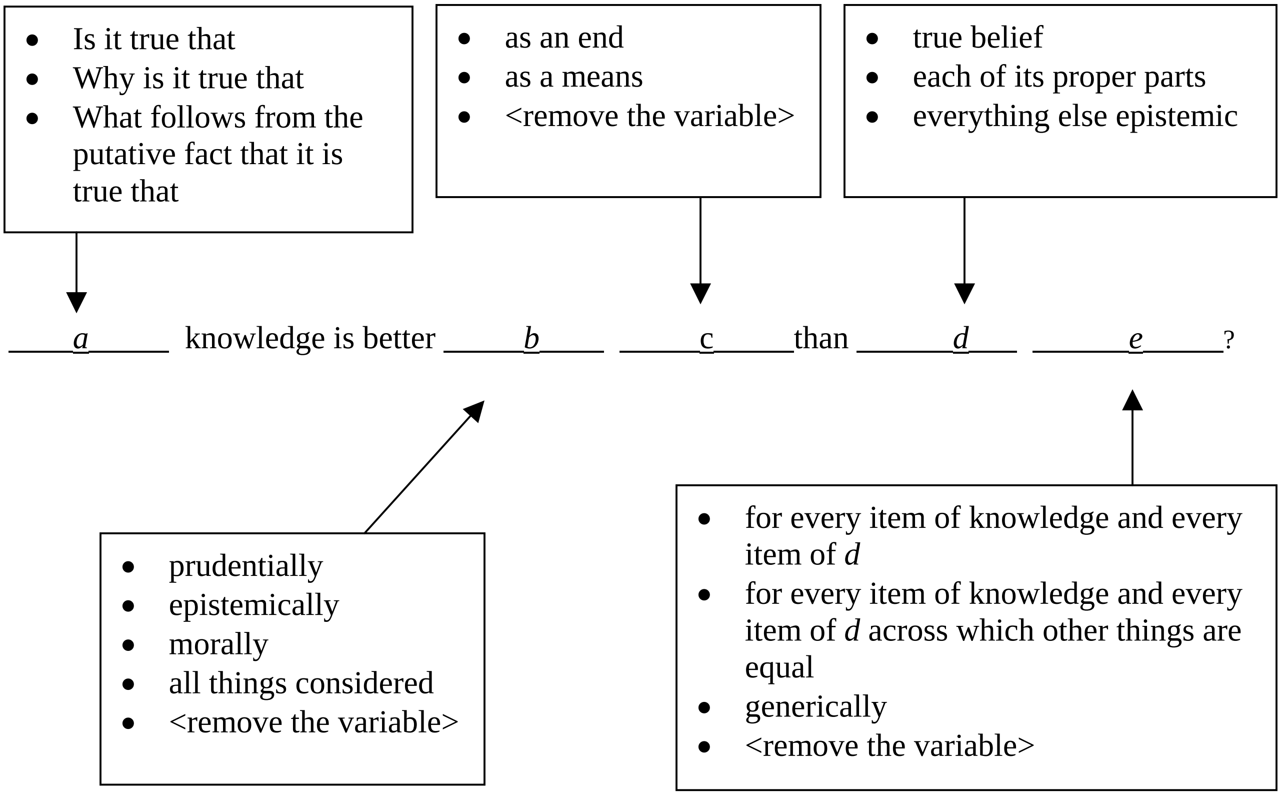
In summary, the *Meno* drives theorists to ask numerous questions about the value of knowledge. Those questions focus on whether knowledge is better than true belief, and why, and what follows from that fact; and they are complicated because different theorists fill in the details differently: the notion of true belief is sometimes replaced by other notions, the notion of betterness is sometimes replaced by other (more specific) notions, and class of the items compared to one another is sometimes wider and other times narrower.

For each exhaustive way of specifying (and/or refraining from specifying) these niceties, there is a particular question about the value of knowledge. Each such question is its own Meno problem; these problems form an interesting domain of inquiry centered on the idea that knowledge is somehow better than states like true belief. We can get a reflective understanding of this domain by classifying its constituent questions in accordance with figure 1:

Figure 1

A Smorgasbord of Meno Problems

This figure encodes hundreds of distinct Meno problems - 540 of them, to be exact. Some of these problems are very specific and others are rather unspecific. Each Meno problem amounts to the question formed by substituting phrases from the boxes for their corresponding variables, or simply removing those variables. The more variables we replace instead of removing, the more specific the resulting Meno problem. To solve a given Meno problem is to answer the given question.



- Is it true that
- Why is it true that
- What follows from the putative fact that it is true that

- as an end
- as a means
- <remove the variable>

- true belief
- each of its proper parts
- everything else epistemic

_____*a*_____ knowledge is better _____*b*_____ _____c_____than _____*d*_____ _____*e*_____?

- prudentially
- epistemically
- morally
- all things considered
- <remove the variable>

- for every item of knowledge and every item of *d*
- for every item of knowledge and every item of *d* across which other things are equal
- generically
- <remove the variable>

For instance, suppose that we set the variables such that

a = Why is it true that
b = epistemically
c = as an end
d = true belief
e = <removed>

This leaves us with the following question:

> Why is it true that knowledge is better epistemically as an end than true belief?

Or to pose the same question more concisely by semantically descending from the truth predicate,

> Why is knowledge better epistemically as an end than true belief?

The recent literature on epistemic value features numerous attempts to answer this question, and to answer the many other questions we get by setting the variables differently.[7] In some cases, theorists are quite clear about which question or questions they are addressing. In other cases they are unclear on the matter, and as a result there is a significant literature trying to get straight on what the Meno problem really is, or on what the various Meno problems really are (Riggs 2009, Baehr 2009, Pritchard forthcoming *a* and forthcoming *b*, Kvanvig forthcoming, Greco 2010 and forthcoming). The best way to get straight on this issue, I think, is to appreciate that there are at least 540 distinct Meno problems, and to keep in mind the distinctions among them.

Among the attempts to solve these problems, the three most prominent themes are what I'll call denial, credit theory, and anti-reliabilism. Deniers focus on the *is it true that* questions. They conclude that knowledge is in fact not better than true belief (or one or more of its other parts), or at least that there are one or more significant ways in which knowledge fails to be better than true belief (or one or more of its other parts). Credit theorists focus on the *why is it true that* questions. They argue for a certain theory of the nature of knowledge, namely the credit theory, on the grounds that it answers some or all of these why-questions. Anti-reliabilists focus on the *what follows from the putative fact that* questions. They argue that a certain important conclusion follows, that conclusion being that reliabilism is false.

Each of these three themes – denial, credit theory, and anti-reliabilism – comes in many flavors, as do numerous other themes. The differences across these themes and their flavors are often determined by the (often implicit) choice to focus on one (or more) of the 540 Meno problems as opposed to others. It seems safe to say that these themes will continue to work out for a good while, and that advancements can be made by paying greater attention to precisely which Meno problems are at issue.

All of the work on the Meno problems focuses on the value of knowledge. But other work in value-driven epistemology focuses on lesser-theorized states. These states include true belief, significant (as opposed to trivial) knowledge and true belief, curiosity, understanding, and wisdom.

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[7] As John Greco pointed out to me, it is worth highlighting the fact that the questions encoded by figure 1 aren't as independent from one another as they might at first seem. In many cases, answering one of them puts us in a position to very quickly answer some of the others. For instance, if we answer "yes" to the question "Is (it true that) knowledge is epistemically better as an end than true belief for every item of knowledge and every item of true belief?", then we are in a position to quickly also answer "yes" to the question "Is (it true that) knowledge is epistemically better as an end than true belief for every item of knowledge and every item of true belief across which other things are equal?". If every item of knowledge is in that way better than *every* item of true belief, then *ipso facto*, every item of knowledge is in that way better than every item of true belief *for which other things are equal*.

Taking these states one at a time, let us start with true belief. Many theorists take it that true belief is good epistemically. The most common arguments for that view are teleological. Many theorists hold that belief has a telos or "aim", much like knives have the aim of cutting things. These theorists often identify truth with that aim, and in doing so they take truth to be particularly good epistemically (Wedgwood 2002, Shah and Velleman 2005). Other theorists identify the aim of belief with, not truth, but *knowledge* (Williamson 2000, Sutton 2005). At least one theorist identifies the aim of belief with *justification* (Feldman 2002).[8] There are numerous theoretical difficulties with all of these views, perhaps most importantly the difficulties of unpacking the idea of an "aim" in such a way that beliefs, as well as knives, can turn out to have one. Other theorists in a similar vein focus not on the notion of belief but on the notion of *inquiry*. For these theorists, inquiry has a telos or aim, for example truth (Hookway 2003) or knowledge (Whitcomb forthcoming *a*). Like the aim-of-belief theorists, these aim-of-inquiry theorists have as a central theoretical difficulty explaining the notion of inquiry's "aim".

Knowledge and true belief, then, are often taken to be epistemic goods. To the extent that it is plausible that these things *are* epistemic goods, something else is plausible as well, to wit that it is better epistemically to have more rather than less of them. It is possible to know more rather than less, and to have more rather than less true belief (and for that matter, more rather than less of any epistemically valuable state including justified belief, understanding, and others). It is occasionally remarked that we do better epistemically by having more rather than less of these things (Levi 1980, Goldman 1986). Such remarks are ripe for further development. In developing them we need, among other things, to make sense of the "measure" involved – the units or quantities of knowledge and belief (Treanor MS).

Another epistemically valuable state, closely related to large (as opposed to small) amounts of knowledge and belief, is significant (as opposed to trivial) knowledge and belief. It is better epistemically to know deep theoretical truths about e.g. metaphysics or physics, than it is to know trivial truths such as truths about the number of grains of sand on the nearest beach. Indeed, even if one were to know a lot of trivial truths, and thereby fulfill the epistemic value of having more rather than less knowledge, one's epistemic states would still be deficient owing to their triviality. Just as theorists inquire into the measure of knowledge, then, they also inquire into the nature of significance – the property that makes significant knowledge significant as opposed to trivial. Some approaches to significance make it a wholly objective mind-independent matter, for instance by making knowledge significant to the extent that it encodes laws of nature and classifies objects into natural kinds (Kitcher 1993). Other approaches make significance more subjective or mind-dependent, for instance by taking one's knowledge to be significant to the extent that it answers whatever questions one happens to be curious about (Goldman 1999).

Curiosity is thus sometimes taken to be the determiner of epistemic significance. It is also sometimes given other roles, for instance the role of explaining (or at least partly explaining) why true belief or knowledge is valuable epistemically (Goldman 1999, Alston 2005, Miscevic

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[8] Thanks to Kristoffer Ahlstrom for helpful discussion here.

2007). Here the idea is not (a) that certain items of knowledge or true belief are significant in virtue of satisfying our curiosity, but instead (b) that true belief (or knowledge) *per se* is epistemically valuable because of its relationship to curiosity. There is considerable controversy over whether either (a) or (b) is correct (Grimm 2008, Brady 2009). There is also controversy over what curiosity *is*. Some claim that it is a desire for true belief (Foley 1987, Goldman 1991); others claim that it is a desire for knowledge (Williamson 2000, Schmitt and Lahroodi 2008, Whitcomb forthcoming *a*); and others still have views more complicated than either of these (Kvanvig 2003).

We see, then, that there are epistemically valuable states other than knowledge, and that these states include true belief, bigger as opposed to smaller amounts of knowledge and true belief, and significant as opposed to trivial knowledge and true belief. In many cases, *curiosity* is taken to be particularly relevant to these states and their epistemic values. In recent years though, a different state entirely – *understanding* - has seen more focus than any of these.

In several cases, philosophers exploring the various Meno problems have concluded with some sort of denial, that is to say, some version of that view that knowledge actually isn't better than true belief. It is common among such philosophers to conjecture that a different state has what knowledge here lacks, and that this different state is understanding (Kvanvig 2003, Pritchard forthcoming *b*). Unsurprisingly, though, there are numerous disagreements about what understanding *is*. These disagreements are complicated by the fact that understanding comes in several forms: understanding *why* ("I understand why the litmus paper just turned pink") and understanding *that* ("I understand that the meeting is on Wednesday"), as well as the understanding of domains ("She understands physics").[9] Some of these forms of understanding may be reducible to others; there are active debates on the matter (Grimm 2010). There are also active debates on several related matters, including the matters of whether understanding is a species of knowledge (Grimm 2006), whether it somehow requires truth (Kvanvig 2003, Elgin 2009), and whether we can always reflectively access the facts about whether we have it (Zagzebski 2001).

In any case, understanding is widely taken to be a "higher" epistemic good: a state that is like knowledge and true belief, but even better, epistemically speaking. Another such state is *wisdom*. Aristotle identified two sorts of wisdom, the practical (roughly: a capacity for good judgment) and the theoretical (roughly: deep understanding). He took both of these sorts of wisdom, and particularly the theoretical sort, to be especially important epistemic goods. Contemporary epistemologists who theorize about wisdom most often take it to come in only the practical variety (Nozick 1989, Garrett 1996, Ryan 1996, 1999, 2007), although some of them argue that there is a *theoretical* form of wisdom as well (Whitcomb forthcoming *b*).

Now that I have surveyed some of the main work in value-driven epistemology, I'll move on to a more radical branch of the value turn. This more radical branch, *epistemic value theory*, is aimed directly at the epistemic value of various states, and inquires into that value for its own theoretical sake as opposed to the sake of identifying the natures of those states.

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[9] Notice that knowledge also comes in these forms; we can know why the litmus paper just turned pink, know that the meeting is on Wednesday, and know physics.

2.2 Epistemic value theory

Most contemporary epistemologists organize their theorizing around two standard questions: “What is knowledge?” and “How much of it do we have?”. Subsidiary questions arise in the course of trying to answer and clarify these. But these organizing questions themselves, the questions from which all the subsidiary questions get their significance, are the questions of what knowledge is and how much of it we have.

Now imagine epistemology as organized by different questions, these focused on epistemic value. What *is* epistemic value? How is it related to other sorts of value, for instance moral and prudential value? What is the best structural vocabulary for describing it – deontological talk of duties and rights, consequentialist talk of ends and means, virtue-theoretic talk of character traits and persons, some combination of these, or something else entirely?

Epistemologists are beginning to sometimes take *these* questions as theoretically central. When they do so, they are engaged in *epistemic value theory*. This branch of the value turn is a more radical break from recent tradition than is value-driven epistemology; it focuses on epistemic value for its own theoretical sake, whereas value driven epistemology focuses on epistemic value for the sake of uncovering the nature and extent of knowledge and similar states like justified belief. The published work in epistemic value theory can be roughly categorized into three branches: truth consequentialism, thick virtue theory, and credit theory.

Several theorists take epistemic value to have consequentialist structure, theorizing that all of epistemic value can be described in terms of epistemically good ends and the means towards those ends. The most prominent partisans of this approach are Alvin Goldman and William Alston, both of whom take true belief, or some combination of true belief and the avoidance of false belief, to be the sole epistemic ends. Goldman and Alston try to use this identification of the epistemic ends, along with the idea epistemic value has a consequentialist structure, to explain the epistemic value of various states other than true belief – for example, consistent belief, belief based on evidence, reliably produced belief, and knowledge (Goldman 2001, Alston 2005, Goldman and Olsson 2009). Goldman brings degrees of belief into the picture as well, constructing a system for evaluating them in terms of truth (and the avoidance of falsehood) and evaluating numerous phenomena as means to these things (Goldman 1999).

Truth-consequentialists sometimes use virtue-theoretic talk to describe their views. But the second branch of epistemic value theory, namely thick virtue epistemology, uses that talk in a much more full-blown manner (Code 1987, Zagzebski 1996, Roberts and Wood 2007, Baehr forthcoming). Whereas truth consequentialists in epistemology are comparable to utilitarians, thick virtue epistemologists are comparable to virtue ethicists. Just as virtue ethicists focus on moral character traits instead of means and ends, thick virtue epistemologists focus on intellectual character traits instead of means and ends. Such character traits include inquisitiveness, attentiveness, open-mindedness, love of knowledge, intellectual humility, impartiality, sensitivity to detail, perceptiveness, insightfulness, and perspicacity. Thick virtue epistemologists focus on such questions as what makes these traits intellectual virtues, what distinguishes them from other things in the ballpark such as intellectual skills, how intellectual virtues relate to moral virtues, and how they relate to epistemic states like knowledge and true belief.

The third branch of epistemic value theory is something of a middle ground between thick virtue epistemology and the truth consequentialism. We'll call this third branch of epistemic value theory is the *credit approach*. Partisans of this approach include Sosa (1988, 2003, 2007), Greco (2003, 2010), and Riggs (2002). Each of these theorists engages in value-driven epistemology as well as epistemic value theory, and each of them wields themes about credit in both projects. But as for the credit approach in epistemic value theory, its basic idea is as follows.

Sometimes it is good in a certain way for a certain performance to be a certain way: for instance, good aesthetically for a dance to be graceful, or good athletically for a arrow-shooting to hit its target. Moreover, it is better in these ways (aesthetically, athletically) for these things (dances, arrow-shootings) to *be creditably* beautiful and target-hitting, than to *be merely* beautiful and target-hitting. To see the difference between creditably being these ways and merely being these ways, compare two cases. In the first case, a skilled shooter releases his arrow; seemingly out of nowhere, a gust of wind blows it off course; and seemingly out of nowhere again, another gust blows it back on course to finally hit the target. In the second case, the same skilled shooter shoots as usual, and there are no unexpected gusts of wind or any other funny business; the arrow hits the target cleanly. In this second case – but not the first - there is a sense in which the shooter deserves credit for hitting the target. We might even say: in the first case the shooter hit the target *because* of the wind, but in the second case he hit the target *because* of his archery virtues. Credit theorists *do* say as much. They believe that the in second case (but not the first), the arrow hits its target because of the archer's athletic virtues, and therefore that in the second case (but not the first) the target-hitting is to the archer's credit. Moreover, they believe that the creditability featured in the second case is to the good athletically. They believe that, when it is good in some way (e.g. athletically) for some performance (e.g. an arrow-shooting) to *merely be* some way (e.g. target-hitting), then it is *even better* in that way for that performance to *creditably be* that way.

Now, credit theorists have it that beliefs stand to truth as arrow shootings stand to target-hits. They therefore take creditably true belief to better epistemically than merely true belief, just as arrow-shootings that creditably hit their targets are better athletically than arrow-shootings that merely hit their targets. In holding this combination of views, credit theorists hold an epistemic value theory; they hold a theory about what is better than what else epistemically. That theory takes truth to be a good end epistemically, and it evaluates true belief and creditably true belief accordingly.[10] But the notion of creditability at work in the theory is not, or at least not obviously, a consequentialist notion, i.e. a notion fully explicable in terms of ends and means. As a result of this, the credit theory is something of a half-way point between truth consequentialism and thick virtue epistemology.

Credit theorists (or at least all of the credit theorists to have published on the matter so far) also adopt an additional view: namely that knowledge is identical to creditably true belief. Given this additional view, their theory takes knowledge to be superior to true belief. Moreover, it *explains why* that superiority holds, or at least purports to do as much. The credit theory thus proposes solutions to many of the Meno problems we identified above. These proposed solutions have been widely discussed in recent work within the value turn (Lackey 2009, Pritchard forthcoming *b*, Greco 2010).

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[10] Sosa (2003) is especially helpful in developing this theme

2.3. Applied epistemic value theory

Now to the final branch of work within the value turn: applied epistemic value theory, the branch of thought that standing to epistemic value theory as applied ethics stands to normative ethics. Applied ethicists inquire into the moral status of particular kinds of acts (e.g. abortion) or institutions (e.g. systems of rules about who can become president of a country). Similarly , applied epistemic value theorists inquire into the epistemic value of particular kinds of belief-forming methods (e.g. trusting the testimony of others) or institutions (e.g. systems of rules about the admissibility of evidence in court).

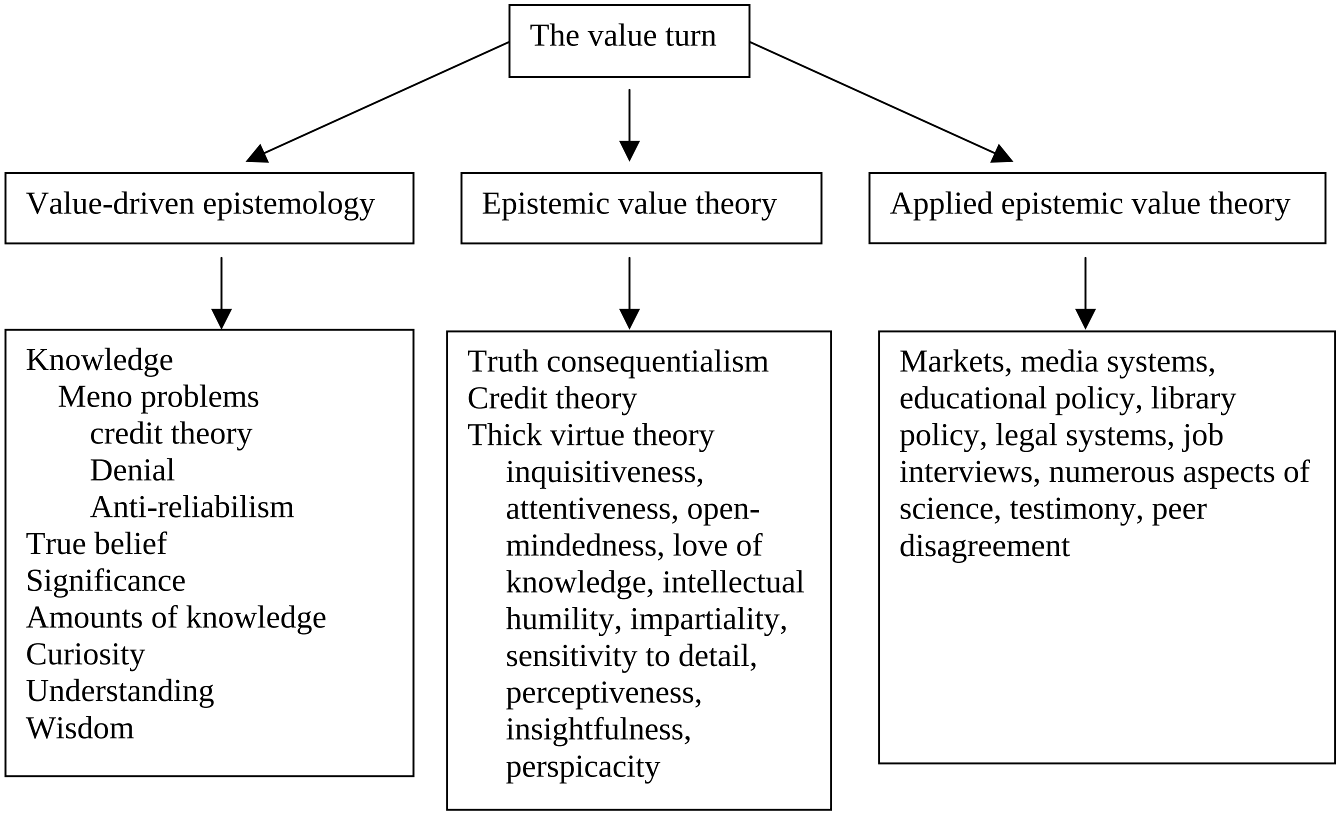
The most extensive work within applied epistemic value theory is Alvin Goldman's (1999) book *Knowledge in a Social World*. That book analyzes markets, schools, legal systems, science, and several other domains, and in each case it argues that the domain ought, from an epistemic point of view, to be structured in some particular way. Bishop and Trout (2005) also epistemically analyze numerous domains, including job interviews and medical diagnosis. Borrowing from the work of Gigerenzer et al (2000) and other psychologists, Bishop and Trout make numerous recommendations about how we should go about forming our beliefs, given the particular psychological makeup with which we are endowed.

Laudan (2007) gives an extensive treatment of the contemporary American system of trial by jury, arguing among other things that this system has epistemically suboptimal rules about the conditions under which a given piece of evidence is admissible in court. Kitcher (1993) explores the division of cognitive labor among scientists; he argues among other things that it is good epistemically for scientific communities to include a few maverick dissenters from orthodoxy, since these people can help keep the community from getting stuck in a rut. In similar work, Zollman (2007) explores the extent to which scientists ought, epistemically, to share their research results with one another. He argues that in a interesting set of cases, the epistemically optimal outcomes are produced by *restricting* information sharing among researchers. Fallis and Whitcomb (2009) apply epistemic value theory to library management, offering up a decision-theoretic approach for librarians to use in constructing policies about e.g. book acquisition so as to balance various epistemic goods such as knowledge and understanding. Quite a bit of applied epistemic value theory goes on, as well, in recent literatures on testimony and disagreement among peers. Those literatures feature attempts to tell us when we should trust the testimony of others, and how (if at all) we should change our beliefs upon finding out that equally informed and equally intelligent people disagree with us (Lackey and Sosa 2006, Feldman and Warfield 2010).

All of this work evaluates particular kinds of things epistemically, just as applied ethics evaluates particular kinds of things ethically. Work of this sort has been rapidly expanding in recent years, as has work in the other branches of the value turn. I've distinguished those branches from one another and given several examples of work in those branches. Figure 2 summarizes this classificatory overview:

Figure 2

Work within the value turn


The value turn
Value-driven epistemology
Epistemic value theory
Applied epistemic value theory
Knowledge
Meno problems
credit theory
Denial
Anti-reliabilism
True belief
Significance
Amounts of knowledge
Curiosity
Understanding
Wisdom
Truth consequentialism
Credit theory
Thick virtue theory
inquisitiveness, attentiveness, open-mindedness, love of knowledge, intellectual humility, impartiality, sensitivity to detail, perceptiveness, insightfulness, perspicacity
Markets, media systems, educational policy, library policy, legal systems, job interviews, numerous aspects of science, testimony, peer disagreement

3. New directions

There are many new directions ripe for development in the value turn. For instance, it is worth making the point that several paradigmatic writings in the value turn are also paradigmatic writings in naturalized epistemology (Kitcher 1993, Goldman 1999, Bishop and Trout 2005, Laudan 2007, Neta 2006). This point conflicts with the widespread belief that normativity and naturalism are at odds with one another. Perhaps, then, that widespread belief should be revised. In any case, the issue is ripe for development (Whitcomb 2008). Another such issue consists in the possibility of importing themes from "knowledge first" epistemology into the value turn literature. In recent years, several epistemologists have experimented with taking the knowledge first, and using it to illuminate other epistemic notions, such as the notions of evidence and justified belief (Williamson 2000, Sutton 2005, Bird 2007, Hossack 2007). This sort of epistemology is a theoretical inversion of recent tradition, as that tradition tends to take the other notions first and define knowledge in terms of *them*. Perhaps the knowledge-first approach would pay dividends if it were applied to the issues at play in the value turn. We might, for instance, take knowledge (as opposed to truth) to be the aim of belief. Given this identification of knowledge with the aim of belief, we could try to solve some of the *Meno* problems. For instance, we might try to explain why knowledge is better epistemically as an end than true belief by pointing out that merely true beliefs do not reach the epistemic goal, whereas beliefs constituting knowledge do. (Whitcomb 2007 advocates a version of this explanation; Pritchard forthcoming *b* explores the explanation without advocating it).

In summary, both the possibility of taking knowledge first, and the possibility of revising certain widespread beliefs about the relationship between naturalism and normativity, are issues ripe for development within the value turn. I'd like to explore a third such issue as well, this one in slightly more detail. This third issue consists in expanding the theme that credit matters to epistemic value.

Epistemologists who have thus far advocated the idea that credit matters to epistemic value have, as we saw above, added two more specific claims to that idea: first, that creditably true belief is better epistemically than non-creditably true belief, and second, that creditably true belief is identical to knowledge. Now, it is possible to coherently advocate one of these two claims without advocating the other. For example, we can coherently advocate the claim that creditably true belief is better epistemically than noncreditably true belief, without identifying the former state with knowledge. This is all to the good, since the identification of creditably true belief with knowledge is quite controversial. The first way we can expand the credit theme, then, is by liberating the idea that creditably true belief is better than noncreditably true belief, breaking it free from the more controversial claim that creditably true belief is identical to knowledge.

Once liberated, the idea naturally suggests several questions. To see them, notice that truth is not the only epistemically goodmaking property beliefs can instantiate. They can also be supported by one's evidence, coherent with one's other beliefs, virtuously produced, reflectively defensible, constitutive of understanding, or even knowledge. If it is better epistemically for beliefs to be creditably true than noncreditably true, then is it *also* better epistemically for beliefs to creditably instantiate these *other* epistemically goodmaking properties, than to noncreditably instantiate them? For example, compare two cases in which one's belief coheres with one's other beliefs. In the first case, Joe forms his beliefs just as we all do, namely by some more or less reasonable combination of perception, testimony, reflection, and so on. Most of us have incoherent beliefs as a result of this process (with most of us, the incoherence can be rapidly demonstrated by a modicum of clever Socratic questioning). Joe, however, is different: unlikely as it may be, his beliefs happen to be maximally coherent with one another.

Contrast Joe with John, who also forms his beliefs in the ways the rest of us do. One day, John engages in some philosophical reflection and finds that his beliefs are incoherent. In response to the incoherence he adds and subtracts beliefs so as to render the whole corpus coherent after all.

When John's beliefs are (here at the end of the story) coherent after all, is it *creditable* to him that they are coherent, just as in our archery cases above without the wind gusts, it is creditable to the archers that their shots hit their targets. But the coherence of Joe's beliefs is *not* creditable to him; *that* coherence is more like the target-hitting of an unskilled shooter whose arrow hits the target through improbable lucky wind gusts.

What we have here, then, is a pair of cases one of which features *creditably coherent* beliefs, and the other of which features *noncreditably coherent* beliefs. If we are to say that creditably true beliefs are better epistemically than noncreditably true beliefs, then should we also say that creditably coherent beliefs are better epistemically than noncreditably coherent beliefs? More generally, should we say of *every* epistemically goodmaking property of beliefs, that beliefs instantiating that property creditably are better epistemically than beliefs instantiating it noncreditably?

And just as there are epistemically goodmaking properties such as truth and coherence, there are also epistemically *badmaking* properties. It is bad epistemically for beliefs to be false, unsupported by one's evidence, incoherent with one's other beliefs, viciously produced, reflectively indefensible, not aspects of understanding, or even for them to fail to be knowledge. For instance, compare two cases of false belief. In both cases, you know a coin to be fair; that is to say, you know that the coin has a 50% chance of landing heads, and a 50% chance of landing tails, given that it is flipped. The coin is flipped, and you predict that it will land tails. Unfortunately for you, it lands heads instead. Then it is flipped again. Reasoning via the gambler's fallacy (which fallacy has been explained to you several times), you predict and come to believe that the coin will land tails on this second flip. It lands heads instead; your belief turns out to be false.

All of that happens in both cases. But in one case the coin lands heads due to chance, and in the other case it lands heads because a powerful demon has manipulated the speed at which the coin falls through the air, altering that speed so as to make the coin land on whatever side makes your belief false: tails if you believe it will land heads, and heads if you believe it will land tails.

In the first case, where the coin lands heads due to chance, your belief is false because you engaged in bad reasoning; and so plausibly, the falsity of that belief is attributable to you, i.e. to your credit.[11] But in the second case, where the coin lands heads due to the manipulations of the demon, your belief is false because of the demon's manipulations. And so, plausibly, the falsity of your belief in this second case is not attributable to you, not to you credit.

Perhaps the creditably false belief here is *worse* epistemically than the noncreditably false belief here – just as a given creditably true belief might be *better* epistemically than a noncreditably true one. More generally, if we are to say that epistemic goods are *even better* when held creditably, then perhaps we should also say that epistemic bads are *even worse* when held creditably. We might say that creditably false belief is worse epistemically than noncreditably false belief, and creditably incoherent belief is worse epistemically than noncreditably incoherent belief – just as we might say that creditably true belief is better epistemically than noncreditably true belief, and creditably coherent belief is better epistemically than noncreditably true belief. These considerations suggest a general principle about credit and epistemic value, to wit:

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[11] Would it be better to say "your *discredit*"?

The Credit Amplification Principle:

> for every belief and every property of epistemic value or disvalue:
>
> it is epistemically *better* for that belief to have that property creditably than non-creditably, if that property is of epistemic *value*
>
> and
>
> it is epistemically *worse* for that belief to have that property creditably than non-creditably, if that property is of epistemic *disvalue*.

This principle tells us that, in general, credit *amplifies* epistemic value by making epistemic goods even better and epistemic bads even worse. Now this principle may be true, and it may be false. It certainly seems plausible in the cases we discussed above. But perhaps there are other cases where it is implausible. If there are such cases, then perhaps the principle does not hold in general – which would suggest that it does not hold in the special case of truth either, that special case already advocated by credit theorists writing about epistemic value. On the other hand, if the principle *does* hold in general, then it provides an interesting expansion of the themes already on offer from credit theorists. Either way, the credit amplification principle is a conjecture that is ripe for development, as are the conjectures that naturalism and normativity are not conflicting but coherent, and that we can make theoretical progress by taking knowledge first.[12]

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