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Restrictions on Warrant Properties

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Not all true beliefs count as knowledge; warrant is the technical term for the (possibly logically complex) property that gives you knowledge when you add it to true belief. Warrant is *not* necessarily the same as justification, or any other epistemological property; all that this stipulative definition seems to entail about warrant is something akin to the following pair of biconditionals:

> (1) A true belief counts as a piece of knowledge iff it is warranted.
> A warranted belief counts as a piece of knowledge iff it is true.

What exactly warrant turns out to be depends upon the substantive theory of knowledge we adopt. It may involve a belief's being justified and having an absence of genuine defeaters for that belief, a belief's being formed through a reliable process, a belief's being formed through the virtuous traits of an agent's cognitive character, or some such.

Some epistemologists, however, have attempted to theorize about warrant by offering "nonpartisan" arguments, or in other words, arguments that do not depend upon any substantive theory of knowledge. For example, Merricks (1995, 1997) argues for warrant infallibilism, the claim that a belief cannot be at once warranted and false; Ryan (1996), Howard-Snyder *et al*. (2003), and Coffman (2008) challenge his arguments without endorsing warrant fallibilism. Pust (2000) argues that some of the claims made about warrant by the philosopher who first used the term as a technical concept in epistemology, Alvin Plantinga, are groundless, given the stipulative definition of the term. Lastly, Michael Huemer (2005) tries to demonstrate several claims about the nature of warrant: that there is no unique warrant property, that warrant fallibilism is true, that some but not all warrant properties are closed under known logical entailment if knowledge is, and that no warrant properties are closed under known logical entailment if knowledge isn't.

In this paper I will first summarize Huemer's arguments and then critique his conclusions. Our stipulative definition of warrant needs to be modified somehow to eliminate some of the intuitively problematic candidates for warrant conditions that his analysis allows. What complicates our task is the fact that, as Huemer (p. 117) points out, given the way warrant is defined, it is not the kind of thing we can have clear intuitions about. Or in Pust's words, "If we had the ability to make independent intuitive judgments about the term's proper and improper application, there would be no justification, prior to analysis, for stipulating that warrant has a certain functional role. After all, we might find that such a characterization was mistaken," (p. 51). All we can know about warrant at the outset is that it fills the functional role of making up the difference between knowledge and mere true belief. We may have intuitive ideas about what does that, but the thing that actually fills that functional role may turn out to be far different from what we originally thought.

On to Huemer's first argument, then. This argument attempts to show that there is no unique warrant property. It hinges upon the fact that for any propositions p and q, there is at least one proposition, r, such that (p & q) is logically equivalent to (p & r) but q is not logically equivalent to r (pp. 172-173). For example, let $r = (p \rightarrow q)$, where the equals sign indicates logical equivalence. q is logically independent of p, whereas r is not; r is true only if p is false or q is true. Yet (p & r) = (p & ($p \rightarrow q$)) = (p & q), so (p & r) is true if and only if (p & q) is. As he writes,

> "Thus, the common metaphor in which we think of a conjunction as 'containing' two 'components', p and q, is misleading. If an omelet contains eggs and cheese, for example, one cannot make the same omelet by keeping the eggs but putting in something other than cheese; but when it comes to propositions, one can get the same result (up to logical equivalence) by holding one 'component' constant and changing the other component," (p. 173)

Huemer then shows that this general principle of logic can be applied to theories of knowledge. The point could be made more simply for some belief p by comparing some warrant condition $\varphi(p)$ with some other warrant condition ($p \rightarrow \varphi(p)$). However, so the reader will not think Huemer's argument is entirely frivolous, one can make the same point by comparing the Standard Defeasibility Analysis of Knowledge (SDA) with the Modified Defeasibility Analysis (MDA) (cf. Huemer, pp. 173-174). Both analyses have the same first three conditions:

> S knows that p if and only if:
> (i) S believes that p;
> (ii) p is true;
> (iii) S is justified in believing that p

They differ in the fourth condition they add:

> (SDA): (iv) there are no (genuine) defeaters for p
> (MDA): (iv') there are no defeaters for p that are compatible with p

The conjunction of (iii) and either (iv) or (iv') serves as the warrant property here. (iv) is logically stronger than (iv') and entails it. But the conjunction of (ii) and (iv') entails (iv) as well, because the truth of p means there are no true defeaters for p incompatible with p (such as not-p) and (iv') states that there are no defeaters for p compatible with p. Hence, if (ii) and (iv') are both true, there are no genuine defeaters for p, and (iv) must be true as well. Thus (SDA) and (MDA) give logically equivalent analyses of knowledge, despite possessing logically non-equivalent analyses of warrant.

Additionally, Huemer gives a very simple argument in favor of warrant fallibilism, the view that a belief can be warranted and false at the same time. Even if some warrant property $\varphi(p)$ entails the truth of p, then the alternative warrant property $(p \rightarrow \varphi(p))$ does not entail the truth of p, because $(p \rightarrow \varphi(p))$ is true whenever p is false. And if $\varphi(p)$ does not entail the truth of p, then $(p \ \& \ \varphi(p))$ does. This shows that warrant need not entail truth, but may do so, depending on minor alterations we might make to a given warrant property's logical form.

Huemer also derives a couple of results concerning the relationship between warrant and closure. Suppose that knowledge is closed under known logical entailment; in other words, if some agent S knows p and knows that p logically entails q, then S knows (or has all that it takes to know) q. Is warrant also closed under known logical entailment? Or rather, if S's belief that p is warranted and S knows that p entails q, does it follow that q is warranted for S? Not necessarily, as Huemer shows (pp. 179-180). To see this, assume the following:

> 1) $\varphi(p)$ is a warrant property that is closed under known logical entailment.
> 2) q is an unwarranted true belief. (This is a reasonable assumption, because not all true beliefs count as knowledge.)
> 3) p is some false belief that entails the truth of q. (At a minimum, in classical logic every contradictory proposition entails the truth of everything else.)

$\varphi(p)$ and $(p \rightarrow \varphi(p))$, as warrant properties, give logically equivalent analyses of knowledge. $(p \rightarrow \varphi(p))$ is true, given the above three assumptions, because the antecedent is false, and thus p is warranted regardless of its level of plausibility. p entails q. But $(q \rightarrow \varphi(q))$ is false, because the antecedent is true and the consequent is false. (We know $\varphi(q)$ is false because q is a true belief, $\varphi(q)$ is a warrant property for q, and we assumed at the outset that q was unwarranted, so that any true belief in q would not count as a piece of knowledge. Our warrant properties give logically equivalent

analyses of knowledge, so *q* will be unwarranted according to both of them.) Thus, the warrant property ($p \rightarrow \varphi(p)$) is not closed under known logical entailment.

On the other hand, if we assume that knowledge is closed under known logical entailment and that the warrant property $\varphi(p)$ is *not* closed, then Huemer can demonstrate that there is another warrant property that is closed (pp. 179-180). Suppose that *S* knows *p* and knows that *p* entails *q*. Knowledge is closed, so S knows (or has all that it takes to know) *q*. If S knows (or has all that it takes to know) *q*, then $\varphi(q)$ is true, according to our analysis of knowledge. We can reason the same way about any of *p*'s other known logical consequences. All of them will have φ, because S is in a position to know them and φ is a warrant property. Therefore, the warrant property ($\varphi(p)$ and all of the known logical consequences of *p* have φ) gives a logically equivalent analysis of knowledge *and* is closed under known logical entailment.

Lastly, Huemer shows that, assuming knowledge is *not* closed under logical entailment, neither is warrant (180). Since knowledge is warranted true belief, and truth is closed (by definition) under entailment, if knowledge is not closed, then it must be the case that either belief or warrant is not closed either. Epistemologists typically find it uninteresting to look at the cases where an agent fails to believe the logical entailment, so if we restrict ourselves to cases of known logical entailment (i.e., where the agent competently infers and believes *q* on the basis of *p*), then it must be the case that warrant is not closed.

Although, as we have seen, Huemer offers a nonpartisan argument for warrant fallibilism, it receives scant attention from Coffman (2008)'s review of the warrant fallibilism/infallibilism debate. The reason seems to be that although Huemer's logic is valid, there seems to be something illegitimate going on in the way he uses it to make his points. If $\varphi(p)$ is a warrant property such that *p* is a warranted belief for an agent S, we clearly do not want propositions like ($p \rightarrow \varphi(p)$) or ($\varphi(p) \vee \sim p$) to count as warrant properties also. But why not? And how should we tighten our definition of warrant to exclude things such as ($p \rightarrow \varphi(p)$) from consideration? Let us first see what Coffman has to say about the matter. His comments on Huemer are restricted to a long footnote, which says this:

> "Michael Huemer (2005) has recently shown that those discussing questions like the ones raised here should be more careful when fixing the reference of 'warrant'. Huemer argues that no feature is simply *the one* that yields knowledge when conjoined with true belief. Suppose there is some such feature, W. The fact that W exists entails that there is another property that yields knowledge when conjoined with true belief – viz., *being false or having W*. So, if there is a feature that yields knowledge when conjoined with true belief, then more than one feature does so: no property is the one that yields knowledge when conjoined with true belief.

In light of this argument, I propose the following: warrant is the (possibly logically complex) *epistemically valuable* feature that yields knowledge when conjoined with true belief – where a property is **epistemically valuable** iff its being exemplified entails the obtaining of an epistemically good or positive state of affairs. Because some false beliefs have no epistemically valuable features – e.g., a false belief grounded entirely in wishful thinking – no property that has being false as a disjunct qualifies as epistemically valuable (in the relevant sense)." (pp. 173-174)

Howard-Snyder *et al*. (2003) also discuss the problems with a particular warrant-property candidate, labeled (2) below, that has being false as a disjunct. It is intended to prevent Gettier cases – cases where one's belief is accidentally true – from counting as pieces of knowledge.

> (2) S's belief that *p* is warranted only if S's belief that *p* is false or non-accidentally true for S.

If we let "being non-accidentally true" = φ(*p*), then (2) above is just (φ(*p*) v ~*p*). They write:

> It divides the cases into true and false beliefs. What it says about warranted true beliefs is helpful in understanding the nature of warrant: they must be nonaccidentaly true. But what it says about false beliefs is completely unhelpful. Any old completely unjustified and unreliably formed belief could meet this condition on warrant, so long as it was false. So this belief tells us nothing about the nature of warrant in the case of false belief." (p. 309)

So for Howard-Snyder *et al*. the problem with a warrant condition that contains "being false" as a disjunct is that it tells us nothing about the nature of warrant, and the problem for Coffman is that such a warrant condition is not epistemically valuable. However, I do not find either of these responses to be a completely satisfactory answer. Since Huemer's argument is based almost solely upon the formal manipulation of logical propositions, ideally, I would like to eliminate warrant conditions such as (φ(*p*) v ~*p*) strictly on the basis of some aspect of their logical form. Note that even if Howard-Snyder *et al*.'s arguments succeeded in ruling out (φ(*p*) v ~*p*) as a possible warrant condition, they would not rule out other possible conditions, such (*p* → φ(*p*)) or (*p* & φ(*p*)).

The warrant condition (φ(*p*) v ~*p*) has "being false" as a disjunct. Indeed, this seems to tell us nothing about the nature of warrant in the case of false belief, but that is because there's nothing to tell. Our stipulative definition of warrant says nothing about what it would mean for a belief to be both warranted and false at the same time. No false belief

counts as a piece of knowledge, nor could so count without somehow becoming true, so it is simply vacuous to say, of a false belief, that it is warranted. It implies nothing new about the belief. Thus attempts to offer nonpartisan arguments for and against warrant infallibilism seem at least slightly misguided. Granted, if such an argument were to succeed, it would spell disaster for any substantive theories of knowledge that had incompatible warrant conditions, but most such arguments, being based on intuitions rather than logical manipulation, seem doomed to failure. Since being both warranted and false is vacuous, according to our definition of warrant, we are not entitled to infer, from the fact that a given true belief is warranted (or unwarranted), that it would be warranted (or unwarranted) were it to become false. We also have no grounds, prior to giving an analysis of knowledge, for knowing which epistemic properties warrant supervenes over, or whether warrant remains the same despite the changes that affect the truth-value of a belief between nearby possible worlds.

As for Coffman, I do not think our definition of warrant should have notions of epistemic value built in. An analysis of knowledge should give us the truth-conditions for determining when we have knowledge and when we don't, and warrant is one part of those truth-conditions. Most of us are intuitively inclined to think that knowledge is valuable in various ways, but it seems to me we do not want our analysis of knowledge to beg such questions. What we also need, in addition to that analysis and separate from it, is an understanding why knowledge is valuable or important enough to bother analyzing in the first place.

To return to Huemer's arguments, I think the real problem with warrant conditions such as $(p \mathbin{\&} \varphi(p))$ is that they are redundant in some way. I tend to think of knowledge like an omelet, as having component parts, rather than as the product of any of a number of sets of complex but logically equivalent propositions. If I have eggs already and want to know what else I need to make the omelet, I want to be told "cheese," not "cheese plus the eggs you already have."

How can I cash out this notion of non-redundancy? Perhaps we can measure redundancy for some set of propositions K in terms of the number of members of K or their denials which are entailed by other members of K or their denials. '$\varphi(p)$' is obviously less redundant than '$(p \rightarrow \varphi(p))$', given a set K containing 'p,' because 'p' and '$\varphi(p)$' entail nothing about each other while the falsity of 'p' entails the truth of '$(p \rightarrow \varphi(p))$.' '$\varphi(p)$' is completely logically independent of 'p.' (Of course, it may not be so in reality, as for all we know pre-theoretically, some substantive theory of knowledge that entails warrant infallibilism could be correct. If so, '$\varphi(p)$' is just a cover term for some logically complex relation which 'p' does entail.) Any increase in the redundancy or logical complexity of the warrant condition should be offset by theoretical advances necessitating that increase.

Lastly, suppose that we try to modify our definition of warrant so that it does imply something about warranted false beliefs. Modalizing (1) above in the following way seems to be one way we could do this:

> (3) A true belief would count as a piece of knowledge iff it were warranted. A warranted belief would count as a piece of knowledge iff it were true.

If we make this move, we force ourselves to say something substantive about the nature of warrant in order to understand (3), and we also increase the likelihood that this definition may not in fact correctly capture whatever makes the difference between knowledge and mere true belief. But it might be worth the effort nonetheless. Let's examine the case of some false belief which, supposedly, would count as a piece of knowledge if it were true. Suppose that Betty has all of the alarming symptoms of zebra pox. She has sought a second and third medical opinion, and all of her reliable doctors agree on the diagnosis: it's a bad case of zebra pox, all right. Thus, Betty competently infers that she has zebra pox. In fact, Betty actually has mule pox, an extremely rare disease with similar symptoms. If Betty's belief that she has zebra pox is warranted according to (3), then seemingly it must be the case that in most of the nearby possible worlds around Betty, her belief is true, and Betty is just very unlucky to be in a world where her belief is false. But beliefs can be true accidentally or non-accidentally, so it seems the non-accidentally-true-zebra-pox worlds must have some kind of advantage over their accidentally-true cousins, in terms of nearness to Betty or numerical superiority or both. One accidentally-true-zebra-pox-world is the world where Betty's doctors misdiagnose her mule pox as zebra pox, but Betty also has recently acquired a zebra pox infection that has not yet produced any symptoms of its own. I presume that world stands at a disadvantage compared to the non-accidentally-true-zebra-pox worlds. In the accidentally-true-zebra-pox-world itself, of course, Betty's belief is not warranted; that was the lesson of the Gettier problem.

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