0 Introduction

It is typically thought that some epistemic states are valuable – knowing, truly or accurately believing, understanding (to name a few). These are states it’s thought good to be in and it’s also said that we aim or want to be in them. It is then sometimes claimed that these sorts of thoughts about epistemic goods or values ground or explain our epistemic norms. For instance, we think subjects should follow their evidence when they form their beliefs. But why should they? Why not believe against the evidence or ignore it completely in deciding what to believe? Here’s a compelling sort of answer: because epistemic subjects are or ought to be trying to know more and following their evidence is a means to that end or to fulfilling that obligation.

Let’s call norms that are grounded in or explained by values – either valuable states or states of affairs or the things that actual epistemic subjects value – ‘teleological’. And let’s call norms that are grounded in or explained by knowledge’s value or our valuing knowledge, ‘teleological_k’. In what follows I’m going to assume that the thought that knowledge is valuable or valued is just the thought that having knowledge is valuable or valued. Later I’ll think about other relations we might stand into to knowledge that the teleologist_k might look to (and other forms of teleological epistemology more generally).

†Please ask if you want to cite it though.
While I’ll discuss some cases already in the literature that make trouble for a teleological$_k$ epistemology, this paper is not focused on counterexamples or counter-intuitive consequences. Instead I want to think about what a set of genuinely teleological$_k$ norms will look like and argue that some of our most central epistemic norms won’t be in that set. To show this I’ll argue that according to this set of genuinely teleological$_k$ norms there is much we’re not permitted to come to know and much we’re not permitted to come to believe on even impecable evidence in absolutely ordinary cases. This conflicts with normative commitments that are central to epistemology as we know it and I think shows that our central epistemic norms cannot be teleological$_k$ norms.

1 Clarifying the issues

I want to start with some preliminary points that will help us to better set up the issues here and better understand the idea of a teleological$_k$ norm.

The teleologist$_k$ makes two main claims:

(1) A value claim – knowledge is valuable/valued.

(2) A grounding claim – that knowledge is valuable/valued grounds or explains our central epistemic norms; these norms are ‘teleologically$_k$ grounded’.

The focus of this paper is largely on (2); I want to argue that (2) is false. Let me make a couple of points to begin about (1) though.

First, in epistemology we often talk as if states of mind or attitudes are the bearers of value. Sometimes though it’s easier to talk about states of affairs as having or lacking value. I’m not going to make anything of this distinction here, but assume that we can easily translate one sort of talk into the other, i.e., that to say that one’s knowing $p$ is valuable is to say that the state of affairs in which one knows $p$ is valuable, and vice versa. I’ll talk in both ways in what’s to come.

Second, there are two ways of thinking about the claim that knowledge is valuable that we should distinguish – one more “subjective” and one more “objective”. The subjective claim is that knowledge or having knowledge is something that people in fact value – this is a claim about what actual people care about. The objective claim is the claim that knowing is valuable – this is a
claim about some state having value, and can be independent of a claim about what any actual (or possible) people care about or value. This distinction raises a complex cluster of issues, but we don’t need to engage with them here. I mean the arguments to come to have their impact given either way of thinking about the claim that knowledge is valuable.

Now more on (2). What is it for a norm to be teleologically grounded? I’m thinking of a norm as expressed by a sentence of the form ‘Δ S φs’ or ‘Δ S φs in c’, where ‘S’ should be replaced with the name of a subject ‘Δ’ with a phrase expressing some normative modality, ‘φ’ a phrase picking out some state or action, and ‘c’ the specification of some relevant circumstances. ‘Δ’ can express any normative modality on the way I’m thinking about norms here, e.g., ‘Δ’ can be replaced with phrases like ‘It ought to be the case that’, ‘It’s permitted to be the case that’, ‘There is reason for it to be the case that’ and so on. ‘φ’ in the norms we’ll think about will have to do with forming and having beliefs.

So each norm has a central normative modality. We might ask what explains why subjects are normatively bound in the way some norm claims – why subjects ought to do something or be some way (in some circumstances), or why they are permitted to do something or be some way (in some circumstances).\(^1\) My thought is that if a norm is teleologically grounded, then that explanation will go by way of some valuable or valued state of affairs. There are several ways this sort of explanation can go, but I want to stay focused on a central way it tends to go: it will be the case that someone (say) ought to (say) do something because doing that thing will or is likely to lead to the relevant valuable or valued state of affairs. The general form of the sort of explanation that I’m interested here then is that subjects are normatively bound to do something or be some way because doing that thing or being that way conduces to the relevant valuable state of affairs. For instance, subjects ought to follow their evidence because doing so is likely to get them more knowledge.

It’s worth relating the idea that epistemic norms are teleologically grounded to some others. There has been some discussion recently about ‘epistemic con-

\(^1\)On ‘bound’: I want to say that a norm binds a subject so long as it applies to the subject. Sometimes it’s said that only requirement norms bind and others apply in other ways, but I’m not making that distinction here.
sequentialism”. It’s hard to say exactly what makes some view consequentialist, but one thought is that some normative theory is consequentialist if, according to the theory, normative facts of one kind, e.g., deontological facts, facts about what we ought or are permitted to do, depend on or are grounded in facts about the value of states of affairs brought about in action. For instance, on views like this it’s exactly because some states of affairs are valuable that we are required (or permitted etc.) to act in ways that help bring about those valuable states of affairs. But then take some norm \( n \) that says that one ought to \( \varphi \) in \( c \). Plausibly, we can think of \( n \) as a consequentialist norm if what explains why one ought to \( \varphi \) in those circumstances is the value of some state of affairs one will bring about by \( \varphi \)-ing in those circumstances. But then thinking of \( n \) as a consequentialist norm means thinking of it as teleologically grounded. So this paper can be thought of as containing an argument against at least some forms of epistemic consequentialism.

Also a target here is a family of views in epistemology we might call ‘instrumentalist’. Thomas Kelly, in arguing against instrumentalism, calls it the view according to which epistemic rationality is a species of instrumental rationality. He thinks of epistemic rationality as the rationality one displays when one respects or follows one’s evidence and instrumental rationality as the rationality one displays when taking the means to one’s ends. So here what explains why one should respect or follow one’s evidence is that respecting or following one’s evidence is a means to one’s ends. So it’s because doing the relevant thing conduces to some valued end that one ought to do the relevant thing. So we can think of instrumental epistemic norms as teleological as well.

These two families of views are targets here then. My thought is that these sorts of views make claims about the structure of traditional epistemic normativity – they claim that our familiar norms are consequentialist or instrumentalist. It’s these sorts of claims that I’m worried about here. I want to argue that our fa-

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2 For some of this see, Berker (2013a), Berker (2013b) and Ahlstrom-Vij and Dunn (2014).
3 For some of the instrumentalist thread in epistemology see Stich (1990), Kornblith (1993), Grimm (2008), Street (2009) and Steglich-Petersen (2011). See Cowie (2014) and Sharadin (forthcoming) for a couple of recent defences.
4 See Kelly (2003).
5 See Feldman (2000) for a defence of evidentialism in this spirit: following our evidence is a means to our epistemic ends.
familiar epistemic norms are not consequentialist norms or instrumentalist norms (at least not in the sense at issue now).

Apart from these two families of teleological positions, there’s something intuitive about a teleological epistemology. Shouldn’t there be some explanation as to why we ought to follow our evidence? Or why we’re permitted to? Or why we should use reliable rather than unreliable methods? Plausibly there should be and the idea that the answer has something to do with following our evidence and using those methods as conducing to a state of value or that we value – in this case, knowing more – has great appeal.

I am not the first to point out that forms of consequentialism and instrumentalism in epistemology are in tension with some of our standard epistemic commitments. My worry here doesn’t go by way of counterexample though but focuses on the basic normative structure of these views and shows why that structure makes it that our familiar epistemic norms cannot be teleologically grounded.

2 Some teleological trouble

I want to argue that our familiar epistemic norms are not teleologically grounded. My plan is to think about the norms that are and show that our epistemic norms won’t be among them.

To start let’s think about normative epistemology “as we know it” or as it is currently done as a set of norms, E. Of course there is debate about which norms are in E, but nothing to come will hang on putting anything too controversial in E or leaving anything too beloved out. I’ll say more about E as we go; in general it should contain our familiar epistemic norms. I also want to think about another set of norms, T. I want to think of T as an exhaustive set of teleologically grounded norms. We can say that the norms in T ‘serve’ the end or value of knowing more: they are the norms subjects trying to produce more knowledge ought to conform to. My thought is that we know that if a set of norms is teleologically grounded in some value v, then the reason why we

\footnote{For instance, see Berker (2013a) for a counterexample to epistemic consequentialism and see Kelly (2003) for a counterexample to epistemic instrumentalism.}
ought or are permitted (and so on) to do as those norms say is that doing so helps to bring about v. So following the norms in T helps subjects get more knowledge. And if we think of T as exhaustive then if one is trying to know more, these are the norms that one ought to conform to.

The teleologist_k wants to say that the norms in E are those that a subject in pursuit of knowledge ought to conform to – those norms serve our goal of acquiring knowledge; or given what we’ve just said about T, that E is a subset of T. I don’t think that this can be right. I want to argue that some of the central norms in E will not figure in T. And if we are thinking of T as the set of all norms that serve our knowledge acquisition ends, then the argument will show that those central norms aren’t teleologically_k grounded.

What I want to first draw out though is how different E and T seem to be. I take it that the teleologist_k needn’t be claiming that E and T are identical. That said, I want to spend a bit of time thinking about why E ≠ T since it’s worth seeing how different from T E is. One might have thought that normative epistemology as we know it is a practice dedicated to the pursuit of knowledge. Thinking about why E ≠ T brings out why that thought is hard to sustain.

Here’s one place to start. At the bottom of the entire teleological_k picture is the idea that knowledge is valuable or valued. If T is the set of norms a subject in pursuit of that good ought to follow then it is not at all clear that that set of norms should only contain only “knowledge-acquisition” norms rather than “knowledge-production” norms as well or more generally. The thought that knowledge is valuable isn’t, I take it, just the thought that my knowledge or your knowledge is valuable but that everyone’s is. A practice focused on producing that value might naturally be thought to have norms that demanded that subjects act to produce the value generally, and not just for themselves, e.g., by teaching others or testifying more generally. We typically think this is the case with other sorts of valuable ends like happiness (say). The thought that we should promote happiness when we act is typically not the thought that we should promote only our own happiness. But general knowledge production norms don’t seem to be in E; public epistemic service is (sadly) not part of what traditionally makes for epistemically good or rational subjects.

Even if we focus just on the narrower goal of (personal) knowledge acqui-
position, and think of T as the norms that serve that end, T will still have other sorts of norms that don't seem to be in E. Imagine two subjects, one who knows next to nothing and the other who is incredibly knowledgeable. Let's say neither has any false beliefs. From the perspective of meeting the goal of acquiring knowledge, one of these subjects is doing much better than the other (other things equal). But from the perspective of E, I think both can be doing equally well. That is, while standard epistemic norms forbid subjects from forming certain kinds of beliefs and might even demand that they form others when they happen to be in certain kinds of epistemic circumstances, they typically aren't thought to ask more than that of subjects. That is, a largely ignorant subject who has some evidence and comes to know what they can based on that evidence is doing no worse than the subject who has a huge body of evidence and sees that through, coming to know what they can. In theory, a completely ignorant subject can be doing just as well from the perspective of E as an all-knowing one. But this pair is not doing equally well from the perspective of the goal of acquiring knowledge.

The thought just expressed is based on one about the membership of E. We want to leave that somewhat open since there is some debate about what should and shouldn't be in there (I'll discuss the contents of E more in a moment). My thought for now though is that at its most demanding E requires epistemic subjects to come to know all they can given their evidence – it requires that they be deductively closed and something like inductively/evidentially closed as well. But I'm assuming that this is about as demanding as E gets. Other norms in E permit believing in certain kinds of circumstances, forbid it in others, justify or warrant believing in others still, but the most that is expected of us in terms of knowledge acquisition, according to E, is that we know all we can at a time given our evidence at that time. This is exactly why according to E, the utterly ignorant can be doing just as well epistemically as the highly knowledgeable: both may know all they can at the relevant time given their evidence.

But T – a set of norms that serves the end of knowledge acquisition – will demand more of us. In particular it will demand that we acquire more knowledge, and not just acquire more knowledge given our evidence. T will demand that we collect more evidence rather than just exploit what we have. That's to
say that T will contain what we can think of as more “inquiry-focused” norms. What will these norms look like?

Roughly they will be norms that push us to explore further and collect more information – they will be evidence collection norms rather than just evidence exploitation norms. Evidence collection norms though aren’t our familiar epistemic norms. First, they might range over actions and not just attitudes or attitude changes. Evidence collection norms might demand we ask more questions, perform more experiments, and generally perform certain kinds of actions. The norms in E are typically thought to range over attitudes and attitude changes only. These evidence collection norms in T might also connect up belief and perception in particular ways, e.g., by demanding we attend to more details presented to us in perception or remember more of what we see. A typical visual scene can contain any number of details that are easily knowable, but which we fail to come to know (or at least fail to remember). This is thought perfectly rationally permissible. That I don't remember exactly how many buildings are visible from outside my window, or what colours the various rooftops are, is not an epistemic failing on my part. That is, E doesn’t demand I have beliefs about all of those details. But evidence collection norms might well demand that we retain more and so know more when knowing more is as easy as it typically is. Thinking about these sorts of evidence collection norms gives us further reason to think that E is not identical to T.

Overall, it looks as though a practice dedicated to (even just) knowledge acquisition would have all sorts of norms that we don’t find in E. As I said earlier, it’s not clear how bothered the teleologist should be about this, so long as E is a subset of T (on the assumption that T is exhaustive). But I don’t think that E is a subset of T. In other words, at least some of the norms in E – central ones – aren’t going to be in T as well and we can’t think of those norms as teleologically grounded. To show this I want to think of some specific norms n_i in E, and then, by reflecting on what will have to be in T, show that n_i won't be in T.
3 \( \mathbf{E} \not\in \mathbf{T} \)

Let's think about the sorts of norms in E then. Here is a natural place to start.

**Weak Evidentialist Norm** If one's total evidence clearly and decisively supports \( p \) at \( t \), then believing \( p \) at \( t \) based on that evidence is permissible.

This norm just says that if a subject has decisive evidence for \( p \) and that this is clear to the subject, then the subject is permitted to follow that evidence and believe \( p \). Of course, it's hard to say just what kind of evidential support counts as “decisive”, but I think any intuitive way of fleshing it out will do. I take it that most will be happy to think of something like this sort of weak evidentialist norm as in E. Here are a couple of other norms that I think we can take to be in E, perhaps these are slightly less familiar (I hope no less plausible though).

**Weak Knowledge Norm for Believing** If one's believing \( p \) at \( t \) results in one's knowing \( p \), then one's believing \( p \) at \( t \) is permissible.

Or relatedly,

**Weak Knowledge Norm** For every \( S, p \) and \( t \), \( S \)'s coming to know \( p \) at \( t \) is permissible.

The sort of permissibility at work in all of these norms is epistemic. My thought with the last two norms is that when a subject believes \( p \) and thereby comes to know \( p \), she's done something that is entirely epistemically permissible on our current way of thinking about normative epistemology. If you're in the position to know \( p \) and you come to know what you're in the position to, you've done something epistemically fine (at least). Plausibly, there are stronger versions of all three of these norms that say that the subject's believing is not just permissible, but justified, warranted, virtuous, rational or even required. For our purposes we only need to focus on these weaker norms.

Let's focus on the Weak Evidentialist Norm (WEN) and the Weak Knowledge Norm (WKN). Are norms like these going to be in \( T \)? We've seen that there's at least a prima face case that they will be: plausibly the reason you're always
permitted to come to know is that knowing is valuable or valued. On further reflection though I don’t think that subjects aiming to know more should conform to them in all cases and so I don’t think we’ll find them in T. Before arguing for this claim I want to draw it out a bit better.

My thought is that T is the (exhaustive) set of norms that a subject trying to know more ought to conform to. If WEN and WKN – norms that I think are central to traditional normative epistemology – are in T, then they too have to be norms that a subject pursuing the aim of knowing more ought to conform to. This is just what the teleologist claims. But what does it mean to say that one should always conform to norms like WEN and WKN? These are permissibility norms so conforming to them isn’t a matter of always doing what they demand. What I think we should say in these cases is this. Say that some norm n says that φ-ing is permissible in certain circumstances c. If n is in T then it should never turn out impermissible, by the lights of T, for a subject in pursuit of knowledge (in the relevant sense) to φ in c. Perhaps another way to think of it is this: when an ‘ought’ norm serves some end we can say that a subject in pursuit of that end ought always to do what the norm demands. And when a permissibility norm serves some end we can say that a subject in pursuit of that end is always permitted to do what the norm allows. This is to say that a subject conforming to the norms in T should always be permitted to do what n allows if n is in T.

I want to argue that a subject trying to know more is not always permitted to do what WEN and WKN permit – that subject is not always permitted to know what they’re in the position to and is not always permitted to believe what their evidence clearly and decisively supports. I’ll try to show that the exceptions to these norms are not exceptional either, but that thinking about typical cases will get us to the conclusion that subjects trying to know more will often not be permitted to believe what their evidence supports or come to know.

Before we get to my main worry, a variant on a sort of case that’s been in the literature recently already makes trouble for the thought that WEN and WKN are in T. These are cases in which one is in the position to know p – one’s evidence clearly and decisively supports p, and one’s epistemic circumstances are otherwise impeccable – but in which failing to believe p – failing to come to know something one is in the position to know – will lead to a gain in knowledge
at a later time. In these sorts of cases if a subject is pursuing their knowledge acquisition goal they won’t be permitted to believe or come to know $p$ at the relevant time.\footnote{These sorts of cases can be found in a number of spots in the epistemology literature. They go back to Roderick Firth in e.g., Firth (1981).}

For instance, say S is the boss at Acme Inc. He’s on the verge of a great discovery that is likely to change his field and lead to an explosion of (important) knowledge. S is an awful boss and he treats his employees terribly, shouting at them regularly, paying them shabbily, offering them dismal working conditions and no health insurance. Each night S reflects on his day and how he performed. If he comes to think that his employees don’t love him, he’ll stay up all night fretting about his behaviour and worrying about whether he’s a bad person and as a result will lose focus in the days that follow. If that happens the project will not succeed and he’ll end up knowing much less than he otherwise would have. All the evidence he has makes clear that he’s despised.

From the perspective of the goal of knowledge acquisition, it looks as though S should resist knowing something he’s in the position to. That’s to say, it isn’t permissible for him to believe something that his evidence clearly and decisively supports and it isn’t permissible for him to come to know something he’s in the position to come to know. S is a subject in pursuit of knowledge. If WEN and WKN are in $T$ then it should always be permissible for S to do what those norms permit. But then this Acme case looks like a counterexample: it’s a case in which a subject trying to know more is not permitted to do what WEN and WKN permit and so seems to show that WEN and WKN are not in $T$ and so not teleologically grounded.\footnote{One might try to argue that these cases don’t get us quite this far. Perhaps they show that there’s a norm in $T$ that says that when not believing $p$ will ultimately lead to more knowledge acquisition than believing $p$, don’t believe $p$. If this norm were in $T$ alongside WEN and WKN this would leave $T$ inconsistent, which is problematic. Moreover, these sorts of counterexamples seem to me to work in the direct way I’m claimed that they do. If some norm $n$ is in $T$ then it should always be permissible for someone in pursuit of knowledge to do what $n$ permits. But these sorts of examples show that it won’t always be permissible for subjects in pursuit of knowledge to do what some of our traditional epistemic norms permit.}

These sorts of cases can feel rarefied. If these cases are just at the far fringes then we might think that there are ways to dismiss their force as counterexamples. Perhaps with a little bit of tinkering we can fix our statement of norms
like WEN and WKN or think more about what is and is not in T to avoid these strange cases, leaving it open that these norms are in T. I'm sympathetic to the thought that it can feel as though there is some wiggle room given just these sorts of cases. But I don't think that there is. I think there will be absolutely central cases in which subjects are not permitted to believe despite impeccable evidence and even not permitted to know. A teleological account of our epistemic norms doesn't fail only at the edges but seems to be off on the wrong foot entirely. Its basic structure makes it that WEN and WKN cannot be in T.

To see this, let's start here. One sort of thing that the Acme case and others like it bring out is that once we see subjects as in pursuit of some valuable or valued end there is pressure to think of the relevant subjects as having to maximize or optimize. A subject who is trying to acquire knowledge ought to get as much of it as they can going forward; anything less seems irrational. If one is trying to acquire money, and one is faced with a choice between acquiring one dollar, ten dollars and one hundred dollars, one opts for the latter on pain of irrationality (other things equal, of course). This is to say that there's pressure to say that there's a norm in T that demands we maximize with respect to our knowledge acquisition. This sort of norm will say that subjects should always act so as to come to know as much as they can (and we can assume that the relevant acts here are acts of belief formation). In many cases this will require subjects to believe some p or q, but not always – as we've seen in the Acme case it required our boss to refrain from believing. Let's assume that this sort of demand to maximize is in T. Later I'll revisit this assumption and show that much of what's argued here could go through without it.

One question that comes out of Acme-like cases has to do with whether the demand to maximize that's at the heart of T is “time relative” or “time neutral”. A time-relative demand to maximize our knowledge acquisition is the demand to know as much as we can at some specific time, typically the time of judgment (or the time at which the judgment ends in belief). A time-neutral demand to maximize is a demand to come to know as much as we can going forward. Our Acme case seems to lose its force if we think of the demand to maximize as a demand to know as much as one can at the time of judgment rather than at the time of judgment and going forward. Our boss should refrain from knowing
now since doing that will mean knowing more later. If the demand to maximize is a demand to know as much as we can at the time of judgment, then it’s not at all clear that our boss should refrain. Some have argued that the demand to maximize that is relevant to epistemology is a time-relative one.⁹

We don’t need to take a subject’s future prospects into account to see why WEN and WKN won’t be in T though. Assume the demand to maximize that’s in T is time relative. All we need to focus on is this demand and its relation to the central norms in E to see why WEN and WKN won’t be in T. To bring this out let’s say that ‘judging’ is just the process or act of coming to believe. The time-relative demand to maximize at issue now binds subjects’ judgments – it says to make the judgment at t that will lead to knowing the most at t. The thought is that judging p has a belief in p as its output and in order to maximize in the relevant sense subjects should make judgments whose upshots are knowing at least as much as the upshot of any other judgment they can make. To make sense of this demand in detail we need some way of measuring how much knowledge one gets with each judgment. This is obviously no easy matter and I’ll try to avoid the hardest bits of it by keeping to fairly clear cases.

I assume that in a typical case (world and time) a subject is in the position to make a number of different judgments. Some of these will be irrational or otherwise epistemically inappropriate but many will be grounded in their evidence and many will be what we can call ‘k-judgments’. K-judging is the process or act of coming to know. K-judging is a kind of judging – the kind that results in one’s knowing something. Let’s focus on the subset of cases in which subjects are in the position to make some k-judgment. I take it that these too are typical cases, that we are typically in the position to come to know something or other. Let’s call these ‘k-cases’. In a typical k-case I think there’s quite a lot that subjects can come to know. For instance, as we’ve already seen, a great deal of information is typically available in visual perception and so those sorts of scenes offer the subject a great deal of potential knowledge – when we perceive an even moderately complex scene there is a lot we can come to know. In addition, a typical subject can easily add to their store of knowledge at a typical time by exploiting their evidence – by drawing out the deductive

⁹See Percival (2002) for a good discussion of this issue in the epistemic case.
consequences of those things they already know, and by drawing other sorts of inductive conclusions from their bodies of total evidence. There’s a lot a typical subject can come to know at a typical time.

Here’s a way to think about a typical k-case then: for each subject in a k-case there is a set of knowable propositions, \( \Psi_i \). The members of \( \Psi_i \) though can be at least partially ordered in terms of how much knowledge each yields when known. But no matter how we flesh out the details of our ranking methodology, that the members of \( \Psi_i \) can be at least partially ordered according to their knowledge yield means that the demand to maximize in \( T \) will make it that believing and coming to know some of the propositions in \( \Psi_i \) will be impermissible (according to \( T \)) since there will have been more subjects could have come to know.\(^{10}\)

Let’s draw this out a bit more with a very simple measure. Say \( \Psi_i \) are ordered roughly according to the logical strength of the propositions in the sets. We can say that all atomic propositions in these sets yield the same amount of knowledge when known. Conjunctions of those yield more knowledge when known; conjunctions of those conjunctions yield even more knowledge when known; and so on. Then we can talk about the logically strongest proposition(s) in each \( \Psi_i \). In some cases that will be the conjunction of all of the atomic propositions, although in other cases that conjunction may be too complex to know. In that case some weaker conjunction may be the strongest or we may have a few strongest knowable propositions. Let \( \alpha_i \) designate one of these logically strongest knowable propositions in every \( \Psi_i \). A demand to maximize one’s knowledge acquisition at the time of judgment will demand that the subject come to know \( \alpha_i \) or something as strong as \( \alpha_i \) at the time of judgment in every case. But this means that in each of these cases coming to know anything weaker than \( \alpha_i \) is impermissible.

But this points to a pervasive problem for the teleologist\(_k\). There is nothing special about k-cases. That’s to say, I think that knowledge is typically available to us. Moreover, a typical k-case is one in which we can know a number of

\(^{10}\)Here and throughout I assume that ‘ought’ and ‘permit’ are duals, i.e., that one ought to \( \varphi \) iff one is not permitted not to \( \varphi \). Alternatively one could take the demand to maximize as a prohibition against not maximizing and largely avoid the duality assumption.
different things and these can be compared according to how much knowledge they yield when known. But this means that if there’s a demand to maximize in play for the teleologist, then typical cases are ones in which there are things it’s impermissible to come to know (no matter what the subject’s evidence is like).

To give a concrete example, imagine you are reading in your office. You wonder where your lucky pencil is and look around. You look to your pen jar and see it there coming to know that your lucky pencil is in your office ($p$). But at the time at which you glance over to your pen jar ($t$) you could have come to know more than just $p$, e.g., that your lucky pencil is in your office and so are at least four pens or that your lucky pencil is in your office and so are at least four pens and so is a blue pen. Say $\alpha$ in this case is some conjunction that entails $p$. But that means that just coming to know $p$ (coming to know $p$ and nothing else) in this case is impermissible given that more knowledge is easily available at $t$. I don’t think there is anything rarefied about this case, quite the reverse I think this is an absolutely typical case. If there’s a demand to maximize then it will typically turn out that there is quite a lot we’re not permitted to come to know.

Here’s another sort of example. Take a k-case in which a subject is presented with all sorts of visual information. Say they’re on the train heading to work, or just at home doing some cooking. In cases like these there is a great deal of knowledge subjects can acquire by just coming to know what’s visually presented to them. Moreover, in cases like these subjects can also typically add to their store of knowledge by doing something other than coming to know some of that visual information. In particular, I take it that at most any time a typical subject can add to their store of knowledge by drawing inferences from the bodies of knowledge they already possess. So our cook and train rider can add to their knowledge at the relevant time by drawing inferences from things they already know that might be completely unrelated to what’s presented to them visually, e.g., how many hours of sleep they got last week or whether any of the students in their class have names starting with ‘x’. But it’s not clear to me that these subjects can do all of these things at once, i.e., take up the visual information and draw these inferences. If they cannot then in cases like this – which,
again, I think are absolutely typical cases – the logically strongest proposition in these $\Psi$s won’t be a conjunction of all of the knowable propositions at the time. Say the strongest proposition in each of these $\Psi$s is some $p$ that can be known perceptually. Then coming to know how many hours of sleep they had or facts about their students’ names is not permissible according to the teleologist$_k$, no matter how good the evidence.

These examples are extremely easily multiplied. They don’t rely on subjects finding themselves in strange or unfamiliar circumstances, rather they are just descriptions of some everyday sorts of cases we all find ourselves in and the normative verdicts the teleologist$_k$ will have to issue about them. If there’s a lot we can know in a typical case then the teleologist$_k$ says that we should know it all or at least a lot of it and so coming to know anything less is impermissible.

The upshot here is trouble for the thought that our familiar epistemic norms are teleologically$_k$ grounded. If we think that epistemic subjects are or ought to be trying to know more, then plausibly they will be expected to act so as to maximize with every judgment. This has the result that coming to know some propositions can very easily be impermissible. This means that WKN is not in $T$. Recall, the condition WEN and WKN had to meet to be in $T$ was that it’s always permissible for a subject in pursuit of knowledge to do what they permit. But now we can see that once a demand to maximize is in $T$, it won’t always be permissible for a subject trying to know more to believe in accordance with clear and decisive evidence. So WEN is not in $T$. So WEN and WKN are not in $T$, and $E$ is not a subset of $T$.

What about WEN? I take it that the argument shows that it, too, is not in $T$ and not teleologically$_k$ grounded. In the cases we’ve been thinking about the various impermissible k-judgments can all be based in clear and decisive evidence for the relevant propositions. Again, once a demand to maximize is in play it will not always be permissible for a subject trying to know more to believe in accordance with clear and decisive evidence. So WEN is also not in $T$. So WEN and WKN are not in $T$, and $E$ is not a subset of $T$.

If $E \not\subseteq T$ then we should also say that at least some of the norms in $E$ are not teleologically$_k$ grounded – they are not the norms subjects trying to know more ought to conform to. Norms like WEN and WKN are among these: they don’t serve our end of knowing more. This isn’t to say that subjects in pursuit of
knowledge shouldn't ever follow their evidence or come to know, rather what we've seen is that once a demand to maximize is in play, there will be significant constraints on which evidence subjects should follow and what they should come to know. It's understandable, I think, to want some sort of explanation as to why we should conform to our central epistemic norms. I've argued that one natural explanation fails.\textsuperscript{11}

4 Objections and replies

In this section I want to raise a few objections and discuss a few replies.

4.1 Just coming to know $p$

I've argued that teleological$_k$ epistemology has the result that in a typical case there are all sorts of propositions that we are not permitted to believe on impeccable evidence and not permitted to come to know. But if we look to one example I gave, it might look as though we should say that a slightly different conclusion is warranted instead. I said that coming to know that your lucky pencil is in your office ($p$) was impermissible according to the teleologist$_k$. But strictly speaking what's impermissible is just coming to know $p$ or rather coming to know $p$ without also coming to know the other things the teleologist$_k$ demands you know in that case. Perhaps we should say that, according to the teleologist$_k$, some ways of coming to know $p$ are permissible in this case and others impermissible. Given this one might wonder whether (a) there are any cases in which it's impermissible to come to know some $p$ tout court (rather than it's merely being impermissible to just come to know $p$) for the teleologist$_k$; and (b) what impact this has on the conclusion that norms like WEN and WKN are not in $T$ either way.

On (a), I think it's easy enough to find cases in which the teleologist$_k$ must say that any way of coming to know $p$ is impermissible. Recall, in each k-case we have a set of knowable propositions for each subject, $\Psi_i$. Let's continue to

\textsuperscript{11}I ran this argument assuming a time-relative demand to maximize, but I hope that it's clear that the argument certainly does not rely on restricting the demand to maximize in this way. We can easily drop the time bias and with only a few small changes the same conclusions will follow.
assume that the ordering that matters for our purposes is logical strength. I don’t think it will be the case that the strongest propositions in $\Psi_i$ will be conjunctions of all of the (atomic) propositions in $\Psi_i$, or even that for each $\Psi_i$ there will be one logically strongest proposition. My thought here is that in many k-cases conjunctions of all the (atomic) propositions in $\Psi_i$ are too complex for typical subjects to grasp and so won’t be in $\Psi_i$. Instead some weaker propositions will be the strongest or among the strongest. In that case there may be propositions in $\Psi_i$ that it’s impermissible to come to know in any way, not only by just coming to know those propositions.

For instance, imagine a subject who with the following $\Psi$ at $t$: \{$p, q, r, (q \land r)$\}. Here $(q \land r)$ is the strongest proposition and so the one that the relevant subject ought to come to know at $t$ according to the teleologist $k$. In a case like this I think the teleologist $k$ should say that coming to know $p$ at $t$ is impermissible tout court and not just that coming to know $p$ without coming to know some other things is. And we’ve already seen a case with this structure in the last section. The cases of the cook and the train rider in which subjects were in the position to both form beliefs based on presented visual information and draw inferences from already existing knowledge were cases like this.\(^\text{12}\)

Moreover, and on (b), even if all my argument here did show was that there are cases in which just coming to know $p$ at a time is impermissible for the teleologist $k$ (but maybe no cases in which coming to know $p$ tout court at a time was impermissible), I think much of the force of the argument would remain. WKN says that it’s always permissible to come to know; and WEN says it’s always permissible to believe what your evidence clearly and decisively supports. WKN doesn’t say that coming to know $p$ alongside some other propositions is permissible, but coming to know $p$ alone is not. It doesn’t say that some ways

\[^{12}\text{I've been working with a picture according to which subjects are choosing between making different single judgments at a time. But I take it that it's possible to make multiple judgments at the same time. Allowing for subjects to make multiple judgments at once though won't change the conclusions here. For instance, one might try to argue that in the case just described the subject is permitted to come to know $p$ at $t$ so long as they also come to know some other things at the same time. But part of the point of the class of cases being described here is that there is a limit on how much of the “available” information the relevant subjects can come to know at once. In these sorts of cases coming to know some things at the relevant time will make it that one cannot come to know some other things at that time. This isn't because we cannot in general make multiple judgments at a time though.}\]
of coming to know are epistemically fine but others are suspect. WEN and WKN are blind to what else you come to believe or know. They say that coming to know and coming to believe on impeccable evidence are always epistemically permissible. But this means that if we find some ways in which coming to know or coming to believe on impeccable evidence are impermissible according to the teleologist, then we’ll have shown that WEN and WKN are not in T.

Here’s another way to think of this point. Say you come to know that your lucky pencil is in your office (p) but don’t come to know some of the other things you could have at the same time. Is your p-belief epistemically justified? I take it that it is. The case is set up to make it that that belief’s credentials are epistemically flawless. Moreover, there is no familiar sense of epistemic justification according to which the belief is less justified because it was formed on its own, without some other beliefs; those sorts of considerations aren’t relevant to the belief’s epistemic credentials. But the following general principle seems extremely plausible: if some belief is epistemically justified then it’s epistemically permissible for you to have that belief or to have formed that belief. So when you just come to know p in this case you’ve done something epistemically permissible from the perspective of our traditional epistemic norms, but you’ve done something impermissible from the perspective of T.

4.2 Other forms of teleological (and teleological) epistemology

I’ve said that the teleologist thinks that the explanation of why we ought to conform to our central epistemic norms goes via the relation those norms bear to epistemic values. It’s doxastic or epistemic states that are valuable or valued and I’ve assumed that the teleologist wants to ground our epistemic norms in the value of having or being in the states of value, e.g., of having knowledge. But one might argue that a teleological account of our norms needn’t take that form. For instance, perhaps rather than claiming that our epistemic norms are the norms subjects trying to know more ought to conform to, the teleologist can claim that our epistemic norms are the norms subjects trying to avoid beliefs that don’t amount to knowledge ought to conform to. This might still be a way of thinking of epistemic norms as teleologically grounded, but it might also avoid some of the worries I’ve raised here which stem largely from the thought that
valuing knowledge involves trying to get more of it. And I can imagine other sorts of broadly teleological treatments of our epistemic norms that might still be on the table given what I’ve said here. That said, I think that the most natural teleological views will take it that epistemic norms are norms for subjects who are trying to know more. The argument here makes trouble for those sorts of views.

I also argued that once we think of epistemic subjects as subjects who are or should be trying to know more, a demand to maximize comes naturally. That said, I think much of what I argue here could retain its force even if one insisted that some weaker sorts of value promotion principles were in T in the place of a demand to maximize. For instance, say T contained only a demand to satisfice, rather than one to maximize with respect to one’s knowledge acquisition. That norm won’t say that subjects ought to know as much as they can with every judgment but will nonetheless say that there is some limit on how little they are permitted to come to know; anything below that threshold will be impermissible. And this leaves the satisficing teleologist in much the same position as the maximizer: WEN and WKN still won’t feature in this sort of satisficing teleological epistemology. More generally, so long as T contains a norm that maintains a permissibility threshold for knowledge acquisition and leaves it that the knowing of some things falls below that threshold, the teleologist is in much the same position.

Finally, even though I’ve focused on teleological epistemology, I think other forms of teleological epistemology – ones in which the valuable state is something other than knowledge, or ones in which knowledge is one of many epistemic states of value – are at risk in the same sorts of ways. If the relevant values, e.g., true belief, understanding, are states we’re trying to get into, then I think we can run analogous arguments to the one I ran here.

4.3 Important knowledge

Perhaps there is a different way for the teleologist to avoid the idea that we ought to come to know as much as we can at every turn. My assumption at the outset was that knowledge in general was valuable – all knowledge. But that claim has been denied with some arguing that only some knowledge, only
“important” knowledge, is valuable. One might try to argue then that the demand to maximize that’s in $T$ is only a demand to maximize with respect to important knowledge. This might appear to help the teleologist $k$ here. Going back to the lucky pencil case, I argued that just coming to know $p$ (that your pencil is in the office) was impermissible because there was more you could come to know at that time. But if all that matters to you is where your lucky pencil is, then perhaps those stronger propositions are unimportant leaving $p$ as the strongest knowable important proposition. In that case just coming to know $p$ can be perfectly permissible.

I don’t see much help in the end here though. Let’s imagine we have some way to distinguish important from unimportant knowledge, even roughly. Now say that only important knowledge is valuable or valued, and so that only important knowledge ought to be acquired (and we’ll have to assume that acquiring unimportant knowledge is at least permissible lest there be plenty we’re not permitted to come to know according to $T$). So long as there are cases in which multiple important propositions are knowable, we can still make sense of ordering these in terms of their knowledge yield (and importance now?). And so long as there’s a demand to maximize or satisfice in place the teleologist $k$ is in much the same position as before. Moreover, even if the strategy might look to offer some relief in the lucky pencil case, it’s worth pointing out that it does nothing to change the result in the Acme case.

4.4 Acts and states

Finally, I’ve argued that WEN and WKN are not going to be in $T$ since there will be a norm in $T$ demanding that subjects maximize their knowledge acquisition and given that norm it is false (from the perspective of $T$) that subjects are always permitted to believe what their evidence supports or are always permitted to come to know. But the demand to maximize is a demand to do something: it’s a demand to make certain kinds of judgments. WEN though is a norm that says something about how we are permitted to be at a time given our evidence and not a norm about which judgments we can and cannot make (at least not

\footnote{See Grimm (2009) for some of this debate.}
in the first instance). Perhaps then we haven’t quite seen an argument for the conclusion that WEN is not in T.\textsuperscript{14}

In fact, one might try to argue that traditional epistemology consists in “state-focused” norms only: that all of its norms tell us how to be rather than what to do and given this that the argument here missed its mark generally since it only shows that certain kinds of judgments are impermissible leaving it open that the resulting beliefs be permissible. Let me make a few points here.

First, while WEN does seem to be a state-focused norm the Weak Knowledge Norm for Belief seems to me more ambiguous. That is, although it doesn’t explicitly mention ‘judging’, it does seem to make something of a more “act-focused” claim – if one’s belief formation at a time resulted in one’s knowing then that belief formation was permissible. WKN is explicitly act focused. The arguments here as they stand seem to show that WKN is not in T and versions of WEN and the Weak Knowledge Norm for Belief that focus on acts of judgment rather than states of belief only are also not in T. So those act-focused norms are not teleologically grounded. But are norms like that in E?

It’s easy to construct state-focused analogues of the Weak Knowledge Norm for Belief and WKN, e.g., knowing is always permissible. And it is true that contemporary epistemology typically focuses on states rather than acts. That said, the Weak Knowledge Norm for Belief and WKN seem to me to be very natural expressions of some aspects of normative epistemology as we know it. This is to say that it does appear as though some traditional epistemic norms bind us with respect to our judgment making. But this shouldn’t come as a surprise: don’t we want to say that a subject who has decisive evidence for p and recognizes that is epistemically permitted to judge p? Don’t we want to say that perceiving p and then coming to know p as a result is epistemically permissible? I take it that we do. But I’ve argued that a teleological epistemology won’t have it that these things are always permissible. This is all to say that even if we think that some of the arguments I made in this paper leave it open whether some central epistemic norms are in T, I don’t think that means epistemology as we know it escapes unscathed. Our epistemology is also committed to the permissibil-

\textsuperscript{14}Although cases like the Acme case cases do seem to show that having some evidentially well-supported beliefs and having some knowledge is impermissible.
ity of certain judgments and those judgment norms will not be teleologically grounded.

Moreover, I’ve argued that judging \( p \) based on decisive evidence for \( p \) and even coming to know \( p \) are often impermissible for the teleologist \( k \). This might look to leave it open that norms like WEN and a state-focused analogue of WKN are in \( T \). But this will be true only if the conclusion that one is not permitted to judge \( p \) in some case does not have certain kinds of implications for the states of mind that result from judging \( p \) – believing \( p \) – for the teleologist \( k \). If the teleologist \( k \) is committed to the conclusion that when judging \( p \) is impermissible, the \( p \)-belief that is the upshot of that judgment is impermissible as well, then, given what I’ve argued here, even the relevant state-focused norms in \( E \) will not be in \( T \).

But there is a case to be made for the teleologist \( k \)’s having to move from the claim that some judgment is impermissible to the claim that the resulting belief is. That case comes out of the fact that for the sort of teleologist we’ve been thinking about the normative statuses of the relevant acts of judgment are derived from the normative statuses of the states that result from those acts. Our teleologist \( k \) proceeds by ranking outcomes according to how valuable they are, and then deeming the acts that lead to those various outcomes as permissible or impermissible in large part based on the values of those outcomes. For instance, it’s in virtue of the fact that judging \( p \) leads to the state of affairs in which knowing is maximized that judging \( p \) is permissible for the teleologist \( k \). This means that if judging \( p \) is permissible according to the teleologist \( k \), that has to be because the resulting state (or state of affairs) is sufficiently good or valuable, and if judging \( p \) is impermissible that’s because the state that results is not sufficiently valuable. So if the teleologist \( k \) says that some judgment is impermissible, they are also saying something about the disvalue of the state that results from that judgment.

Of course this isn’t yet the claim that it’s impermissible to be in the relevant states, but I think if the teleologist \( k \) is going to make any deontic pronouncements about the states, that’s exactly the one they ought to make. And I don’t see any special reason to think that they cannot make some deontic pronouncement about these states. That the normative structure of the teleologist’s position is
“state first” typically means that they start with some axiological evaluations of the states and from there derive some deontological evaluations of the acts leading to the states. In epistemology though we want some deontic evaluations of the states as well, not just the acts. How should those be distributed for the teleologist\(_k\)? Surely the most natural way is in line with those of the acts that lead to the states. Any other arrangement would need some explicit motivation. If this is right though then the most natural thing for the teleologist\(_k\) to say is that if some judgment is impermissible then the resulting belief state is as well. With that conclusion though we should say that even state-focused norms like WEN and the analogues of the other norms won't be in \(T\).

5 Concluding remarks

Could the teleologist\(_k\) argue that norms in \(E\) are helpful rules of thumb for subjects trying to acquire knowledge? I don’t see how they could. So long as there is pressure to think of subjects in pursuit of knowledge as having to maximize (or even something less demanding), then the norms we’ve looked at simply don’t look like good rules of thumb for subjects trying to know more. In a typical case there will be much subjects are not permitted to come to know.

At the start of the paper I picked out two main targets: the consequentialist and the instrumentalist. While I haven’t always been careful about distinguishing between the two positions I want to make clear why both are affected. Both positions have subjects facing a range of available actions and having to choose one. My thought has been simply that in typical cases some of the actions that are impermissible for either a consequentialist or an instrumentalist are going to be the making of judgments that are impeccable from the perspective of normative epistemology as we typically engage in it – those judgments will be based in excellent evidence and even result in knowledge. But this means that there’s a fundamental mismatch between the normative verdicts rendered by a teleological\(_k\) epistemology and those issued by normative epistemology as we know it.

We like to think that we are subjects in pursuit of knowledge. And even that epistemology provides us with rules we should conform to in pursuit of
this goal. I’ve argued though that our familiar epistemic norms aren’t that. They aren’t the norms a subject trying to know more will conform to; they aren’t teleologically grounded. This doesn’t spell the end of a teleological epistemology though, only the end of a teleological treatment of our central epistemic norms. One might see in some of the arguments here a case for embracing some other epistemic norms. If you think that knowledge is valuable that our epistemic norms should be the norms subjects in pursuit of that good should conform to, then I hope to have shown that you’ll need to embrace some new epistemic norms and to have given the start of an account of what those norms might look like.¹⁵

References


¹⁵Thanks very much to Dave Chalmers, Harvey Lederman, and Amia Srinivasan.


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