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Epistemic instrumentalism

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Abstract According to *epistemic instrumentalism*, epistemically rational beliefs are beliefs that are produced in ways that are conducive to certain ends that one wants to attain. In “Epistemic Rationality as Instrumental Rationality: A Critique,” Thomas Kelly advances various objections to epistemic instrumentalism. While I agree with the general thrust of Kelly’s objections, he does not distinguish between two forms of epistemic instrumentalism. *Intellectualist* forms maintain that epistemically rational beliefs are beliefs arrived at in compliance with rules that are conducive to epistemic ends, such as believing true propositions and not believing false propositions. *Pragmatist* forms maintain that rational beliefs are those that are formed, maintained, and revised in accordance with rules that are conducive to whatever ends one wants to attain. In this paper, I argue against both forms of epistemic instrumentalism and suggest that epistemic instrumentalism grows out of a mistaken conception of what it means to say that the standards of epistemic rationality are ‘normative.’

Keywords Epistemology · Rationality · Normativity · Instrumentalism

1 Instrumentalism and epistemic normativity

Instrumentalism, the view that rationality consists in taking effective means to one’s ends, is of course very familiar, going back at least to Hume.^{1,2} Although

¹ In this paper, I do not distinguish different teleological notions that can be connoted by such terms as ‘end,’ ‘aim,’ ‘goal,’ and ‘value.’ Instrumentalists generally employ these terms to refer to things desired for their own sake. My preferred term for this notion is ‘end.’ Of course, the term ‘value’ can be used to refer, not to things desired for their own sake, but to one’s *degree of desire* or *strength of preference* for an end, and I will occasionally use the term ‘value’ in this sense.

² See Hume (1978, 1999). Foley (1987) calls instrumentalism an ‘Aristotelian’ account of rationality. There is, however, a deep difference between Hume and Aristotle that deserves emphasis. To oversimplify

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instrumentalism is best known as an account of practical rationality, in recent years several prominent philosophers have appropriated the instrumentalist conception of rational action to explain the nature of epistemically rational belief (see Foley 1987; Kornblith 1993, 2002; Laudan 1990, 1991; Maffie 1990; Nozick 1993; Papineau 1999). According to *epistemic instrumentalism*, epistemically rational beliefs are beliefs that are formed, maintained, and revised in ways that are conducive to the attainment of certain ends that one wants to achieve.³

Many of the same kinds of concerns that motivate instrumentalist accounts of practical rationality are invoked in support of its epistemological counterpart. Often, instrumentalism is motivated by attempts to reconcile the *prima facie* existence of normative facts with versions of naturalism on which all facts are fundamentally non-normative, descriptive facts. Naturalism is sometimes thought to imply that if there are any normative facts, they must in some way derive from nonnormative, purely descriptive facts, and many philosophers view instrumentalism as providing the best account of how such a derivation might work.⁴

Another *prima facie* source of motivation for epistemic instrumentalism stems from reflection on the normative nature of epistemic evaluation. It is natural to think of epistemic evaluation as evaluation of belief relative to standards, or norms, associated with the attainment of some fundamental epistemic end, such as truth and the avoidance of error. But some philosophers think that it would be odd to regard someone as irrational for failing to satisfy standards associated with an end that she has no desire to achieve. Whether it would be rational for me to turn on the light before entering a dark room, for example, seems to depend on whether I want the room to be illuminated, whether I want to do something that requires the room to be illuminated, and so on. Absent some backdrop of assumptions about what I want to do or achieve when I enter

Footnote 2 continued

somewhat, Hume viewed a rational action as one that takes effective means to the attainment of one's *desired* ends, whereas Aristotle explained practical rationality in terms of a *summum bonum* that may or may not actually be desired by all individuals. As far as I can tell, Aristotle's account of human flourishing did not presuppose that most people actually want to achieve the *summum bonum*, or even that people generally *would* want to achieve it, upon careful consideration. Aristotle's account of practical rationality seems to me to involve a thoroughgoing objectivism about human ends that Hume's philosophy explicitly rejects. For these reasons, I would not count Aristotle an instrumentalist about practical or epistemic rationality. In this paper, I will only focus on views that attempt to explicate rationality by reference to *desired* ends.

³ Kelly, Foley, Nozick, and other writers on this topic typically use 'rational' as a more or less generic term of positive epistemic appraisal. I realize that for some the term 'rational' has an internalist or deontological connotation (see, e.g., Plantinga 1993, Chap. 1). In my view, the term 'rational' connotes possession of the faculty of reason, including the capacity to reason critically and reflectively. I believe that one can have propositional knowledge and epistemically warranted belief without possessing such a faculty of reason. So 'epistemic rationality' would not be my first choice as a generic term of epistemic appraisal (I prefer 'epistemically warranted,' in Tyler Burge's sense—see Burge 1993, 2003). But such a generic usage is common in the literature that I cite in this paper, so for ease of exposition, I will follow the practice of using the term 'rational' in this generic sense.

⁴ Quine (1969) is often read as having suggested epistemic instrumentalism as a way of naturalizing the normative aspects of epistemology.

the room, it is difficult to see how the question of whether it would be rational for me to turn on the light could be answered.⁵

Such lines of thought generally take it for granted that facts concerning what it is rational or irrational for one to believe are normative, as opposed to merely descriptive, facts (or, if you prefer, that claims concerning epistemic rationality or irrationality are normative claims). But of course, what it means to say that a fact or a claim is ‘normative’ is a matter of controversy, which can make it difficult to assess arguments for epistemic instrumentalism. In this paper, I will instead focus directly on whether epistemic instrumentalism can offer a plausible account of the circumstances under which an individual’s beliefs are properly regarded as epistemically rational or irrational. My thought is that reflecting on the implications of epistemic instrumentalism can to some extent illuminate the nature of epistemic rationality.

Kelly (2003) presents a forceful critique of epistemic instrumentalism. Kelly notes that epistemic instrumentalists often claim that whether one is epistemically rational in believing a given proposition depends in part on whether one wants to achieve some fundamental *epistemic* end, such as having true beliefs and avoiding false beliefs. But according to Kelly, it is not always plausible to attribute to people who have rational beliefs the desire to achieve this epistemic end—one need not want to achieve any such epistemic end in order to be appropriately subject to epistemic evaluation and criticism.

While I find much that is plausible and persuasive in Kelly’s arguments, I think that they do not go far enough. As stated, they apply only to what I will refer to as *intellectualist* versions of epistemic instrumentalism, which maintain that the epistemic status of an individual’s beliefs is contingent on that individual’s wanting to achieve some particular *epistemic* end. He does not address *pragmatist* versions of epistemic instrumentalism that explain epistemic rationality in terms of satisfying various epistemic conditions that are conducive to the attainment of one’s ends, *whatever* those ends might be. Ultimately, I think that Kelly’s criticisms leave unanswered the broader question of whether there is something misguided about epistemic instrumentalism *per se*.

In the following section, I will begin by discussing the intellectualist variety of epistemic instrumentalism and Kelly’s objections to it. *Prima facie*, there are various ways that proponents of intellectualist versions of epistemic instrumentalism could respond to Kelly’s objections. But ultimately, I argue that the strongest instrumentalist response to Kelly’s objections would involve adopting a pragmatist form of epistemic instrumentalism. Although pragmatist varieties of epistemic instrumentalism do not suffer from the same kinds of difficulties as their intellectualist counterparts, I will argue that they, too, cannot give a plausible account of the conditions under which an individual’s beliefs are appropriately subject to standards of epistemic rationality.

The arguments of this paper highlight the difficulties of formulating an instrumentalist account of epistemic rationality that is extensionally adequate. These difficulties suggest that there are deeper reasons to think that epistemic instrumentalism is

⁵ Of course, this point is more contentious if the case is described in such a way that turning on the light would have some moral or prudential significance. For purposes of illustration, we can imagine that turning on the light has no such significance.

mistaken. In the end, I briefly return to the question about how to understand the normativity of epistemic rationality. I speculate that epistemic instrumentalism may stem from a mistaken conception of what it means to say that the standards of epistemic rationality are ‘normative.’

2 Intellectualist forms of epistemic instrumentalism

Above, I characterized instrumentalism as the view that rationality consists in taking effective means to one’s ends. This characterization requires refinement in two ways.

First, it is important to note that ends can be achieved just by accident or luck. A person can take ineffective means to an end but nevertheless succeed, by accident, in achieving that end. Playing the lottery, for example, is an extremely ineffective means of making money, despite the fact that people occasionally do achieve the goal of making money by playing the lottery. The mere fact that a person happened to achieve one of her goals does not entail that the means by which she achieved it were, in the relevant sense, effective, or that she was rational in taking those means. The instrumentalist can draw a broad distinction between kinds of means that are *systematically*, *reliably* effective in a sufficiently wide variety of circumstances, and *token* activities that happen, on a given occasion, to bring about a desired state of affairs. I assume that the only kinds of means that are relevant to instrumental rationality are those that are systematically, reliably effective at bringing about one’s desired ends.⁶

Second, there is the obvious fact that achieving one end will sometimes preclude the achievement of others. Suppose you want to go to the ballgame on Thursday afternoon, but you also want to attend the end-of-the-year meeting at work. If the meeting is to be held Thursday afternoon at the office, you will be unable to fulfill both of these desires. Suppose you are sitting at the train station midday Thursday and have to choose between getting on Train A, which would take you to the ballgame, or Train B, which would take you to the office. In such a situation, your desires would be *contextually incompatible*. That is, the circumstances as described would prevent you from being able to satisfy both your desire to go to the ballgame and your desire to attend the meeting.

Now suppose you take Train A and go to the ballgame. The question of whether it was rational for you to take Train A is not settled merely by the fact that taking Train A was an effective means of achieving *some end or other* that you desired to achieve. If you acted akratically, for example, and took Train A to the ballgame despite the fact that you valued attending the meeting at work more highly, then you were irrational in taking Train A. If, instead, attending the game was sufficiently more valuable to you than attending the meeting, then you would be instrumentally rational in having taken Train A. Instrumentalism maintains that one acts rationally when one takes effective means to the achievement of some *contextually dominant* end that one

⁶ Instrumentalist accounts of *practical* rationality generally require that one *believe* the relevant means to be effective. I think that applying this requirement to instrumentalist accounts of *epistemic* rationality raises a number of complications for the instrumentalist. See footnote 9, below.

desires to achieve—i.e., an end one values more highly than any end with which it is contextually incompatible.⁷

Putting these elements together helps to fill out the instrumentalist conception of rationality: according to instrumentalism, it is rational for S to ϕ just in case ϕ -ing is a systematically effective way for S to achieve her contextually dominant ends.⁸

Epistemic instrumentalism views epistemic rationality as, at bottom, simply a species of instrumental rationality. Some of the most prominent accounts of epistemic instrumentalism are *intellectualist*, in that they view the epistemic norms to which an individual's beliefs are subject as rules that promote some particular *epistemic* or *cognitive* end that she wants to achieve. Although there is disagreement concerning how to construe the relevant epistemic end, instrumentalists about epistemic rationality usually explicate epistemic ends in terms of having true beliefs and avoiding false beliefs. Foley, for example, claims that the primary epistemic end is “now to believe those propositions that are true and now not to believe those propositions that are false” (1987, p. 8). Epistemic instrumentalists often attach qualifications to their accounts of the primary epistemic end, saying, for example, that people typically only have such an end with respect to some circumscribed class of propositions. (Foley immediately follows his explication of the primary epistemic end by saying, “perhaps better, we can take this to be the goal with respect to those propositions that an individual can understand” [1987, p. 8].) For present purposes, let's set aside such qualifications. As a working approximation, we can say that, according to intellectualist versions of epistemic instrumentalism, your beliefs are appropriately subject to norms of epistemic rationality only if there is some epistemic end, such as the end of believing true propositions and not believing false propositions, that you want to achieve.⁹

Instrumentalism seems to present an elegant reductive account of rationality, including epistemic rationality. Epistemically rational beliefs can be thought of as beliefs that satisfy *epistemic norms*, where an epistemic norm is, roughly, a conditional rule stating what one should believe, in a given kind of circumstance, in order to achieve some end. The contents of epistemic norms are just fixed by ordinary, descriptive facts

⁷ What is it for an individual to value one end more highly than another? One suggestion would be to say that an individual S values A over B just in case S prefers—i.e., has a stronger desire to achieve or obtain—A over B. A more intellectualist model might say that S values A over B just in case S *would, on reflection*, prefer A to B. These are just suggestions; since my discussion of instrumentalism in this paper will not hinge on any particular conception of the dominance relation, I will not take a position on how best to understand the notion of one end's ‘dominating’ or ‘outweighing’ another.

⁸ Of course, this statement of the view is still only an approximation, but it should suffice for the purposes of this paper.

⁹ A complication: some instrumentalists, including Foley, think that it is only rational to form beliefs by means that you *believe* are effective ways of achieving your epistemic ends (1987, 5ff). So, for example, endorsing the content of my perceptual experience may not actually be an effective means of believing truths and avoiding falsehoods, if I am constantly subjected to visual illusions. But if I am unaware that I am witnessing an illusion, I might very well *believe* that I can trust my perceptual experience. So, according to Foley, in such a case I could be rational in forming perceptual beliefs about my environment, even though in the circumstances, doing so would not *actually* be an effective means of achieving my cognitive ends. There is some concern that such a requirement implies a vicious infinite regress. (In order to be rational in taking means that one believes are effective, must one be *epistemically rational* in believing those means to be effective?) For now, I set this worry aside. The criticisms of epistemic instrumentalism that I will develop do not presuppose that Foley's requirement induces a vicious regress.

concerning which rules of belief formation, revision, and maintenance are systematically effective at bringing about various outcomes. A given rule of belief formation, revision, or maintenance counts as an epistemic norm—that is, it constitutes a standard of epistemic rationality—insofar as complying with it is an effective way to bring about some outcome that one has a contextually dominant desire to attain. According to intellectualist versions of epistemic instrumentalism, the relevant outcome is one that realizes an individual's desire to attain some specifically epistemic end, such as the end of having true beliefs and avoiding false beliefs.

One serious (and, in my view, underappreciated) difficulty facing such forms of epistemic instrumentalism concerns the level of conceptual sophistication they demand of individuals whose beliefs may properly be regarded as epistemically rational or irrational. Desiring to achieve an epistemic goal presumably requires one to have a conceptual repertoire that includes such concepts as *proposition*, *belief*, and *truth*. Young children and higher animals seem capable of having rational and irrational beliefs despite lacking these concepts—hence despite lacking desires to achieve any epistemic ends whatsoever.

Kelly (2003) focuses on another difficulty facing epistemic instrumentalism: namely, the problem of how to construe the relevant epistemic ends. Kelly objects to epistemic instrumentalism on the grounds that “there simply is no cognitive goal or goals, which it is plausible to attribute to people generally, which is sufficient to account for the relevant phenomena” (2003, p. 623). In particular, Kelly focuses on Foley's claim that epistemic rationality consists in managing one's beliefs in ways that are conducive to the goal of now believing true propositions and now not believing false ones. Kelly claims that although individuals often do desire to have true beliefs and avoid false beliefs *about certain subject matters*, it is implausible to attribute to people a general desire to believe true propositions and avoid believing false propositions. According to Kelly,

There are ...very real limits to how wide even the widest of my cognitive goals are. In addition to those many truths such that my believing them would contribute to the achievement of some goal that I have, there are also (countless) truths such that my believing them would not contribute to any goal that I actually have. Whether Bertrand Russell was right- or left-handed, whether Hubert Humphrey was an only child—these are matters of complete indifference to me. That is, I have no preference for having true beliefs to no beliefs about these subjects; nor, for that matter, do I have any preference for having true beliefs to false beliefs. There is simply no goal—cognitive or otherwise—which I actually have, which would be better achieved in virtue of my believing true propositions about such subjects, or which would be worse achieved in virtue of my believing false propositions about them. (2003, pp. 624–625)

He then goes on to say, “from the fact that some subjects are matters of complete indifference to me, it does not follow that I will inevitably lack epistemic reasons for holding beliefs about those subjects” (2003, p. 625). The claim here is that if you come across compelling evidence that Bertrand Russell was left-handed, for example, you will have good epistemic reason to believe that Russell was left-handed—regardless of

how little you care about the question. That is, you need not be antecedently interested in a given topic in order to stumble across evidence that bears on the truth of propositions concerning that topic. Since the epistemic reasons you have are determined largely by the evidence you encounter, it follows that, even if you lack the goal of forming true beliefs about a given subject matter, you can nevertheless have epistemic reasons to believe various propositions concerning that subject. In fact, your epistemic reasons to believe that p , when you accidentally stumble across strong evidence to the effect that p , are just as strong as they would have been if you had uncovered the same evidence deliberately (2003, pp. 625–627). So your interest in a particular topic seems irrelevant to the epistemic status of your beliefs about that topic. Call this line of thought the *argument from the epistemic irrelevance of indifference*.

Moreover, Kelly notes that there are times when one's primary epistemic goal with respect to a subject matter is to avoid having true beliefs, or even to have false beliefs, about the subject. Such cases arise when having true beliefs about some subject would have deleterious consequences. For example, Kelly notes that your enjoyment of a movie can be spoiled by learning in advance how it ends. It is common to prefer ignorance about a movie's ending, or even to prefer being misled, to believing the truth about the ending.¹⁰ And yet, Kelly argues, even when you do not want to know how a movie ends, if you happen to encounter evidence that the movie ends in a particular way—for instance, because an inconsiderate friend blurts it out—then you will typically have an epistemic reason to believe that the movie ends in that way. Again, in such a case, your epistemic reasons for believing that the movie ends in the way indicated will be just as strong as they would have been, had you come across the same evidence because you intentionally sought to discover how the movie ends.

According to Kelly, the fact that people sometimes, perfectly coherently, try to remain agnostic about a subject matter by screening themselves off from evidence that bears on it is a fact that instrumentalism cannot plausibly explain:

Consider the following. When I undertake deliberate measures in order to avoid discovering how the movie ends, my project is simply this: I want to avoid the acquisition of reasons for believing the truth about how the movie ends. Notice, however, that if the possibility of acquiring reasons for believing the truth about p is contingent on one's having some goal which would be better promoted by believing the truth about p , then this project is incoherent: there is no need to deliberately avoid the acquisition of epistemic reasons to believe propositions about subjects with respect to which one has no desire to believe the truth, for one knows a priori that there are no such reasons. (Indeed that there *could not be* such reasons.) But in fact, the envisaged project is not incoherent. ...Put simply: one cannot *immunize* oneself against the possibility of acquiring reasons for belief by not caring about the relevant subject matter. (2003, p. 628)

Kelly's point here concerns the instrumentalist who claims that if you lack the goal of attaining true beliefs and avoiding false beliefs about a given topic, then you cannot

¹⁰ Note that in this case, the cognitive goal of avoiding having true beliefs about the movie's ending is not an end in itself—it is an end that one wants to achieve only because one has some other, nonepistemic goal (i.e., to enjoy the movie).

possess epistemic reasons to believe things about that topic. Such a view implies, a priori, that it would be impossible for you to stumble across evidence that would provide you with an epistemic reason to believe things about a subject matter about which you would prefer not to have true beliefs. If that were the case, then it wouldn't make sense for you to try to avoid stumbling across evidence concerning a subject matter about which you would prefer to remain ignorant. But Kelly's point is that it often *does* make sense to try to avoid encountering evidence concerning a subject matter about which you would prefer not to have true beliefs. Call this line of thought the *argument from the coherence of truth-avoidance*.

There are three ways for an epistemic instrumentalist to respond to cases like the ones Kelly presents. The first involves noting that Kelly's examples presuppose a particular conception of epistemic instrumentalism, according to which the fundamental epistemic goal is that of believing a proposition just in case it is true. Yet epistemic instrumentalism per se is not committed to this way of construing the primary epistemic goal. The epistemic instrumentalist could thus claim that what Kelly's cases show is that there is something wrong, not with epistemic instrumentalism, but with versions of epistemic instrumentalism that maintain that the relevant epistemic end is something like believing a proposition just in case it is true. Presumably, there are versions of epistemic instrumentalism that are less vulnerable to Kelly's counterexamples.

For instance, an instrumentalist might respond by saying that the epistemic goal of having true beliefs and avoiding false beliefs should not be interpreted as implying an indiscriminate interest in having true beliefs, regardless of the subject matter. An instrumentalist could maintain that the epistemic goal that is most central to epistemic evaluation does not concern *curiosity* or *discovery*, for what truths one wants to discover will tend to vary greatly from one person to the next, as Kelly rightly points out. Rather, the primary epistemic goal could be understood as the goal of managing and updating one's beliefs in response to inputs from perception, interlocution, and shifts in attention in such a way as to ensure that one's beliefs are true. Suppose then that the primary epistemic goal were to be construed instead as the goal of *believing any proposition the truth of which is indicated by things of which I am presently aware*. So understood, epistemic instrumentalism would not imply that one must be interested in whether Bertrand Russell was right- or left-handed in order to be rational in believing that he was, say, left-handed. Suppose that you have the epistemic goal of believing any proposition the truth of which is indicated by things of which you are aware. Imagine that, quite unwillingly, you are made aware of something that indicates that Russell was left-handed (someone points out the way the ink on one of Russell's handwritten manuscripts is smeared, say). In that case, according to the instrumentalist response that I am suggesting, it *would* be rational for you to believe that Russell was left-handed, even though you have no interest in the question of whether or not he was. A version of epistemic instrumentalism that adopted this alternative characterization of the fundamental epistemic end would therefore be immune to Kelly's argument from the epistemic irrelevance of indifference.

Similarly, suppose that although you want to remain ignorant about how a movie ends, this desire is subordinate to a contextually dominant desire to believe any proposition the truth of which is indicated by things of which you are aware. In that case, it would make perfect sense for you to try to avoid situations, such as conversation with

inconsiderate friends, that are likely to make you aware of things that indicate how the movie ends. By successfully avoiding such situations, you could satisfy *both* of these desires. But suppose that, despite your best efforts, you happen to be made aware of something that indicates how the movie ends. According to the present proposal, since you value this epistemic end more than the goal of remaining ignorant about the movie's ending, it would be irrational to remain agnostic about the movie's ending. So if epistemic instrumentalism were to construe the fundamental epistemic goal along the lines I have suggested, it would be immune to Kelly's argument from the coherence of truth-avoidance.¹¹

The problem with this imagined response is that Kelly's cases can be adjusted to apply, with apparently equal validity, to any intellectualist version of epistemic instrumentalism, no matter how the fundamental epistemic end is characterized. For example, although one *might* have a contextually dominant desire to believe propositions indicated by things of which one is aware, it seems possible for there to be situations in which one has practical concerns that contextually dominate any desire one might have to achieve this epistemic end. And in such a situation, one's beliefs might nevertheless be epistemically rational or irrational.¹² The question for the epistemic instrumentalist, then, is whether there is *any* candidate epistemic goal such that, in principle, it is impossible for it to be contextually subordinate to a desire to achieve some practical goal. Presumably, there is no special reason why our epistemic ends—whatever they are—cannot, in principle, be outweighed by sufficiently pressing practical concerns. For any candidate epistemic end, it is possible to imagine a situation in which an individual would have a practical desire that dominates his desire to achieve that end. Papineau (1999) describes one such case:

Consider people who aim deliberately to mislead themselves. Suppose an elderly man realises that he is likely to be upset if he learns about the real probability of his developing cancer, and so arranges to avoid any evidence that might undermine his sanguine beliefs that this probability is low.... Of course, there are familiar psychological difficulties about deliberately arranging to have false beliefs, but examples like this suggest they are not insuperable. (1999, p. 24)

The elderly man Papineau describes is supposed to have a practical desire to be free of anxiety that dominates his epistemic ends. Epistemic instrumentalism implies that, given that the elderly man's epistemic ends are subordinate to his desire to be free of anxiety, his beliefs about his medical condition simply have no epistemic status at all. That is, instrumentalism implies that the elderly man's beliefs about his condition are

¹¹ Besides, why would the instrumentalist concede that, in avoiding situations in which one is likely to be made aware of things that indicate how the movie ends, one is really attempting to avoid acquiring *reasons* to believe how the movie ends? Presumably, the point would be to avoid acquiring *beliefs* about the movie's ending, whether those beliefs are supported by reasons or not. The instrumentalist could describe Kelly's case of avoiding the obnoxious friend as a case of avoiding a situation that will likely *cause* one to form beliefs about the movie's ending. Whether the relevant cause—the obnoxious friend's claim that the movie ends in such-and-such a way—is a *reason-giving* cause is, in the context of the debate over epistemic instrumentalism, a contentious issue. Cf. Leite (2007) and Kelly (2007).

¹² Thanks to an anonymous referee for emphasizing this point.

neither epistemically rational nor epistemically irrational. It is precisely this implication that Kelly thinks is so implausible.

Papineau himself thinks that this is an intuitively correct result. In fact, he cites it as a *reason* to accept a broadly instrumentalist picture of epistemic rationality (1999, pp. 24–25). With respect to the cases like that of the elderly man, in which individuals manage their beliefs solely in order to achieve their dominant practical aims, Papineau asks:

Are these people acting wrongly? Of course, they aren't doing what they need to, if they want their beliefs to be true. But by hypothesis they don't want their beliefs to be true. So is there any other sense in which they are proceeding improperly?

It is not obvious to me that there is. I would say that it can sometimes be quite proper...not to be moved by the aim of truth. (1999, p. 24)

He goes on to emphasize that his point is not that there is some universal, *pro tanto* requirement to seek the truth that can be overridden by other practical considerations. Rather, it is that, for those who do not want to have true beliefs, there is not even a *pro tanto* requirement to seek truth. As Papineau puts it, “Why should we suppose that the elderly man, or [others in similar situations], are in any sense obliged to comport their beliefs to the evidence? It doesn't seem to me that they are violating any prescriptions at all by adopting their entirely sensible strategies” (1999, p. 25). Papineau's view of these cases thus represents a second possible response to Kelly's purported counterexamples to epistemic instrumentalism: the epistemic instrumentalist might just reject the intuition that the beliefs of a person who either lacks the epistemic end in question, or whose practical ends are contextually dominant, can properly be regarded as epistemically rational or irrational.

I think there is some ambiguity in Papineau's case that obscures the primary points at issue. Papineau concludes from the case that the elderly man is not obliged to conform his beliefs to the evidence. But it is unclear from Papineau's description of the case whether the elderly man's beliefs about his condition fail to conform to evidence he already possesses, or whether, like Kelly's moviegoer, he instead simply avoids acquiring the relevant evidence in the first place.

To make things more concrete, suppose that the elderly man's doctors tell him that he is unwell and that he goes to get a second and then a third opinion, which only confirm the original diagnosis. Imagine that he himself is a doctor who specializes in the very disease from which he is suffering and knows full well that his symptoms are indicative of that disease. But suppose that he manages to keep from believing that he has the dreaded disease. Whenever he thinks about his medical symptoms, he does something to distract himself: he drinks until intoxicated, immerses himself in a crossword puzzle, or repeatedly chants some sort of mantra. By engaging in distracting behavior, he is able to retain the belief that he is free of the disease, even though he has overwhelming evidence to the contrary.

Let us grant that the anxiety that knowledge of his condition would excite is so severe that the elderly man would prefer believing himself free of the disease to having true beliefs about his condition, to being responsive to evidence about his condition, and so

on. For *any* plausible epistemic end, it seems possible to imagine a scenario in which the consequences of achieving it would be so overwhelmingly bad for a particular individual that that individual would rather avoid those consequences than attain that epistemic end. The question is whether the beliefs of an individual caught in such an unfortunate situation would cease to be properly regarded as epistemic rational or irrational.

Papineau asks, of the elderly man and others who intentionally deceive themselves for good practical reasons, “Are these people acting wrongly?” (1999, p. 24). In the context of the debate over epistemic instrumentalism, the real question is whether the man’s self-induced *belief* that he is free of disease is epistemically rational. This question, which concerns the epistemic status of the man’s belief, should be sharply distinguished from questions about whether the elderly man is rational in *acting* in such a way as to keep himself from forming true or evidence-responsive beliefs about his condition.¹³ The question of whether elderly man’s belief is rational should also be distinguished from questions about whether he is rational in *preferring* comforting beliefs about his condition to true or evidence-responsive beliefs. We cannot simply assume that these questions collapse. We can grant that it is at least possible that the elderly man who distracts himself in order to maintain his belief that he is free of the dreaded disease could be rational in so *acting*, assuming that he acts in his own all-things-considered best interest. We can also grant that the elderly man could be rational in preferring comforting beliefs to true or evidence-responsive beliefs about his condition. But intuitively, neither of these concessions implies that his *belief* that he is free of the disease would itself be epistemically rational or that it would not be epistemically irrational (i.e., that it would lack any epistemic status at all). Indeed, I think it is far more natural to think that, however rationally the elderly man in the example is acting, and however rational his preferences, his belief that he is well would be irrational. Such a belief would, in fact, be a paradigm of epistemic irrationality. The intuition that individuals can act rationally in manipulating their beliefs without regard for the truth does not support Papineau’s conclusion that such individuals are not “*in any sense* obliged to comport their beliefs to the evidence” or that they are not “violating *any prescriptions at all* by adopting their entirely sensible strategies” (1999, p. 25; emphasis added). It is therefore implausible to say that since the elderly man has no contextually dominant desire to achieve any epistemic end, his beliefs about his condition cannot properly be viewed as epistemically rational or irrational.

Intellectualist versions of epistemic instrumentalism maintain that, in order for one’s beliefs to be properly regarded as epistemically rational or irrational, there must be some fundamental epistemic end or goal that one wants to achieve. In light of Kelly’s objections, proponents of intellectualist versions of epistemic instrumentalism must either postulate some indomitable, universally held epistemic end, or they must bite the bullet and claim, with Papineau, that there are circumstances in which an individual’s beliefs are simply not appropriately regarded as epistemically rational or

¹³ Kelly (2003, p. 627) objects to Papineau on the grounds that he “conflate[s] (1) the reasons which one may or may not have to seek out further evidence which bears on the truth of p, and (2) the reasons which one may or may not have to believe p.” Cf. the distinction in Hieronymi (2006) between “constitutive” and “extrinsic” reasons to have an attitude.

irrational. I have argued that neither approach is plausible. But there is a third option: the epistemic instrumentalist could deny that standards of epistemic rationality are grounded in desires to achieve ends of a specifically epistemic nature.

3 Pragmatist forms of epistemic instrumentalism

At least one variety of epistemic instrumentalism has been proposed with a view to reconciling the theory with the intuitive view that epistemic norms apply universally to all individuals, regardless of what desires they happen to have. Its goal is to explain, in instrumentalist terms, how your beliefs can be epistemically rational or irrational, even if you have no contextually dominant desire to achieve any particular epistemic end. This line of thought begins by claiming that epistemically rational beliefs are beliefs that satisfy rules, or norms, for achieving true belief, and stresses that true belief is *itself* instrumentally valuable. After all, you typically need to have various true beliefs in order to succeed in carrying out your practical projects. So even if you do not happen to care about having true beliefs, you have pragmatic reason to ensure that your beliefs are true. Thus, norms of epistemic rationality are thought to derive from your desired ends, though from no *particular* end, epistemic or otherwise, that you want to achieve. Such a view is a species of *epistemic pragmatism*.

Kornblith explains the pragmatic value of true belief in this way:

Consider an unproblematic case in which the cost-benefit approach [to pursuing a desired end] is applied. If I am deciding between two toasters and I wish to use the cost-benefit model, I will begin by determining the consequences of buying each of the candidate toasters. I assign values to each of these consequences, and I do some simple arithmetic. The toaster which has the higher expected value is the toaster I should buy.

In doing all of this, I make use of my cognitive system. I need to figure out the relevant consequences; I need to assign values to each of them; I need to do some arithmetic. The cost-benefit account assumes that these will be done accurately, otherwise the fact that one toaster is assigned a higher number by this procedure is of no interest. So it is assumed that my cognitive system is generating truths about the toasters, truths about what I value, and accurately computing certain arithmetic functions. These assumptions are perfectly legitimate ones to make when trying to devise a decision procedure for the purchase of toasters. It is how we figure out which toaster better serves our interests, whatever those interests may be. (1993, pp. 369–370)

Kornblith observes that practical reasoning presupposes that the information used in carrying out the reasoning is accurate. In practical reasoning, the information we rely on is carried by our beliefs. So engaging in practical reasoning will be an effective way to achieve our ends only if the beliefs we employ in practical reasoning are true. Kornblith concludes,

It seems that someone who cares about acting in a way which furthers the things he cares about, and that includes all of us, has pragmatic reasons to favor a

cognitive system which is effective in generating truths, whether he otherwise cares about truth or not. We should thus adopt a method of cognitive evaluation which endorses truth-conducive processes. (1993, pp. 371–372)

His point here is that, trivially, everyone wants to achieve his or her own desired ends. Since achieving your ends invariably involves practical reasoning, and since practical reasoning enables you to accomplish your ends only if your beliefs are true, you have a pragmatic reason to have beliefs that are true. In this sense, we should “adopt a method of cognitive evaluation which endorses truth-conducive processes”—that is, we have pragmatic reasons to form, revise, and maintain our beliefs in accordance with truth-conducive rules.

Note that Kornblith’s account of epistemic rationality is instrumentalist, in that it attempts to derive standards of epistemic rationality from their conduciveness to the attainment of desired ends. He thinks that one ought to form beliefs in ways that are truth-conducive precisely because true belief is itself conducive to the attainment of one’s ends. But that is just to say that one ought to form beliefs in truth-conducive ways because it is instrumentally valuable to do so.

Kornblith’s form of epistemic pragmatism does not entail that epistemically rational or irrational beliefs are always associated with specifically practical ends. Sometimes true belief is itself a desired end, as when a person simply wants to know the answer to a question. Thus, wherever intellectualist versions of epistemic instrumentalism imply that an individual’s beliefs are properly regarded as epistemically rational or irrational, pragmatist versions of epistemic instrumentalism imply this as well. But there are situations in which one should value having true beliefs about some topic, even though one does not actually care about having true beliefs about that topic. (A person who wants to fly a Piper Cub may not realize how important it is to know the plane’s stall speed, for example.) And epistemic pragmatism does not require individuals whose beliefs are subject to standards of epistemic rationality to have a conceptual repertoire that includes specifically semantical or psychological concepts, like *belief*, *proposition*, or *truth*. Thus, the range of cases in which an individual’s beliefs can be epistemically rational or irrational is, in principle, broader on a pragmatist account of epistemic rationality than it is on an intellectualist account. In fact, Kornblith claims that his account can accommodate the intuition that one’s beliefs are *always* appropriately regarded as epistemically rational or irrational. According to Kornblith, this is one of the virtues of a pragmatic conception of epistemic rationality: it “allow[s], on the one hand, that [epistemic norms] are derived from our desires in a way that removes any mystery surrounding them, and, on the other, that they are universal in their applicability and not merely contingent upon having certain values” (2002, p. 157).

There are two ways to understand the notion that a person’s beliefs are properly subject to standards of epistemic rationality insofar as compliance with those standards is conducive to attaining one’s ends. One way is to understand it as the view that, for any topic T about which you have beliefs that are subject to standards of epistemic rationality, there is some contextually dominant goal that you want to achieve such that you stand a better chance of achieving it by having true beliefs about T than by having either false beliefs, or no beliefs, about T. Such a ‘case-based’ form of epistemic pragmatism would be broadly analogous to act utilitarianism, according to which the

moral status of a particular action derives from its effect on utility. So understood, epistemic pragmatism entails that an individual's beliefs about a given topic are properly subject to standards of epistemic rationality just in case having true beliefs about that topic would be conducive to the attainment of that individual's contextually dominant ends. But this conclusion seems wrong. Recall that in Papineau's elderly man case, as I elaborated it, we did not imagine only that the elderly man did not want to have true beliefs about his condition. It was stipulated that, in fact, having true beliefs about his condition would have overwhelmingly deleterious consequences. Nevertheless, the man's deluded belief that he is free of the disease would be epistemically irrational.

But there is another way to construe pragmatist forms of epistemic instrumentalism. According to this alternative picture, the instrumentalist is *not* claiming that it is rational for you to hold a belief in accordance with truth-conducive rules only if doing so *on the particular occasion at hand* would advance your ends. The idea is that the norms of epistemic rationality apply to your beliefs just in case compliance with them *generally tends* to advance your ends. Such a 'rule-based' form of epistemic pragmatism would be roughly analogous to rule utilitarianism, according to which the moral status of an act is determined by whether it was performed in compliance with rules that generally tend to maximize utility.¹⁴ Kornblith's emphasis on reasons we have for favoring truth-conducive cognitive *systems* suggests that the form of epistemic instrumentalism he endorses is rule-based.

Suppose that the elderly man who has overwhelming evidence that he has a dreaded disease simply believes, on the basis of that evidence, that he has contracted the disease. Imagine that, knowing the dire consequences of believing that he has contracted the dreaded disease, he attempts to deceive himself about his medical condition by engaging in distracting behavior, but his efforts fail. If believing that he has contracted the dreaded disease makes the elderly man worse off, case-based forms of epistemic pragmatism entail that he is either epistemically irrational in holding this belief, or that his belief lacks any epistemic status whatsoever. I think this consequence is extremely counterintuitive. It seems far more natural to say that, regardless of its deleterious consequences, the elderly man's belief that he has the disease—based as it is on expert testimony and his own expert knowledge of the disease and its characteristic symptoms—would be epistemically rational. Indeed, his belief would presumably constitute knowledge of his medical condition.

But a rule-based form of epistemic pragmatism is not committed to the idea that epistemically rational beliefs are always conducive to the attainment of one's contextually dominant ends. The fact that the elderly man is made worse off by succumbing to the evidence he possesses about his condition does not show that his belief that he has the dreaded disease is either irrational or arational. Strictly speaking, rule-based

¹⁴ Leite (2007) proposes a version of epistemic instrumentalism that, like the one I am imagining here, is analogous to rule utilitarianism. According to the version Leite considers, "epistemic rationality is a matter of forming beliefs in accordance with a system of habits or procedures whose consistent application would bring about the optimal satisfaction of one's cognitive goals over time" (p. 461). Leite's focus on *cognitive* goals makes this view a kind of rule-based intellectualist form of epistemic instrumentalism, rather than a rule-based pragmatist instrumentalism of the sort I think Kornblith has in mind. But I think the concerns I raise about the rule-based interpretation of Kornblith's view also apply, *mutatis mutandis*, to Leite's proposal.

forms of epistemic pragmatism are consistent with the intuitive view that the elderly man's belief that he has the dreaded disease would be epistemically rational, even though forming his belief in a truth-conducive way would, on this particular occasion, frustrate his ends.

However, there is a serious problem with any view that seeks to combine rule-based epistemic pragmatism with the intuitive view that the elderly man's belief that he is unwell is epistemically rational. For as I described the case, the elderly man *knows in advance* that he will be worse off if he forms beliefs about his medical condition in accordance with the evidence. He suspects that if he allows his beliefs about his own medical condition to be responsive to the best available evidence, he will be devastated by anxiety. When he succumbs to the evidence and believes that he has contracted the dreaded disease, I think it is most natural to regard him as epistemically rational. But doing something that one *knows* will be inimical to the achievement of one's contextually dominant ends is the paradigm of instrumental *irrationality*. It is hard to see how rule-based forms of epistemic pragmatism can accommodate the intuition that one can be epistemically rational in forming beliefs in ways that one knows will frustrate the attainment of one's contextually dominant ends.

By analogy, suppose it is rational for you to go for a jog each morning. An instrumentalist account of rational action will attempt to explain why it is rational for you to go for a jog each morning by trying to find some end of yours to which going on a morning jog is conducive, such as the end of maintaining good health. But, of course, the instrumentalist about practical rationality will concede that if you have reason to think that going for a jog on a particular morning wouldn't be conducive to this end—if, for example, you know that due to a nearby wildfire, the air on this particular morning is exceptionally toxic—then of course it would be irrational of you to go for a jog anyway (out of habit or neurotic compulsion, say). Acting in accordance with a rule that is usually conducive to one of your contextually dominant ends is actually *irrational*, if you have reason to believe that, on the occasion at hand, doing so would hinder your ability to attain those ends.

Furthermore, consider the original version of Papineau's case, in which the elderly man successfully deceives himself about his condition. Intuitively, the man's belief would be epistemically irrational, despite the fact that he deceived and distracted himself precisely because he thought that, on that occasion, forming an epistemically rational belief about his condition would be inimical to the attainment of his dominant ends. Even if we concede that holding epistemically rational beliefs generally tends to advance the elderly man's ends, I think that the rule-based epistemic pragmatist will still need to explain why it is that his belief that he is well would be instrumentally irrational, despite the fact that he formed the belief in a way that he knew would be conducive to the attainment of his ends. After all, doing something that one knows is conducive to achieving one's contextually dominant ends is the paradigm of instrumental rationality.

Consider another analogy with instrumentally rational action. Suppose you have two routes by which you can drive home from work. One of the routes is short, pleasant, economical, and in every other respect better than the second route, which is long, circuitous, unsightly, and so on. In other words, suppose that taking the first, shorter route is generally more conducive to the attainment of your various ends than taking

the second route. But clearly, taking the second would be the rational thing to do, if you were to discover that the first route was being worked on by a construction crew and would take three times longer to drive than the second, more circuitous route. If you happen to know that taking the second route, on a particular afternoon, would be more conducive to your ends than taking the first route, then quite clearly that would be the rational route to take—even though doing so would normally be relatively inimical to the attainment of your ends. But in order to accommodate the intuition that Papineau's elderly man is irrational when he deceives himself about his medical condition, the epistemic instrumentalist will have to say that, for some reason, it is irrational for him to manage his beliefs in ways that he knows will enable him to achieve his contextually dominant ends. It is hard to see how the epistemic instrumentalist could accommodate natural intuitions about the case without relinquishing the defining tenet of instrumentalism—that it is rational to do what you know will most effectively serve your ends.

Epistemic instrumentalists who view pragmatism as a way to provide an intuitively correct account of cases like Papineau's are thus faced with a dilemma. Epistemic pragmatism must be understood in either a case-based way or in a rule-based way. Case-based forms of epistemic pragmatism only yield intuitively correct conclusions about Papineau's elderly man if we assume that true or evidence-responsive beliefs about his condition would serve his ends. The problem is that, in principle, there seems to be no reason why the elderly man couldn't be in a situation in which having true beliefs would, on the whole, frustrate his ends. Rule-based forms of epistemic pragmatism, by contrast, can yield intuitively correct conclusions about the rationality of the elderly man's beliefs, without supposing that true or evidence-responsive beliefs would serve his ends. However, they only yield these intuitively correct results insofar as they concede that what it is rational for the elderly man to believe is not affected by his awareness of the fact that having true or evidence-responsive beliefs about his condition would not serve his ends. But making this concession is tantamount to abandoning an instrumentalist account of epistemic rationality altogether.

4 Epistemic instrumentalism and the normativity of epistemic rationality

By broadening the range of possible circumstances in which beliefs can be subject to norms of epistemic rationality, pragmatist accounts of epistemic rationality avoid some of the problems facing intellectualist versions of epistemic instrumentalism. In particular, epistemic pragmatism is not compelled to say that the epistemic status of an individual's beliefs is contingent on that individual's having a contextually dominant desire to achieve some specifically epistemic end. Pragmatic forms of epistemic instrumentalism can allow that even those who do not have any such desires can have beliefs that are epistemically rational or irrational. In fact, Kornblith argues that a pragmatic account of epistemic rationality can reconcile epistemic instrumentalism with the intuitive view that the epistemic status of an individual's beliefs is not sensitive to particular features of her circumstances or the particular desires she happens to have. But the arguments of the previous section show that, in attempting to accommodate ordinary intuitions concerning the conditions that bear on the rationality of

an individual's beliefs, epistemic pragmatism is committed to allowing that there are circumstances in which an individual could be rational in holding a particular belief, while knowing full well that doing so is not in his all-things-considered best interest. But knowingly doing things that are contrary to one's all-things-considered best interest is a paradigm of instrumental *irrationality*.

I think these problems indicate that epistemic instrumentalism, as such, rests on a more fundamental mistake. I suspect that the mistake may stem from a certain very common way of thinking about normativity.

According to one prevalent and influential view of normativity, a standard of evaluation, as applied to an individual, has normative force only insofar as she has reason to meet that standard. For example, the rule 'When entering a dark room, turn on the light' can be used to provide a normative basis for evaluating an individual's actions only insofar as the individual to whom the rule is applied has a reason to comply with it. It is no mystery how such a view might encourage an instrumentalist conception of epistemic normativity. One begins by thinking of epistemic rationality as consisting in the satisfaction of certain rules or standards of belief formation, revision, and maintenance. Such epistemic rules have their home not just in providing evaluations of individuals' beliefs, but in grounding normative assessments and criticisms. To call someone's beliefs 'irrational' is to imply that there are standards of forming, maintaining, and revising beliefs that she in some sense *ought* to have satisfied, but failed to. But then one might wonder how it could be the case that an individual ought to satisfy a standard, unless she has some reason to do so.

Once we begin seeking reasons to comply with standards of epistemic rationality, it is natural to look for ways in which compliance would be valuable. Thus, for example, if epistemic norms are truth-conducive, true belief must be valuable, either as an end desired for its own sake (as Foley's intellectualist version of epistemic instrumentalism maintains), or as a means to the attainment of other ends (as Kornblith's pragmatist form of epistemic instrumentalism maintains). Epistemic instrumentalism thus represents one way of attempting to ground the normativity of epistemic rationality in reasons—namely, instrumental reasons—to be epistemically rational.

If the arguments of this paper are correct, we are left with three possibilities concerning the normativity of epistemic rationality. One is that there must be non-instrumental reasons to be epistemically rational, which account for the normativity of epistemic rationality. A second possibility is that there are no substantive reasons to be rational, and that, therefore, standards of epistemic rationality are only apparently normative.¹⁵ The third possibility is that epistemic normativity is primitive, in that the question of whether an individual's beliefs are properly subject to normative epistemic evaluation does not depend on whether that individual has any substantive reason to comply

¹⁵ Cf. Broome (2007) and Kolodny (2005). I assume that what I am calling 'epistemic norms' are a species of what Broome and Kolodny would refer to as 'rational requirements.' Kolodny and Broome claim not only that there is no *instrumental* reason to be rational, but also that there are no substantive reasons *of any kind* to be rational, and therefore that rational requirements lack any real normative force. Wedgwood (2003) draws a distinction between choosing 'rationally' and choosing 'correctly' that is broadly parallel to Broome and Kolodny's distinction between what it is rational to do and what one has reason to do, and sketches a defense of the view that rational choice can be explained in terms of choosing correctly. Cf. Also Parfit's (2001) distinction between reasons and rationality.

with epistemic norms.¹⁶ While I cannot claim to have settled which of these views of epistemic normativity is ultimately correct, I hope that the arguments of this paper help to narrow the field of possibilities.

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¹⁶ Southwood (2008) takes a pessimistic view of the prospects for a substantive theory of the normativity of rationality and presents what I would consider a kind of primitivist account of the normativity of rationality.