

Reverse Engineering Epistemic Evaluations*

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1. A Puzzle: What Is the Function of Epistemically Evaluative Language?

What is the *function* of words like ‘irrational’ as used in ordinary epistemic evaluations? I’m thinking of simple evaluations: criticism like ‘Smith’s belief that Obama’s a Muslim is irrational’ or praise like ‘Green’s belief that all humans are mortal is rational’. We don’t make such claims just for the sake of it, just for fun, or for no reason at all. So what is the real point or purpose of this epistemically evaluative aspect of our linguistic practice? It must have some utility, but what? What would we lose if epistemically evaluative words suddenly disappeared from our vocabulary?¹

The question requires some motivation, since discovering a word’s function doesn’t necessarily call for armchair philosophy. Some words might serve a hidden psycho-sociological function that only empirical science can uncover. This might be true of words like ‘hello’ and ‘thanks’. And for many words, their basic function isn’t particularly

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[†] I pronounce it, when speaking English, like this: *sin-on dor-uh.mudge-uh*.

¹ The question of this paper thus contrasts with the timeworn questions of how to give necessary and sufficient conditions for this or that philosophically interesting property. There are, however, a few excellent philosophical explorations of the *function* of this or that philosophically interesting word or concept.

In philosophy of logic and language, Quine offered an elegantly simple insight about the utility of the truth predicate which precipitated the contemporary development of deflationism about truth; see Quine (1970), Leeds (1978), Horwich (1990/98), and Field (1994).

In metaphysics, a series of recent papers on modality have broached the fascinating issue of the function of modal concepts; see Kment (2006), chapter 5 of Williamson (2007), and Divers (2010).

mysterious. For example, we use ‘water’ to be able to communicate important, sometimes life-saving, information about where there is (or isn’t) water. It’s obvious that if ‘water’ were expunged from our vocabulary (by an Orwellian government, suppose), life would be harder until we could recover or replace it.

There is, however, a distinctly philosophical puzzle about the function of our epistemically evaluative language. The puzzle I have in mind begins with the following intuitive line of thought. Whatever the utility of our epistemically evaluative practice is, it can’t just be that it promotes rational beliefs and suppresses irrational beliefs: that outcome just isn’t valuable *for its own sake*. The utility of the practice must be instrumental utility. Instrumental for what, though? Intuitively, *truth*. As inquirers, what we are ultimately interested in are not *rational* beliefs, but *true* beliefs (about topics of interest to us).² I thus take the following as an intuitive premise: the utility of our epistemically evaluative practice is just an instrumental utility it has by helping us get true beliefs.³

By and large, that premise jibes with our ordinary epistemically evaluative practice. We apply ‘irrational’, by and large, to someone’s beliefs when he is veering from truth, and we apply ‘rational’ when the truth is being well-tracked. (Or ‘[un]justified’, ‘[un]reasonable’, even ‘[il]logical’: our topic is evaluations made using *ordinary* language, so we can treat these all as pretty well equivalent. I’ll stick with ‘[ir]rational’ in this paper just for uniformity, and because it strikes my ear as the most commonly used in ordinary conversation.) A puzzle arises because

In epistemology, there is Edward Craig’s wonderful and underappreciated book, *Knowledge and the State of Nature*, Craig (1990). Some recent work by Steven Reynolds, brought to my attention only after this paper was given at the Rutgers Epistemology Conference, is closely related to Craig’s project; see Reynolds (2002). Though Craig and Reynolds write about knowledge rather than rationality or justification, there are obvious common themes and specific points of contact between their views and the view I will be developing. The most notable common theme is the general importance we assign to the role of testimony in the function of epistemic language. One major difference, since they write about knowledge and not rationality, is that their views are not designed to explain the puzzle I will be raising shortly.

² By ‘ultimately interested in’, I don’t mean to claim that true belief is valuable for its own sake. Maybe it is, but I don’t want to commit myself to that. My claim is that true beliefs have some kind of utility, and we can appeal to that to *explain* the utility of our epistemically evaluative practice.

³ Note that I’m *not* saying that epistemic rationality is instrumental rationality. Kelly (2003) argues, convincingly in my opinion, that an epistemically rational belief is not just a belief that is instrumentally rational for the believer. Kelly shows that there are cases where a belief is rational even though the believer does not have the goal of believing the truth *in this case*. But Kelly’s view does not conflict at all with my claim that we have an interest in believing the truth *about topics that are of interest to us*, and that the utility of our epistemically evaluative *practice* is due to that interest of ours.

there appears to be a range of cases that stand as stark and inexplicable exceptions. These are cases where we *criticize* as irrational the beliefs of someone we know is tracking the truth very *well*, and we *praise* as rational the beliefs of someone we know is tracking the truth very *badly*!

The clearest such cases are the old counterexamples to the simplest and most intuitive versions of reliabilism. A simple reliabilist theory of justification, such as Goldman (1979), is just the sort of theory we'd have expected to be right if our evaluative practice is a means for getting at the truth. But then BonJour (1980) gave us the unwittingly reliable clairvoyant, Norman, whose beliefs we criticize, calling them 'irrational'. The thing that's puzzling me is, if we know Norman tracks the truth so well, why on earth do we criticize his beliefs? What purpose could it serve? That's a puzzle case for anyone wondering what function 'rational' serves.⁴

Some people hesitate to call Norman's beliefs irrational.⁵ Perhaps this compromises Norman's status as a counterexample to reliabilism, but it doesn't remove the puzzle I'm concerned with. Why do *so many people* feel *any temptation at all* to criticize the beliefs of someone whom we know, by stipulation, enjoys an excellent, robustly reliable connection to the truth? That's a puzzle, as I said, for anyone wondering what function 'rational' serves.

The other classic counterexample to reliabilism also generates the puzzle. Cohen (1984) pointed out that Dupe, the victim of a Cartesian evil demon, uses an unreliable process to form perceptual beliefs, but we apply 'rational' to Dupe's beliefs. Why do we give epistemic praise to someone we know to be so badly disconnected from the truth?

Cohen himself was gripped by a puzzle different from ours but closely related. He wondered about, as he labeled it, "the truth-connection": surely, Cohen said, rational beliefs are somehow connected with truth, but if reliabilism is wrong, then what could that truth-connection be? My puzzle is not in the first instance about the *property* of being rational, but is rather about our use of the *word* 'rational' and similar terms of epistemic evaluation. I'm puzzled by why we use these words in ways that appear to be downright counterproductive(!) to our ultimate epistemic goal, namely believing just the truth (about topics of interest to us).

⁴ Goldman, BonJour and other contributors to this literature mostly used the term 'justification'. Of course, they were explicitly using it to pick out a notion present in ordinary thought and talk. As noted, I treat 'justified' and 'rational' as meaning pretty much the same thing as far as ordinary conversation goes.

⁵ See, for example, Weinberg et al. (2001). As the authors emphasize, variation in responses varies with cultural background. This important point has supportive implications for the larger project advertised in the final section of this paper.

There's no dismissing the puzzle by saying Norman and Dupe are isolated and unrealistic cases. BonJour and Cohen extracted these vivid examples from real standards that tacitly guide our everyday usage. Our criticism of Norman is a distillation of a feature of our standards that also generates a complaint you can hear in everyday discourse: 'What you believe happens to be true, but you didn't know it!' And for a realistic version of Dupe, think of an unwitting schizophrenic, like John Nash was portrayed in the film *A Beautiful Mind*. We aren't tempted to call his beliefs 'irrational'.

Puzzle cases even arise for deductively inferred beliefs. Let Rami be an unwitting logical or mathematical clairvoyant: in just the way we sometimes infer q from p and if- p -then- q , Rami infers Fermat's Last Theorem immediately from some elementary axiom. (The example is drawn from Boghossian (2003).) Again, even if some people feel ambivalence, a puzzle arises just from the fact that many of us share Boghossian's strong temptation to call Rami's inferred conclusion irrational. Why do many of us feel any inclination at all to criticize Rami's conclusion when we ourselves know his transition is as valid as our own basic deductive transitions?⁶ For Dupe's deductive analog, consider Frege. Frege drew intuitive inferences concerning sets, oblivious to the proof (provided by Russell's paradox) that he was following an invalid rule (his notorious Basic Law V). Many will share the temptation to say Frege's unwittingly invalid conclusions were, like Dupe's conclusions, rational (at least at the time). Why, then, do we call Frege's conclusions rational and Rami's irrational?

These puzzle cases can lead you to worry that our epistemically evaluative practice is full of glitches! Are we so badly designed that every so often we make evaluations that are counterproductive to our interest in truth? Or might there be some other non-obvious interest at play that explains our behavior in these cases? But even if it were to turn out that, in these cases, our evaluative practice is serving some other valuable function, that would still be disappointing. Either that other function is unavoidably in tension with our interest in truth, or the tension is avoidable and we've been serving our interests very inefficiently.

An ideal solution would provide a clear and plausible function that all our epistemically evaluative practice serves in a uniform way, and which vindicates that intuitive premise that the utility of our

⁶ I hope it is clear why we cannot say our inferences are better than Rami's because we make ours with the *recognition* of their validity. Three familiar problems: (1) Most people don't give any thought to the validity of their inferences. (2) Between Carroll (1895) and Boghossian (2003), it should be very clear that recognition of validity doesn't help to explain why our basic deductively valid inferential transitions are rational. And (3) Rami is in as good a position as we are to argue, by giving a standard rule-circular soundness proof, that his basic transitions are valid.

epistemically evaluative practice is just an instrumental utility it has by helping us get true beliefs. I think there is such a solution to the puzzle, and I will use the rest of this paper to sketch it.

The task is a one of reverse engineering. First, bracketing speculation about what it is *for*, let's look at what our epistemically evaluative practice actually is, and what some of its significant effects on us are. Once we have a picture in hand, we can try to come up with an explanation of how this practice benefits us: what exactly is it for, and how does it accomplish that? I'll propose an answer that vindicates the intuition that it is all ultimately for the sake of having true beliefs.

2. Our Use of Epistemically Evaluative Language

2.1. *The Simple Use: Evaluations of Epistemic Rules*

We use '[ir]rational' in interpersonal, evaluative discourse. With the simplest such assertions, we praise or, far more often, we criticize a belief by asserting that the belief is rational or that it is irrational, respectively. I am taking it that assertions such as,

Smith's belief that Obama's a Muslim is irrational.

Jones's belief that 9/11 was an inside job is irrational.

Brown's disbelief in global warming is irrational.

Green's belief that all humans are mortal is rational.

have the simplest logical form of any of the assertions we make using 'rational' or 'irrational'. In attempting to reverse engineer a function for epistemically evaluative language, the aspect of our overall use that I will focus on is the use exemplified by the indented assertions above. In other words, my focus is on our practice of *calling* beliefs rational and, the more common case, *calling* beliefs irrational. I label this *the simple use* of epistemically evaluative terms like '[ir]rational'.

(The simple use is not the only way we use 'rational'. We embed 'rational' into non-indicative and/or logically complex structures. Also, not only do we use the word in speech, we use the associated concepts in thought, for instance if I were to believe that Smith's belief is irrational, perhaps never making an assertion that expresses that belief. For now, I am setting these uses aside, returning to them only at the very end of the paper.)

In any instance of the simple use, like the indented claims above, the surface form of the assertion indicates that the object of the evaluation is a belief or a disbelief. However, two observations about ordinary discourse reveal that what is being implicitly evaluated are belief-forming

rules. ('Implicitly' here just means it isn't reflected in the surface form of the evaluation.)

The initial observation reveals that the evaluation is sensitive to more than just the attitude itself. The observation is that we ordinarily allow for the belief that p to be rational in one person and irrational in another, or even in the same person at different times, when the *basis* of the belief differs or changes over time. We can allow that while Brown's disbelief in global warming is irrational, the same attitude held by his very young and very sheltered child is rational. So, in our ordinary practice, we consider more than just the belief when deciding whether or not it is rational: what we implicitly evaluate includes the belief together with its basis.

The next observation is that the object of our evaluations is not just something particular but something general. To see this, notice that we'd not count Smith as having responded to our criticism if the only thing she does is revise her belief that Obama's a Muslim. She could form future beliefs that have different contents, but which invite what we'd intuitively count as *the same criticism*. Smith has not responded to our original criticism if she merely replaces her old belief with a new belief that Obama is the antichrist. Or imagine a frustrating gambler who needs to be repeatedly criticized each time he believes of this or that string of bad luck that it is increasingly due to turn around. Even if he revises his present belief on each occasion he is criticized, he is not fully responding to the criticism; the same criticism is being repeated. Such cases suggest that what we implicitly criticize is *the way* beliefs are formed from their bases.

The resulting picture is a familiar one in contemporary epistemology, though labels vary: the fundamental objects of epistemic evaluations are belief-forming methods, processes, norms, or rules.⁷ I'll use 'rules', but the other labels are fine too.

Note that we don't need *explicit* knowledge of the rules to engage in the simple use. Like with the rules of syntax, implicit knowledge can guide our belief-forming practice and our evaluations of particular belief-basis pairs. Epistemologists can try to work out the implicit general rules by following the standard procedure of pursuing reflective equilibrium. The data are our evaluations of particular beliefs, and perhaps even a few intuitions we may have about the rules or their general structure. While there isn't yet any consensus about exactly what any of our rules are, we have plausible ideas about the rough form of many of our various observational, inductive and statistical, and deductive rules.

⁷ See, for example, Pollock and Cruz (1999), Goldman (1986, 2009), Wedgwood (2002), Field (2000), Peacocke (2004), Boghossian (2008).

Note also that some authors distinguish our *basic* (observational, inductive, etc.) rules from *non-basic* rules, such as believing what the *Times* reports. Whenever I refer to rules, I mean basic rules (unless I explicitly describe them as non-basic rules).

So then, in a critical instance of the simple use, like the criticism of Smith's belief about Obama, the evaluator is (implicitly) criticizing Smith's failure to follow the correct rules. Maybe Smith accepts the correct rules, but she failed on this occasion to follow them, i.e., she committed a performance error, like what happens with syntax. More likely in this case, Smith followed bad rules that take fear and prejudice as bases for beliefs. (Instances of the simple use that involve epistemic praise are slightly more complicated, since we call a belief 'rational' only if the belief was formed by correct rules *and* the believer had no irrational beliefs in her basis. To avoid wordy formulations, and in any case to stick with the more common instances of the simple use, I'll continue to focus on critical instances.)

2.2. *The Simple Use Promotes Coordination*

I've highlighted a simple and central part of our use of 'rational', but before we can tell what function this simple use has, we need to say something about what effects that use has on us beyond its effects on speech. Making assertions has little point for its own sake; a word's real function must depend on how it influences non-linguistic life.

To see what this influence could plausibly be, I look to metaethicists for some clues. Here is R. M. Hare summing up a line of thought whose force he says was recognized by Socrates, Aristotle, Hume, Kant and Mill. (Of course, it also motivated the specific theory Hare developed.)

The prescriptive meaning is the function all normative and evaluative statements have of guiding our actions. This shows up in the fact that someone who makes one about his own proposed actions but does not act accordingly exposes himself to a charge of speaking insincerely, as also does someone who makes one about other people's actions but does not will them [...] so to act.⁸

Hare makes two claims here, both of which I claim are plausible when they are transplanted into the epistemic domain. Let's examine them.

The first claim is this: *there's a robust correlation between the rules a speaker (implicitly) evaluates positively/negatively and the rules that she*

⁸ See Hare (1998), section 2. My ellipsis deletes '(in the above broad sense)'. Hare describes that as 'a broad sense in which it covers Kant's rational will and Aristotle's *boulesis* or rational desire.'

herself does/doesn't follow. This first claim is a modest form of judgment internalism for epistemic rationality, a plausible thesis in light of the intuitive general tie between evaluation and practice. Note that I am not insisting on any kind of necessary relationship here (though I'll record my sympathy for the view that there's a conceptual necessity here). There are many cases where the correlation can fail. For one thing, the assertion may not be sincere; it may be a lie. Also, since our knowledge of our own rules is implicit, a speaker can form a mistaken explicit belief about her rules.

The second claim in the quote from Hare is something like this: when we make our evaluations of others' beliefs, we are *intending* for them to follow the correct rules. Actually, I'll claim something slightly stronger; I claim this: *our evaluations have an overall tendency to influence our audience to follow the endorsed rules.*

Why think that second claim is right? Properly understood, it is not any kind of particularly bold claim. I am *not* committed to any claim about the essence of evaluative concepts. I am *not* committed to any claim about any metaphysically necessary connections. I am making a *contingent* claim. Thus, thought experiments about aberrant creatures who are invulnerable to the influence of our evaluations are irrelevant here. (Indeed, the function I'll be proposing wouldn't apply to such aberrant creatures, and I myself have no idea what function epistemically evaluative notions like ours could have for them.) I am also decidedly *not* claiming that interpersonal evaluations are the *sole* cause or explanation of why each of us follows the particular belief-forming rules we do.

What I *am* claiming is just a commonsensical truth about our being built to respond to each others' evaluations in accommodating ways. Each of us knows from personal experience how we are built to respond to the sting of criticism, or the pleasantness of praise. As Adam Smith put it:

Nature, when she formed man for society, endowed him with an original desire to please, and an original aversion to offend his brethren. She taught him to feel pleasure in their favourable, and pain in their unfavourable regard. She rendered their approbation most flattering and most agreeable to him for its own sake; and their disapprobation most mortifying and most offensive.⁹

The claim is consistent with the observation that, often, the person criticized (or praised) by an assertion is not the audience, not the person the assertion is made to. I may tell you that Smith's belief is irrational,

⁹ See Smith (1759/1976), p.116.

even though I believe or suspect that you follow all and only the correct rules. In such cases, my evaluation still influences my audience: it serves to reinforce a good practice, as well as to encourage the proselytization of third parties. Or I may tell you Smith's belief is irrational, even though I believe or suspect that you are equally guilty of Smith's mistakes. In such cases, my evaluation will be especially effective in influencing my audience because I am being diplomatic! Indeed, it's plausible that such diplomatic third-personal evaluations are the most common instances of the simple use.

The scope of the claim (that our evaluations tend to influence our audience's rule-following) is all our rules, down to our most basic. There is no restriction, even if cognitive science finds that some rules, e.g., very basic deductive or inductive rules, are *innate*.¹⁰ Two points show why. First, what cognitive science could find, at best, is that, like with syntax, we innately *accept* certain rules; our *competence* is innate. But, our success in *following* those rules, our avoidance of *performance errors*, can still be improved by the social influence of the evaluative use. Consider, syntax is innate, but some professional athletes' interview transcripts read like a sputtering of barely interpretable fragments, while some public speakers are trained to always speak in well-formed sentences. Second, it's likely that even our most deeply accepted rules are subject to modification. After all, many promising solutions to the semantic paradoxes call on us to revise one or another of our most dearly held deductive rules of reasoning.¹¹ And with induction, while it may be hard to imagine actually adopting a "gruesome" rule, it's easy and common enough for us to revise the setting of the parameter for the trade-off between *speed* and *caution* in our inductive rules. I criticize Jones's belief in a 9/11 conspiracy theory because she is being unreasonably quick to draw conclusions from a small amount of data. And, I criticize Brown's global warming skepticism because he is being unreasonably cautious when the data is overwhelming. The simple use can bring people like Jones and Brown to settle the trade-off between power and caution in a more reasonable, moderate way.¹²

An important point requires emphasis here: it's *not* my view that we criticize Smith, Jones and Brown as a way of *reasoning* with them (or with our audience, if the audience is someone else). We cannot hope to modify their *basic* rule-following behavior by providing them with new

¹⁰ See Carey (2009).

¹¹ See Field (2008).

¹² The inescapable trade-off between speed and power was something William James was apparently aware of and moved by; see James (1897/1956). See Goldman (1986) for a more contemporary discussion.

data or evidence (such as the fact that we believe their rules are unreliable). Reasoning with someone and providing her with new evidence can only effect changes in non-basic rules. Maybe you could get someone to stop trusting the *Enquirer* by asserting: that newspaper isn't reliable. But bringing about changes in someone's basic epistemic rule-following (e.g., changing the caution/speed parameters in Jones and Smith's basic inductive rules) requires a more brutish kind of force than reasoning and evidence are capable of. It requires the kind of force Adam Smith describes flattery and disapprobation to have in the above quote. And this is why evaluative terms like '[ir]rational' and '[un]justified', normatively loaded as they are, can play a role that non-normative terms like '[un]reliable' cannot. This is why the simple use can promote a deep kind of coordination, coordination among *basic* epistemic rules.

Okay, I've presented and hopefully made plausible my two claims about the simple use. This leads to important conclusions about how our epistemically evaluative assertions have an substantive effect on our lives. Instances of the simple use serve to pressure *others* to conform to the belief-forming rules of *the evaluator*. If that's right, we get, as an immediate consequence of everyone's participation in the simple use, a significant result. The result is that the simple use promotes the *coordination* of epistemic rule-following across the linguistic community. I pressure you to follow my rules, you pressure me to follow your rules: together we push toward an equilibrium in which we follow *shared* rules.

To be clear, I don't claim the simple use is the sole cause or explanation of why there is coordination among our belief-forming rules. What I claim is that the simple use *promotes* coordination. The simple use is the social influence on our belief-forming patterns; I allow other non-social factors, e.g., some kind of evolutionary biological factor, to share responsibility for why we follow the coordinated rules we do. As mentioned, empirical science may find there are certain rules of reasoning we accept innately. The simple use cannot, of course, be responsible for any degree of coordination those innate rules start out with, but the simple use can help us stay on the shared track. As a matter of actual fact, we often do veer off track, and we do benefit from interpersonal help to get back on track. Another empirical finding seems to be that we each have an incurably asymmetric tendency to accurately detect the cognitive flaws and biases in others' reasoning while remaining blind to those in our own reasoning.¹³ If so, then by allowing others

¹³ See Pronin et al. (2002).

to help police our reasoning, we receive a more objective evaluation of it.

Now, this view that evaluative language serves to promote coordination across the community is not entirely new. Gibbard (1990) proposed that the function of evaluative discourse is to foster coordination. Gibbard was, however, primarily focused on practical rationality; he spoke of coordination of actions and feelings, not belief-forming rules.¹⁴ So, the question we still have to answer is: what could this proposed coordination of belief-forming rules be *for*? What we need now is an account of *why* we use evaluative language to coordinate belief-forming rules. I offer my answer in the next section.

3. Epistemic Communism

3.1. Coordination Makes Testimony Trustworthy

We each want true beliefs, and no false beliefs, about the topics that are important to us. This requires collecting lots of evidence, evidence that will serve as the bases for the beliefs we want to acquire. We each have our individual faculties of evidence collection. Each individual's perceptual faculties give her experiences that can serve as the bases of

¹⁴ See especially chapter 4. For instance, here Gibbard says: 'Shared evaluation is central to human life, I suggest, because it serves biological functions of rehearsal and coordination.' (p.72) Also: 'Here, then, in brief, is the proposal. Normative discussion might coordinate acts and feelings if two things hold. First, normative discussion tends toward consensus. The mechanisms here, I shall propose, are two: mutual influence, and a responsiveness to demands for consistency. Second, the consensus must move people to do or feel accordingly.' (p.73)

Also see chapter 12, specifically pp.223–6, for good summaries of the relevant theme of the book. Also see the rest of pp.72–3, where Gibbard separates out two aspects of normative discourse paralleling the two I used the Hare quote to introduce. And see pp.77-8, where Gibbard emphasizes a point I agreed with earlier, namely that the connections between evaluation and practice, though robust, may not be necessary.

A very significant difference I have with Gibbard is that he ends up invoking the coordinative effect to argue for the anti-realist conclusion that there are no moral facts. See, especially, chapter 6, for the full presentation of his argument. Much later, in Gibbard (2003), he backed away from his anti-realist views, saying that it is difficult to see how to coherently draw the realist/anti-realist distinction. (See, e.g., p.x of the preface.) I'm sympathetic to the view that there is no good way to draw a coherent distinction (such that neither side becomes a non-starter).

Field (2009) outlines a view of the evaluative role of the linguistic and psychological use of 'rational' very much like the view in Gibbard (1990), and Field does focus on the epistemic domain. Field, though, does not discuss coordination, and goes into few details about how use of the word/concept results in its performing any function for us. The most he says about function is on p.286, where he says the function of normative discourse 'is to give advice, to oneself and others'. I certainly agree with that much.

non-inferential beliefs. And, each individual's own existing beliefs can serve as bases for new inferred beliefs. But, a single individual's perceptual faculties, and her individual stock of beliefs, are limited sources of evidence for her. Expanding the pool of accessible evidence would allow us to acquire more of the true beliefs we want.

That is what the simple use and the ensuing coordination of our belief-forming rules gives us: our practice with 'rational' allows us to put together every individual's evidence into a vastly larger communal pool. This is because, by actively pressuring everyone to share belief-forming rules, we make *testimony* trustworthy in our epistemic community. Because we are each actively and constantly using 'rational' in a way that promotes that coordination, we can easily recognize that we are all following the same rules. And if we can recognize such coordination, then we have reason to trust each others' testimony.

I am, of course, taking it for granted here that, somehow or other, we each rationally believe, of our own actual rules, that they are reliable. If we couldn't, we would be forced into radical skepticism. However it is that we are each able to rationally believe of *these* rules that they are reliable, we are able to trust each other because we've shared these rules with each other.

So, at last, my proposal is that the function of 'rational' is to extend our common epistemic reach by enabling each person to serve as an "epistemic surrogate" for any other person.¹⁵ I can't have all the perceptual experiences you have, but your experiences can serve as bases for beliefs that I can acquire by testimony. Likewise, I can't have all the beliefs that are in your head, but your own beliefs can serve as bases for inferred conclusions that I can then acquire by testimony. And this is all possible because, when we share rules, I can trust that *you will* draw the same conclusion from an evidential basis that *I would*.

If the resulting view needs a name, call it *epistemic communism*. Actually, according to the view itself, we should call *everyone* an epistemic communist. For, in our epistemic community, the pursuit of truth is a group effort: people depend on the communal support system to help them follow the same rules, the rules we all agree are correct. And this answers a question that opened the paper. If 'rational' (and 'justified' and all the others) were suddenly expunged from our vocabulary, and nothing new were introduced to take their place, our communal support system would be weakened, and the credibility of testimony would suffer.

¹⁵ Thanks to Karl Schafer for the apt label 'epistemic surrogate'.

Notice how this form of communism, unlike the political version, gives rise to a highly efficient (epistemic) economy. There is a division of epistemic labor, the labor of gathering evidence and forming beliefs based on it. As we labor, we each do not need to store all our evidence.¹⁶ This is because, if you present me with testimony but not your evidence, I can still trust that, whatever your evidence was, you formed the same belief that I would on the basis of it.¹⁷ Furthermore, not only can I make use of your unstored evidence, I can make use of your computational resources for reasoning. I can't come up with and consider every explanatory hypothesis. I can't go through every chain of deductive reasoning. But, if you come up with a powerful explanatory hypothesis (for some known data), or infer some deductive result (from some known premises), I will trust the belief you form, since it is the same belief I would myself have formed if I'd been able to devote enough computational resources to the task. Our system even allows us to exploit the differences among people's epistemic strengths. People vary with how fast they can reason, and with how creative they are at coming up with explanatory hypotheses. We can thus efficiently divide the intellectual labor according to principles of comparative advantage. (Or, to sound more communist: from each according to her epistemic ability!)

3.2. *Why Epistemic Communists Aren't Reliabilists*

Sharing rules is not a necessary condition for testimony to be rationally accepted. The only necessary condition (and the weakest sufficient condition) for testimony to be rationally accepted is that the audience rationally believes the testifier is likely to be reporting the truth. So, if *we* know that Norman is an unwittingly reliable

¹⁶ Harman (1986), chapter 4, made the point that we do not and should not store all our evidence.

¹⁷ To be sure, we should not, and of course we in fact do not, discard *all* our evidence. Storing evidence may be costly, but it will always have some epistemic value. This is because, interestingly, there can be cases where two items of evidence, E1 and E2, individually confirm beliefs B1 and B2, respectively, even though their conjunction, E1 & E2, *disconfirms* the conjunction B1 & B2. In these cases, our cost-saving engineering trick can fail. Example: the early polls confirmed that a woman will be nominated. The later polls confirmed that a black person will be nominated. But, the whole batch of polling data did not confirm that a black woman will be nominated. In such situations, it benefits us to keep track of more information than just that E1 confirmed B1. In the example, we want to keep track of the fact that the early evidence confirmed that Hillary Clinton will be nominated, while the later evidence confirmed that Barack Obama will be nominated. These kinds of cases illustrate the value of storing more data.

So, sharing rules only allows us to grow the pool of communal knowledge while storing vastly *less* information than we would otherwise need to. Again, sharing rules is what enables me to share your beliefs without sharing all your evidence.

clairvoyant regarding some topic, then we can rationally accept what he reports about that topic. Why, then, do we apply 'irrational' to Norman? If the function of 'rational' is to shape those around us into valuable epistemic surrogates, wouldn't it make more sense to praise him with 'rational'?

To see why we criticize Norman, remember that our task is to reverse engineer the function of 'rational'. Thus, we should ask: what's the *easy* way, engineering-wise, to set up a system of trust so that evidence is pooled? There may be many possible ways of getting us to trust each others' testimony, but the easy, the *low-cost*, way of doing so is to make it plain to each person that everyone else is using the same methods as her. Think of the work that has to be done before you can rationally accept Norman's testimony. Someone, you or someone you already trust, must first *independently* learn a substantial amount about the very topic that Norman's reports are about, so that Norman's reports can be checked and his reliability rationally established. While such a vetting procedure may be worth going through under some circumstances, a *community-wide* system of testimony that generally worked this way would be extremely inefficient. (Of course, to the extent that we sometimes actually do have to expend effort to detect liars among us, our system becomes bogged down. By and large, though, we actually trust each other without first engaging in costly vetting procedures.) So, we criticize Norman because the more efficient system is one where we use 'rational' just to promote coordination among everyone's belief-forming rules.

Of course, Norman's "visions" are a valuable fund of evidence, evidence that a well-engineered epistemic system wouldn't let go to waste. But, it is perfectly possible to epistemically criticize Norman while not letting his visions go to waste. In our actual system, we don't let his visions go to waste because, although we criticize his rule-following, at the same time we inform him that his visions are reliable, with the overall result that he can now apply *our* rules to make proper, praiseworthy use of his evidence. Remember, epistemic evaluation is evaluation of *rule-following*. This also addresses the corresponding question about Dupe, the unwittingly unreliable victim of a Cartesian demon: if the function of 'rational' is to shape others into valuable epistemic surrogates, wouldn't it make more sense to criticize Dupe with 'irrational'? No, because there is nothing to criticize regarding his rule-following. Dupe's flaw is that he has been fed misleading evidence, but 'rational' is not used to evaluate *evidence*. With Dupe, the best way to make him into a valuable epistemic surrogate is to make him aware that his evidence is misleading. For a slightly more realistic example, think again of how Nash was portrayed as an unwitting schizophrenic

in the movie *A Beautiful Mind*. He applies correct perceptual and deductive belief-forming rules, indeed applies them ingeniously, to highly misleading inputs about spy codes he sees around him, but which do not really exist. Thus, we praise Nash's rule-following, but must correct his evidence.

Coda: A Keyhole View to a Larger Project

I would like to very briefly advertise, without argument, a perspective of the bigger picture. This paper has concerned the *pragmatics* of a bit of language, the *function* of epistemic evaluations. Such views don't usually license any conclusions about the *semantics* of that language or the nature of the *properties* that language is about. But, there are a few famous philosophical arguments that revolve around just such a transition (perhaps most famously a much-debated argument for deflationism about truth).¹⁸ I see the communist view as a springboard for a deflationary view of the property of epistemic rationality. To be only slightly more specific: I think epistemic communism supports a form of epistemic *conventionalism*.

The development of and argument for this view must be presented elsewhere, but the basic maneuver is intuitive. While our actual epistemic community has converged upon one set of moderately reliable and powerful epistemic rules, there are numerous *alternative* sets of reliable and powerful rules that would equally well serve the pragmatic function that communism claims for epistemic evaluation. These alternative sets can be radically alien: for a simple example, consider the set of rules that omits some of our actual deductive rules, but includes some rules as alien as Rami's (see above); you can end up with a set of rules as reliable and powerful as our actual set. So, *if* the *only* function of epistemically evaluative terms is the coordinative one that epistemic communism describes, then nothing privileges our actual rules over alien sets that might include Rami's or even Norman's rules: it's an arbitrary convention that we promote these particular rules. Indeed, from the conventionalist perspective, there is no reason to expect that there is any feature "in virtue of which" our actual basic rules are rational.¹⁹

¹⁸ See references in footnote 1.

¹⁹ Many theories compete to say what epistemic rationality holds in virtue of, including reliabilism (e.g. Goldman (1979), developed in Goldman (1986)), conservatism (e.g. Harman (1986) and Huemer (2007)), metasemantic accounts (e.g. Peacocke (2004) and Boghossian (2003)), and pragmatic accounts of a Reichenbachian sort (e.g. Enoch and Schechter (2008), Wright (2004), and Wedgwood (2011)).

As every theory so far proposed faces objections, it makes sense to ask whether there was ever reason to expect that a successful theory exists.

Defending this project requires, among other things, arguing that epistemic terms and concepts serve no *further* function beyond the coordinative one; this requires arguing no such function is served in either non-simple linguistic uses of ‘rational’ or in our deliberative thoughts involving the concept of rationality; but this argument can be made. And any defense of conventionalism also requires a patient discussion of why Quinean objections don’t apply; but this also can be done.²⁰

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