

NATURALIZED EPISTEMOLOGY AND THE NORMATIVE

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Abstract. Gradually emerging from the so-called ‘linguistic turn’, philosophy in the second half of the twentieth century witnessed what we might follow P. M. S. Hacker in describing as a ‘naturalistic turn’. This change of direction, an abandonment of traditional philosophical methods in favour of a scientific approach, or critics would say a scientistic approach, has met with widespread approval. In the first part of the paper I look to establish the centrality of the normative to the discipline of epistemology. I then turn to examine Quine’s attempt to reduce normative discourse to instrumental rationality, and the more fully developed accounts provided by Stich, Kornblith and Papineau. I argue that these accounts fail because they insist on a constitutive connection between desires and the ends of epistemic activity. I conclude with the suggestion that a more plausible position severs this connection, in favour of an objective, externalist account of ends and reasons.

Gradually emerging from the so-called ‘linguistic turn’, philosophy in the second half of the twentieth century witnessed what we might follow P. M. S. Hacker in describing as a ‘naturalistic turn’ (2006: 231). This change of direction, an abandonment of traditional philosophical methods in favour of a scientific approach, or critics would say a scientistic approach, has met with widespread approval. Perhaps the most influential figure in this movement has been W. V. Quine, and a central element of his naturalistic programme has been an insistence on the possibility and the desirability of naturalizing epistemology. For Quine, the central task of epistemology is to understand the causal relations between the evidence of experience and our knowledge of the world, understood in behaviouristic terms as input and output respectively. This relationship between the ‘meagre input and the torrential output’ (Quine 1967: 83) should be investigated purely within the

remit of empirical psychology. Thus, the philosophical problems associated with the theory of knowledge are to be tackled using empirical methods, and epistemology is to become continuous with the natural sciences. Metaphysics or first philosophy is rejected, and distinctly philosophical methods are gladly consigned to the unenlightened past. This paper looks at how the project of naturalizing epistemology faces up to the task of accounting for epistemic normativity.

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Quine set forth the programme of naturalizing epistemology as follows:

Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science. It studies a natural phenomenon, viz., a physical human subject. The human subject is accorded a certain experimentally controlled input – certain patterns of irradiation in assorted frequencies, for instance, and in the fullness of time delivers as output a description of the three-dimensional world and its history. (1969a: 82-3)

The qualification 'epistemology or something like it' is not idle here. Quine's proposal was, and was intended to be, revisionary. As he says in *The Roots of Reference*:

A far cry, this, from the old epistemology. Yet it is no gratuitous change of subject matter, but an enlightened persistence rather in the original epistemological problem. (1974: 3)

The original epistemological question, the one pursued by the classical empiricists Berkeley, Locke and Hume, was, according to Quine, as follows: „Given only the evidence of our senses, how do we arrive at our theory of the world?“ (1974: 1). However, it might seem misleading to insist that there is, or ever has been, one, and only one, question constituting the core of epistemology. Rather, the subject matter of epistemology is rich and varied.

Epistemologists, from antiquity onwards, have been interested in understanding the nature and scope of knowledge quite generally. What is the

difference between knowledge and mere (true) opinion? What do mathematical knowledge, moral knowledge and perceptual knowledge have in common and how do they differ? Is absolute knowledge possible, or is all knowledge in some sense relative? Is certainty possible and, if so, in which fields of inquiry? But, perhaps most importantly, epistemologists have been interested in the normative question of how knowledge is justified. Under what conditions are we entitled to believe such and such a proposition? Indeed, normative concepts are ubiquitous features of epistemic discourse. We say such things as ‘you ought to believe such and such’ and we talk of ‘good’ and ‘bad’ evidence. We call beliefs ‘appropriate’, ‘fitting’ and ‘reasonable’. We also use normative vocabulary to describe an agent’s epistemic character. One can, for example, be ‘honest’, ‘responsible’, ‘courageous’ or ‘negligent’ in conducting one’s research.¹ Again, Kornblith writes that ‘to say that a belief is an item of knowledge is to praise it in a certain way; it is to approve of it as meeting our cognitive ideals; it is to recommend it’ (2002: 159). Even Quine, perhaps in an unguarded moment, refers to epistemic ‘duty’:

[T]he purpose of concepts and of language is efficacy in communication and in prediction. Such is the ultimate duty of language, science, and philosophy, and it is in relation to that duty that a conceptual scheme has finally to be appraised. (1953: 79)²

However, the normative aspect of epistemology is conspicuous by its absence from Quine’s epistemological programme. Scientific theory, Quine tells us, ‘stands proudly and notoriously aloof from value judgements’ (1973: 49).³ And so must Quinean epistemology if it is successfully to become ‘a chapter of psychology and hence of natural science’ (1969a: 82).

The concern thus arises that a naturalized epistemology can be no more than descriptive, and therefore fail to account for the sense in which epis-

¹ See Haack (1997: 30) for further discussion of epistemic virtue.

² The normative import of this passage is highlighted by Morton White (1986: 652). In his response to Morton White Quine tells us that when he referred to duty he ‘was using the word somewhat as when we speak of a heavy-duty cable or tractor. It was what language, science, and philosophy are for, as eyes are for seeing’ (1953: 665). We shall see later that whilst Quine is indeed committed to using normative vocabulary in this teleological sense, this fact does not enable him to elude the charge that insofar as naturalized epistemology stands aloof from normative discourse, it fails to accomplish one of the central tasks of traditional philosophy and, indeed, fails to be distinctly philosophical at all.

³ This, it seems, can only be an implicit call for change; for it would be patently false were it presented as a thesis about the history of scientific practice.

temology has traditionally aimed to be a prescriptive discipline. One of the traditional roles of the epistemologist has been to recommend certain methods of belief-formation and criticise others. Naturalized epistemology, it might well seem, looks to do no more than tell us how, as a matter of fact, we come to acquire certain beliefs.

Jaegwon Kim is one philosopher notable for emphasizing the normative aspect of epistemology. Kim suggests that the two fundamental projects of traditional (Cartesian) epistemology have been ‘to identify the criteria by which we ought to regulate acceptance and rejection of beliefs, and to determine what we may be said to know according to those criteria’ (1988: 381). The normative concept of ‘justification’ is central to any theory of knowledge seeking to provide a satisfactory answer to these questions.⁴ Kim provides a persuasive explanation of why this is so. Considering the classical tripartite conception of knowledge as justified true belief, justification is the only distinctly *epistemic* component. As Kim notes ‘neither belief nor truth is a specifically epistemic notion: belief is a psychological concept and truth a semantical-metaphysical one’ (1988: 383). It is true that Gettier taught us to be sceptical of the idea that knowledge is exactly justified true belief. Nevertheless, there is good reason to suppose that *whatever* it is that makes the difference between knowledge and mere true belief is normative. This distinctively epistemic component essential to knowledge would seem to be a normative concept insofar as knowledge is subject to positive epistemic appraisal in a way that mere true belief is not. If this is indeed the case, we might suppose that epistemology shorn of its normative aspect is liable to be a relatively barren enterprise, or even that it might fail to count as epistemology at all.

Despite Quine’s general indifference towards normative philosophy, he does make a suggestion that other proponents of naturalized epistemology have taken as their lead. It requires that we bring into focus the end or *telos* of epistemology:

Naturalization of epistemology does not jettison the normative and settle for the indiscriminate description of ongoing procedures. For me normative epistemology is a branch of engineering. It is the technology of truth-seeking, or, in a more

⁴If not exactly ‘justification’, then at least some close relative. Plantinga, for example, holds that the difference between knowledge and mere true belief is that the former, but not the latter, is warranted. He also emphasizes the normative aspect of epistemology: ‘To say that a belief is *warranted* or *justified* for a person is to evaluate it or him (or both) *positively*, his holding that belief in his circumstances is *right*, or *proper*, or *acceptable*, or *approvable*, or *up to standard*.’ (Plantinga 1993: 3).

cautiously epistemological term, prediction. Like any technology it makes free use of whatever scientific findings may suit its purpose ... There is no question here of ultimate value, as in morals; it is a matter of efficacy for an ulterior end. The normative here, as elsewhere in engineering, becomes descriptive when the terminal parameter is expressed. (1986: 664–5)

Quine seeks to keep science aloof from value judgements by denying that normative recommendations have any place within science. Rather, values are the external aims of science, and apparently normative discourse turns out to be merely descriptive. The aim of science, Quine tells us, is to ‘maximise prediction’ or, to develop a theory ‘that will anticipate as many observations as possible, getting none of them wrong’ (1973: 137).⁵

This is taken to be a plain matter of fact about what it is that scientists try to do. Questions of justification are reduced to questions concerning the efficacy or reliability of certain belief-forming mechanisms for attaining truth or prediction, and these questions can be answered within the remit of empirical science. There is no further distinctively philosophical work to be done. As Alcázar (1993: 315) describes it, one ‘can happily give normative advice since this is the result of combining two elements which are not normative at all’. On this view, epistemic rationality turns out to be a variety of instrumental rationality; that is the rationality one displays in taking appropriate means to one’s ends.⁶

Quine’s does not defend this position, so much as state it. Nevertheless, it does seem a promising line of argument for philosophical naturalists and many others have taken up the baton.⁷ However, the question immediately arises, ‘how and why does an epistemic end oblige us?’ If the epistemic

⁵Some, such as Laudan (1990: 48-9), broadly endorse the Quinean picture, but maintain that the aims of science, and therefore epistemic norms, change over time as the practices of scientists change. Although in a sense scientists have always aimed to attain knowledge, when the details are unpacked, it begins to look like there is little unity to be found in the aims of scientists over the ages. As a descriptive thesis Laudan’s historicism seems at least plausible. However, I only take this to show the dangers of reading off final ends from changing practice.

⁶To reinforce the analogous nature of certain ethical and epistemological considerations, we might notice that this strategy in accounting for the normative can be traced back as far as Aristotle’s *Nicomachean Ethics*. At least on one plausible reading, Aristotle’s idea was that the *telos* of man, i.e. the life of *theoria* or intellectual contemplation, is a matter of descriptive fact determined by man’s function, which is in turn determined by man’s form or essence. The virtues are just those stable dispositions of character that are reliably conducive to the life of intellectual contemplation.

⁷For example, Brown (1988) Maffie (1990), Papineau (2000), Kornblith (2002) and Janvid (2004).

end is truth, whence does *that* derive its normative force? Hilary Kornblith, a notable advocate of naturalised epistemology, clearly recognises this difficulty. He writes:

We cannot rest content with Quine's seemingly innocent suggestion that epistemic norms 'become descriptive when the terminal parameter is expressed', for we need to know what the source of this terminal parameter is. What, ultimately, is the source of epistemic normativity? (2002: 139)

One way in which we might look to answer this is by considering the value of true beliefs. If true beliefs are valuable, we have reason to promote those belief-forming mechanisms which reliably generate them. It might seem initially obvious that true beliefs are indeed valuable, for without them, or with false beliefs, it seems we would fare exceedingly badly in all manner of ways. As Quine put it memorably, 'creatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind' (1969b: 126). However, the matter is less clear than at first blush. Stephen Stich (1990) is one philosopher who has argued against Quine's plausible sounding claim.⁸ Indeed, he has claimed that on becoming clear about the nature of truth, one sees that true beliefs are neither intrinsically nor instrumentally valuable. Whilst the details of his arguments need not detain us here, the relevant upshot for present purposes is Stich's recommendation that we replace the idea of truth as the terminal parameter of inquiry, with other valuable ends. He writes:

In evaluating systems of cognitive processes, the system to be preferred is the one that would be most likely to achieve those things that are intrinsically valued by the person whose interests are relevant to the purpose of evaluation. So, for example, if the issue at hand is the evaluation of Smith's system of cognitive processes in comparison with some actual or hypothetical alternative, the system that comes out higher on the pragmatist account of cognitive evaluation is the one that is most likely to lead to the things that Smith finds intrinsically valuable. (Stich 1990: 131)

There are, however, some worrying features of this account. We might notice, for example, that it is a relativistic account of epistemic normativity. Two individuals ought to give credence to different sets of beliefs depending on the individual's respective systems of values. This would entail, for example, that confirmational bias, a readiness to give credence to evidence

⁸ Plantinga (1992: Ch. 12) also has arguments against evolutionary defences of the value of true belief. See also Maddy (2007: 152-165).

which supports one's existing set of beliefs at the expense of evidence which favours an alternative set of beliefs, can sometimes be justified. For example, if some set of false beliefs promotes peace, love and harmony, ends Smith finds valuable, then Smith would be justified in ignoring disconfirming evidence. However, it seems that the most natural response to this case is to draw a distinction between different types of justification. Perhaps Smith is *morally* justified in persisting in his false belief in the face of disconfirming evidence, but he is not therefore *epistemically* justified.

The difficulty is that this move does not appear open to Stich because of a larger concern that in removing truth as the end of inquiry, and replacing it with the all embracing category of everything an agent values, Stich strips epistemic normativity of its specifically *epistemic* aspect, such that the notion of distinctively epistemic justification collapses. For Stich, belief in a proposition is justified *tout court* in light of an agent's values. As there is no longer any uniquely epistemic criterion of justification, it becomes impossible to say of a certain set of beliefs that it is epistemically justified, but not morally justified, or *vice versa*. This is a counterintuitive outcome which seems to count heavily against Stich's account.

Nevertheless, establishing a connection between the end of epistemic activity and an epistemic agent's values is a common strategy for explaining epistemic normativity within a naturalistic framework. Kornblith offers a similar account of epistemic norms as 'universal hypothetical imperatives' (2002: 157), which has the merit of retaining the distinctively epistemic aspect of epistemic justification. In his view, as for Stich, it is important to have beliefs that enable us to achieve our desired ends. However, Kornblith, unlike Stich, emphasizes the importance of *true* beliefs in this regard. He envisages that making choices between available courses of action involves some process akin to, or appropriately modelled by, cost-benefit analysis. Thus, he succinctly describes the homely example of choosing to buy one toaster or another:

[W]e must figure out the consequences of the two purchases; we must assign values to each of them; we must do some arithmetic. (2002: 155)

Approximately, when we decide how to act we multiply the expected value of a set of consequences by the predicted likelihood of the consequences obtaining. In order to succeed in this piece of moral or prudential arithmetic, Kornblith argues that we will typically need to have true beliefs:

It is thus of the first importance that our cognitive systems remain suitable for the purpose of performing the relevant cost-benefit calculations. And what this

requires is that our cognitive systems be accurate, that is, that they reliably get at truth. (2002: 158)

As the ends of this instrumental reasoning are by definition valuable to us, the mystery concerning the normative force of epistemic norms is supposed to be removed. Because we value the end, we will also value the means to that end; and here the means are reliable methods of arriving at true beliefs. As true beliefs are a precondition for the sort of cost-benefit analysis necessary for attaining whatever we value, we will always value truth. Although truth is ‘pre-eminent’, other epistemic values such as simplicity and conservativeness still have their familiar roles to play in epistemic justification insofar as they too are necessary for cost-benefit analysis. As Kornblith notes, ‘a system of evaluation that was perfectly accurate but could not perform its evaluations in real time would be of little value’ (2002: 158–9).

David Papineau (2000) offers a similar account. Once more, for Papineau the aim of science is truth, and patterns of reasoning which are reliably conducive to truth have normative force because truth enables us to meet our desires. Thus, he writes:

On my view, what makes it the case that you ought to judge in certain ways on specific occasions is that this will be a means to your judging *truly*. There is nothing circular about this analysis, provided truth itself can be analysed without appealing to norms of judgement, and the adoption of truth as an aim is in turn explained by reference to moral or personal value attached to truth. (2000: 20)

Hence the conclusion that ‘there is always a species of derived personal value to having true beliefs that are relevant to action, for such truth will always help you to find a way to satisfy whatever desires you have’ (2000: 17). So, again it is no mystery that the normative force of epistemic norms is universally felt.

Advocates of naturalized epistemology frequently commit themselves, then, to a teleological theory of epistemic normativity. However, analogies with ethical theory immediately suggest a problem. Ethical deontologists maintain that an action is justified insofar as it conforms to some *sui generis* norm, and are then left with the tasks of justifying their belief in the existence of these *prima facie* queer entities and explaining how they bind us. By contrast, an advocate of teleological ethics, such as consequentialism or eudaimonism, insists that an action is good insofar as it is the type of action

which is (typically) conducive to some end, such as the greatest happiness of the greatest number or a flourishing life.

The Quinean account of epistemic normativity falls into the second category. However, one worry facing teleological accounts of normativity in general is the *prima facie* existence of categorical norms. For example, it is sometimes objected that utilitarians must be willing to countenance any act whatsoever so long as it promotes the end of utility. However, certain acts are apt to strike us as obligatory or impermissible irrespective of their consequences. Thus, it is commonly supposed that it would be morally impermissible to take an innocent man from the street in order to carve him up and provide organs for numerous needy others. This intuition holds despite the apparent utility of the action.⁹ The thought is that the injunction not to take innocent life is categorically binding, regardless of any instrumental value attached to disregarding it.

A similar idea applies regarding epistemic norms such as the canons of logic. For example, it is sometimes argued that rather than it being the case that our reasoning ought to conform to logic in order that we are better able to achieve our desired ends, part of what it is to be a rational epistemic agent at all is to reason in conformity to logical norms. For example, O'Hagan writes:

It is not possible for an agent to engage in the practice of reasoning without being accountable to rational norms since such accountability is constitutive of agency. (2005: 42)

On this view, norms of judgement are internal to the practice of forming beliefs, not external as instrumentalists such as Papineau and Kornblith would have it. Hence a rational agent would still be bound by norms even if a situation were to occur in which a violation of, say, *modus ponens* would promote his epistemic ends. Even where illogical inquiry turns out to be fruitful, it is not therefore epistemically justified.

This is an important line of objection for the proponent of naturalised epistemology to meet. Papineau attempts to do so by highlighting an imaginary case in which it seems we ought not to conform to the norms of judgement. This is intended to show that such norms cannot be categorical. We are invited to consider the case of an elderly man who, aware that

⁹Utilitarians do, of course, have resources to draw upon here. The normal move is to claim that the disutility of a society in which people lived in constant fear of being snatched from the street would outweigh the utility of saving a few lives. Although the response seems to me somewhat strained, here is not the place to pursue the issue.

coming to know of a real probability of developing cancer would cause him considerable upset, arranges matters so as to avoid any such distressing evidence (2000: 14). His behaviour is not obviously blameworthy and Papineau further claims that he doesn't seem to be 'violating any prescriptions at all' by adopting this sensible strategy (2000: 16).

Thus, Papineau sets up a thought experiment and then asks us to consider which way our intuitions go. This is frequently a dangerous strategy and I think that this particular example is unhelpful. Because of the significance of the moral reasons bearing on the case, intuitions are likely to vary about whether there really are no epistemic norms in play, or whether they are simply over-ridden. It is somewhat like being asked to distinguish between fine wines adulterated with vinegar.

Moreover, even if there were no epistemic norm telling against the elderly man's strategy, it is not clear that this would establish Papineau's point, for it not clear that he is describing a case of epistemic behaviour at all. Rather it might seem that the reason why no epistemic norm bears on the case, if indeed this is so, is that the situation concerns purely moral or prudential behaviour. Perhaps the elderly man is best described as *refraining* from epistemic activity on the subject of his developing cancer. We do, after all, decline to investigate the truth of a great number of propositions without this implying that we thereby violate any norms of judgement. We might do so because the propositions are trivial, or because the investigation would be inappropriately time-consuming, or for moral, prudential, political or aesthetic reasons. It would not, for example, be reasonable to wreck a great painting in order to discover the truth of propositions concerning the paint's chemical composition. However, a decision to refrain from some activity does not constitute a rejection or a denial of the norms that govern it. If one decided that the afore-mentioned artistic destruction were a reasonable project, then quite plausibly one *would* be governed by the applicable epistemic norms, as in all one's epistemic endeavours.

As mentioned, examples involving the weighing of different sorts of reasons are difficult to judge. It is therefore helpful to consider another, less morally loaded, example. Take the case of a trivial question, say, the maiden name of Tony Blair's mother. This is a question, let us agree, about which we are totally indifferent. We do not value this item of knowledge, and it in no way helps us in attaining any of those goods we do in fact value. Now imagine that despite our complete indifference, we are firmly confronted with reliable and conclusive evidence that the maiden name of Tony Blair's mother was Corscadden. It would then seem irrational to fail to form a true

belief about this matter of fact and continue to profess ignorance or to falsely believe that the answer was Smith or Jones. The example suggests that strong evidence for the truth of a proposition makes claims on us irrespective of any instrumental value attached to having the true belief. If this is so, then it looks like epistemic norms cannot always derive their normative force in the way in which Kornblith and Papineau envisage.

Perhaps it could be replied that a general rule about forming true beliefs would promote our desires even when doing so in a particular case does not, and that such a general policy would in fact better succeed in promoting our desires than a case-by-case policy would be. However, the problem here lies in providing an explanation of why we should evaluate general policies in the light of promoting our desires, but not individual beliefs. It is analogous to the difficulties rule-utilitarians face in motivating their position. If the basis for justification is the promotion of desire, then there is no obvious reason why an individual belief should not be evaluated in those terms. It appears *ad hoc* to invoke rules or general policies when it is ultimately consequences that matter. If it is ultimately rules that matter, we have of course a completely different theory.

I suggest that the problem with the theories of Kornblith and Papineau is their insistence on too strong a connection between value and desire. In cases such as the maiden name of Tony Blair's mother we see that it is the truth of a proposition which has normative force, or is a reason for belief, not the utility of the belief for promoting further desired ends. If a desire-based model of instrumental normativity were the only one available, the project of instrumentally grounding all epistemic normativity would not look promising. However, there does appear to be a strong and natural alternative which I would now like to consider. It seems that a more promising approach may be to sever the connection between ends and desire, or an agent's personal values, in favour of an account which makes the end of truth a necessary part of the practice of epistemic activity. That is to say that part of what it is to be engaged in epistemic activity is to aim at the possession of true beliefs and to be governed by epistemic norms.

I should emphasize that this is not a semantic claim about the meanings of epistemic terms, but a claim about what epistemic agents are doing. We can draw on analogies with playing games such as chess. If one is playing chess then one is governed by its various rules and the goodness of one's moves can be judged in accordance with the aims of the game. If a player starts moving rooks along diagonals or using pieces as skittles then he is not playing chess but doing some other thing. If he aims to lose the game

then he is playing badly if at all. Of course, he might have reasons for doing so, such as gambling purposes or kindness to an opponent. So, perhaps his moves are prudentially or morally good, but they are not good *chess* moves. Similarly so with epistemic activity. There may be external reasons for aiming at false beliefs, such as the fulfilment of desires, but a process of belief formation is *epistemically* justified only insofar as it is conducive to truth. If one is failing to form beliefs then one isn't engaged in epistemic activity at all, and if one is forming beliefs via processes which are not conducive to truth then one is engaging badly in epistemic activity.

Of course, this is a sketch of a substantive position, and there are many further pressing questions which need to be addressed. Analogies between board games and epistemic activity break down in various places. I would hope, however, that two advantages are immediately clear. First, this is a naturalistic account insofar as it makes not appeal to supernatural entities, gods, demons, spirits and the like. Second, it explains epistemic normativity whilst avoiding the pitfalls of a desire-based account of reasons. These advantages should at least motivate philosophical naturalists to take the position seriously.

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