

Quine's Pragmatic Solution to Skeptical Doubts

Benjamin Bayer

July 6, 2009

ABSTRACT: I examine a series of criticisms that have been leveled against Quine's naturalized epistemology, regarding its response to the problem of skepticism. Barry Stroud and Michael Williams, assuming that Quine wishes to refute skepticism, argue that Quine not only fails to undertake this refutation, but is also committed to theses (such as the inscrutability of reference and the underdetermination of theory by evidence) which imply versions of skepticism of their own. In Quine's defense, Roger Gibson argues that Quine can succeed in showing skeptical doubts to be incoherent. But I contend that both parties of this dispute wrongly assume that Quine wishes to defeat the skeptic in a traditional way. Instead, Quine is happy to "acquiesce" in skepticism about a certain kind of justification. No logical justification of our scientific beliefs is possible on his view. But Quine thinks pragmatic justification is possible, and acknowledging that this is his view this leads to the resolution of a number of interpretive quandaries.

1. Introduction

Quine's (1969a) arguments for naturalizing epistemology have long sparked dissent from the ranks of traditional epistemologists. For example, Kim (1988) complains that by making epistemology a "chapter of psychology," Quine's naturalist robs epistemology of its normative force and thereby of its status as genuine epistemology. I agree with the spirit of Kim's objection, but it is, perhaps, an objection that is more difficult to sustain than Kim thinks, since it is unlikely that Quine's naturalized epistemology must abandon normativity in an explicit and obvious way: Quine himself insists his epistemology is normative (1986a; 1992), and generic proposals for naturalizing normativity abound. Also, it has been argued persuasively that Kim's normative alternatives to Quine's naturalism are not available without begging important questions against Quine (Bayer, 2007). But even if Quine's epistemology is nominally normative, and even if there were no viable alternatives to it, it could still be asked whether it would count as a genuine *epistemology*. Why doesn't it say, instead, that epistemology has failed, and that the best we can settle for is psychology?

The question of whether Quine's naturalism counts as a genuine epistemology can be illustrated, in particular, by examining Quine's views on one of the most important topics in traditional epistemology: the problem of skepticism. Quine's most prominent works on naturalized epistemology do not dwell much on the question of skeptical doubt, even though Quine insists his naturalistic project still yields epistemology "or something like it." In "Epistemology Naturalized," Quine insists his project counts as such because it studies a natural phenomenon which is the subject matter for traditional epistemological questions:

[E]pistemology still goes on, though in a new setting and a clarified status. 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. This human subject is accorded a certain experimentally controlled input—certain patterns of irradiation in assorted frequencies, for instance—and in the fullness of time the subject delivers as output a description of the three-dimensional external world and its history. The relation between the meager input and the torrential output is a relation that we are

prompted to study for somewhat the same reasons that always prompted epistemology; namely, in order to see how evidence relates to theory, and in what ways one's theory of nature transcends any available evidence. (Quine, 1969a: pp. 82–3)

Even though Quine thinks naturalized epistemology is still much like traditional epistemology, he stresses its “new setting” and “clarified status.”¹ The “new setting” is the field of psychology. If epistemology is a branch of psychology, important questions about the relationship between theory and evidence are no longer to be settled by examining the relationship between theory and states of awareness, but by determining the causal proximity between language and sensory stimulation. Epistemology now has a “clarified status,” because studying this psychological relationship is no longer intended to yield a foundationalist account of justification.

While it is true that both traditional epistemology and Quine's project study the theory-evidence relationship, critics may wonder whether this common subject matter is enough to count Quine's naturalism as genuine epistemology. Prominent critics such as Barry Stroud (1981; 1984) have suggested that if Quine's project is to count as epistemology, it should at least confront the problem of skepticism.² Quine does appear to offer a naturalistic strategy for dealing with the skeptic, but the nature of this strategy is not entirely clear.

In “The Nature of Natural Knowledge” (2004/1975), Quine argues that skeptical doubt is indeed what prompts epistemology—but that this doubt is itself a product of scientific discoveries and questions that arise from them.³ He notes, for example, that illusory perceptions can be identified as such only in relation to the existence of “genuine bodies with which to contrast them.” Likewise the attempt to account for our awareness of a third dimension based on two-dimensional images on the retina could be made only against the backdrop of the investigation of three-dimensional physiology. But in noting that the skeptic presupposes this knowledge of the external world, Quine does *not* appear to be raising the point that skeptical doubts are incoherent. On the contrary, he notes:

[The skeptic] is quite within his rights in assuming science in order to refute science; this, if carried out, would be a straightforward argument by *reductio ad absurdum*. I am only making the point that skeptical doubts are scientific doubts. (Quine, 2004/1975: p. 288)

Presumably, Quine thinks that a skeptic may assume *for the sake of argument*, that we know there are genuine, three-dimensional bodies. Then, if on this assumption we know that some of the three-dimensional bodies we observe are sticks placed in glasses of water, it follows that we will experience illusions (straight sticks that look bent). A skeptic might conclude that the possibility of sensory deception under such circumstances casts doubt on the reliability of the senses more generally, and this casts doubt on our original assumption, that we know there are three-dimensional bodies. So the skeptic's original scientific assumption does not make the skeptical argument incoherent; it is simply an assumption which is reduced to absurdity, and thereby rejected. But if the skeptic is “within his rights” to do this, how does pointing out scientific nature of skeptical doubts help Quine answer the skeptic, particularly in a way that is consistent with and conducive to the goals of traditional epistemology?

In this paper, I will try to answer this question by examining the major criticisms leveled against Quine's response to the skeptic, as well as attempts by Quine and his defenders to reply to these criticisms. I will argue that in the end, many interpreters of Quine—including both critics and defenders—are confused about what Quine is trying to do in response to the skeptic. Critics assume his views lead to skeptical conclusions of a sort he would not welcome; defenders assume his views can help refute the skeptic. Both parties, I will argue, are incorrect. Quine's views do lead to a version of skepticism, at least from the perspective of traditional epistemology. But since Quine is not a traditional epistemologist, he would not necessarily consider various "skeptical" conclusions to be unwelcome. By traditional standards, Quine rejects the possibility of justification and is a skeptic. But by his *pragmatic* standards, justification of another variety is still possible (even if it embraces various "skeptical" conclusions). This is why Quine can embrace a kind of normativity in epistemology without accepting traditional epistemologist's theories of what normativity amounts to.

2. Allegations of Quinean skepticism, and Quinean responses

So far we have mentioned two ways in which Quine's naturalized epistemology makes use of science to answer epistemological questions. First, Quine urges epistemologist to determine the theory-evidence relationship by examining the relationship between language and sensory stimulation. Second, he identifies the scientific source of skeptical doubts and contends that recognizing this source has some force against the skeptic.

In his seminal critique, "The Significance of Naturalized Epistemology" (1981), Stroud worries that the first part of Quine's naturalistic project could undermine the second. For example, given the "meager input" of the sensory surfaces, Quine urges that the output of our belief in physical objects is merely a "posit," or as he had described it in "Two Dogmas of Empiricism," this output is "comparable, epistemologically, to the gods of Homer" (1953: p. 44). Quine of course believes in physical objects and not the gods of Homer, and says everyone should agree with him. But the origin of the physical object hypothesis is "shrouded in prehistory" (Quine, 1960: p. 22), and although it has no doubt proved empirically successful, Stroud wonders why we should take the hypothesis for granted in the face of the skeptic. Even if the physical object hypothesis accounts the data, presumably there are other possible hypotheses that could do so, as well. If, by pointing to the scientific roots of skeptical doubts, Quine does not mean to suggest that skeptical doubts are incoherent, to what further use could science be put in answering the skeptical *reductio ad absurdum* of our knowledge? If our naturalistic investigation itself uncovers a discrepancy between the meager input and torrential output of our cognition, and if this discrepancy has skeptical consequences, then Quine's vaunted use science itself already seems to *further* the skeptical *reductio*, to say nothing of undermining it.⁴

Stroud then considers the possibility that Quine wants to answer the skeptic in a different way, and Quine's answer to Stroud (1981a: p. 475) hints at what this alternative might be:

Thus, in keeping with my naturalism, I am reasoning within the overall scientific system rather than somehow above or beyond it. The same applies to my statement, quoted by Stroud, that “I am not accusing the skeptic of begging the question; he is quite within his rights in assuming science in order to refute science.” The skeptic repudiates science because it is vulnerable to illusion on its own showing; and my only criticism of the skeptic is that he is overreacting.

Here is what Quine might mean. There is an important difference between relying on science after a *reductio* of science has gone through (which would, as Stroud points out, be unjustified), and appealing to science in order to show that a *reductio* simply does not go through in the first place. Suppose again that the *reductio* is of the following form: suppose, for the sake of argument, that we know there are genuine three-dimensional bodies, but that among these are bodies which create illusions (such as the stick in water). At this point the skeptic argues that the possibility of such illusions generates a general doubt as to the reliability of the senses, leading us to reject the original assumption. But does the skeptic’s *reductio* really go through? Does our original assumption, plus a point about illusions, really imply that our senses are never reliable? Perhaps if we examine even more science, we’ll discover that this is not so. Perhaps we observe (as Descartes did) that sensory illusions happen only under special conditions, and when we have no reason to believe those conditions are present, we have no reason to doubt our senses.⁵ If examination of even more science shows that our original assumption for the sake of argument does not have the absurd consequence that the skeptic thinks it does, then we can see why someone might say that the skeptic is “overreacting” to the problem of illusion, for example.

Another critic of Quine, Michael Williams (1996: pp. 257-8) considers this last interpretation of Quine, but ultimately dismisses it. Williams appreciates that we should be on guard against skeptical overreaction to scientific discoveries, and notes Quine’s point about the scientific sources of the argument from illusion is a viable response to a fairly local kind of skepticism. But Williams reminds us that in presenting the scientific roots of skeptical doubts, Quine has another, more globally significant scientific discovery in mind, one which he mentions after discussing illusions in “The Nature of Natural Knowledge” (2004/1975: p. 288): the discovery that “our only source of information about the external world is through the impact of light rays and molecules upon our sensory surfaces.” Presumably Quine could say that just as skeptical doubts arising from two-dimensional images presuppose knowledge of a three-dimensional eyeball, so skeptical doubts arising from this input/output discrepancy presuppose knowledge about light rays and sensory surfaces. But Williams thinks that if this discrepancy is the source of skeptical doubts, Quine can no longer point to other scientific facts to criticize the skeptic as overreacting:

Unlike the commonsense distinction between reality and illusion, this is not a contrast between some observations (those that can safely be taken at face value) and others (those that can’t): it is a contrast between everything we believe about the external world and something more primitive (Williams 1996: p. 258).

To put it a different way: we can accuse a skeptic of overreacting to an illusion by pointing to conditions under which perception is not illusory. But we cannot accuse a skeptic of overreacting to the discrepancy between our cognitive input and output by pointing to of the conditions of cognition that do not involve

such a discrepancy. For the very reason that this data generates global doubt, it cannot block any *reductio* by pointing to more data that does not generate the global doubt: it is global!⁶

So far both Stroud and Williams have assumed that the input/output discrepancy implies some kind of skepticism. This connection should be clarified. There are at least two major Quinean theses which highlight sensory inputs as “meager” in comparison to theoretical outputs: the inscrutability of reference and the underdetermination of theory by evidence. Although Quine discusses mainly the inscrutability thesis in his “Reply to Stroud” (1981a), Stroud actually invokes a hybrid of the two in attempting to show that Quine cannot respond successfully to the skeptic on these premises (Stroud 1981: p. 465). In what remains of this section, I will briefly explain why each of these theses can be taken as suggesting a form of skepticism.

Quine’s inscrutability thesis is the thesis that the reference of individual terms within sentences are indeterminate, i.e. unsettled by the totality of evidence or sensory stimulation (the only relevant “facts of the matter”) available to language users (Quine 1969b). Famously, “rabbit” might refer to “rabbit,” but also to rivals such as “rabbit stage,” or “undetached rabbit part,” or “Rabbithood” (Quine 1960).⁷ Quine uses “proxy functions” to show how similar rivals may be constructed for any term, simply by systematically mapping each predicate in a language to a unique predicate in a rival language. Inscrutability appears to have inescapable skeptical consequences. If it is true that our terms may refer to any of Quine’s proxies, then we don’t know what the objects of our theoretical or even our observational sentences are, and we seem to be cut off from the world. Now perhaps we can still have knowledge without knowing what our knowledge is *about*. But questions of reference and questions of epistemic justification may not be so easily isolated. It is possible that, at least in traditional epistemology, self-consciously successful reference is necessary to achieve the non-accidental justification needed to avoid Gettier cases.⁸ One way that a justified true belief can be only accidentally true is if it does not refer to the fact in question that makes the belief true. Put another way: if there’s no determinate object of belief, there can be no determinate, non-accidental relationship between the reason for our belief and its object.⁹

The underdetermination thesis claims, roughly, that there are always rival hypotheses which are supported equally well by the available empirical evidence. The apparent skeptical implications of the underdetermination thesis have been explained best by Lars Bergstrom (1993: pp. 344–5). Bergstrom argues that if there are theories that are rival to and possibly incompatible with one’s own theory, but equally well-supported by the evidence, one’s justification in believing one’s own theory is undermined—and so then is one’s knowledge.¹⁰ This is a recipe for skepticism because if the underdetermination thesis really does imply that for *any* theory, there are *always* rival hypotheses equally supported by the evidence, then there is never an evidence-based method of choosing the proper theory, and our beliefs are never justified by the evidence. The rival hypotheses to our accepted theories needn’t be of special “skeptical” scenarios (such as dream- or demon-worlds) to undermine justification in our ordinarily accepted beliefs.¹¹

For all of these reasons, Stroud and Williams’ contention that the input/output discrepancy leads to some kind of skepticism is persuasive. The inscrutability thesis and the underdetermination thesis both

appear to lead to skeptical consequences. If, therefore, the naturalized epistemologist discovers the input/output discrepancy that underpins both theses, Quine's identification of the scientific nature of skeptical doubt will do little to erase the skeptical implications of his own basic philosophic commitments.

Before endorsing Stroud or Williams, it is worth examining the fuller context of Quine's reply to Stroud, to learn what he means when he examines the scientific nature of skeptical doubt to show that the skeptic is overreacting. Roger Gibson's (1988) defense of Quine against Stroud could shed some light here. Gibson maintains that Stroud's (1984) criticism¹² of Quine fails because it neglects a central aspect of Quine's naturalism, the "reciprocal containment" of scientific ontology in epistemology and epistemology in scientific ontology (Quine, 1969a: p. 83). The containment of ontology in epistemology is the view shared by both naturalized and traditional epistemology: the idea that we formulate our scientific ontologies via our most widely-accepted method of acquiring knowledge. Just as the traditional epistemologist sought to construct science out of sense data, confining himself to the theories it delivered, so the naturalized epistemologist acquiesces in the deliverances of the best science, because he accepts that knowledge only arises from the senses.

The second containment, of epistemology in ontology, is distinctive to the naturalist. While every epistemologist grants that we formulate our scientific theories by relying on our best theories of knowledge, not every epistemologist accepts that our theories of knowledge must assume the framework of our best scientific theories. (Usually, foundationalists will suppose this to be question-begging.) Gibson argues that Stroud is neglecting the significance of this second containment, which implies that naturalized epistemology presupposes the existence of the external world because meager sensory inputs are parts of physical subjects (59). Why does it matter that epistemology presupposes these claims? Gibson contends that it means that "transcendental epistemology is incoherent," because while the skeptic may use limited portions of science to generate doubts about other pieces of science, this still presupposes "interim acceptance" of the original scientific claims (59–60).

So, Stroud and others may be worried that the inscrutability thesis leads one to raise skeptical doubts about the ontology of one's beliefs. But Quine's response, according to Gibson, is that even in the act of doubting our ontology of rabbits in light of the possibility of a "rabbit stage" ontology, we are still presupposing a fixed ontology of nerve endings, etc., which leads us to see a disparity between meager input and torrential output in the first place. Quine makes precisely this point in "Things and Their Place in Theories" (1981c: p. 21), an essay which appears to have developed out of his original critique of Stroud:

Epistemology, for me, or what comes nearest to it, is the study of how we animals can have contrived that very science, given just that sketchy neural input. It is this study that reveals that displacements of our ontology through proxy functions would have measured up to that neural input no less faithfully. To recognize this is not to repudiate the ontology in terms of which the recognition took place.

On this view, even if we can doubt some things, we can't doubt everything all at once. Therefore even if inscrutability and underdetermination lead us to be skeptical about some things, *radical* skepticism is, indeed, an overreaction.

At the same time, we've already seen that Quine does not assume that skeptical doubt is logically incoherent, and yet what he says here could be interpreted as an allegation that it is. What, then, does it mean to say that the skeptic *presupposes* science? At minimum, what we "presuppose" is what we *used* to believe, even if we don't any more. This kind of presupposition could still be a premise in a *reductio ad absurdum*, even if it is a premise we come to reject as a result of that *reductio*. Note, after all, that Gibson says that what is presupposed by naturalized epistemology is *interim* acceptance of scientific theory. Quine himself (1960: p. 4) admits this much in a passage Gibson quotes immediately after making his point about interim acceptance:

[O]ur questioning of objects can coherently begin only in relation to a system of theory which is itself predicated on our interim acceptances of objects. We are limited in how we can start even if not in where we may end up.

If "where we may end up" is not limited in the way that we start is limited, this allows that we may "end up" abandoning the objects we originally accept. Indeed, the wider context of this quotation from *Word and Object* suggests that this is a possibility Quine had in mind. He says that while we all start, like Dr. Johnson, affirming the existence of physical objects, we may come to find that best account of the world does not affirm this. Immediately after the sentences quoted by Gibson, Quine tells us: "To vary Neurath's figure with Wittgenstein's we may kick away the ladder only after we have climbed it" (1960: p. 4). This is clearly allowing for the possibility of kicking that ladder away.

In what follows, Quine explains more about what kicking the ladder away would amount to. Two paragraphs later, Quine explains that by beginning with physical object talk, we are merely assimilating a "cultural fare" without distinguishing between actual stimuli and what is posited additionally over and above them. He concludes:

[W]e can investigate the world, and man as a part of it, and thus find out what cues he could have of what goes on around him. Subtracting his cues from his world view, we get man's net contribution as the difference. This difference marks the extent of man's conceptual sovereignty—the domain within which he can revise theory while saving the data (Quine, 1960: p. 5).

Quine's reference here to "the domain within which he can revise theory while saving the data" is another reference either to his underdetermination or inscrutability of reference thesis. The continuing relevance of this thesis to Quine suggests that the containment of epistemology by ontology has little force to prevent the kind of *reductio* based on the underdetermination thesis that Williams envisions.¹³ If our ontology contains scientific facts that suggest that we might abandon existence claims about physical objects—including the objects presupposed by that scientific theory—then it seems we can, in fact, "kick away the ladder." Inscrutability and underdetermination do presuppose interim acceptance of scientific theory, but *every* argument by *reductio ad absurdum* presupposes *interim* acceptance of whatever is to be reduced to absurdity.

Of course as we have already noted, Quine insists that he is not trying to challenge the coherence of the skeptic's doubts, so if the containment of epistemology in scientific ontology implies something about what we must presuppose, or what we cannot repudiate, the point must be something other than a point about *logical* coherence.¹⁴ So even though Gibson at times seems to attribute to Quine a point against the skeptic about coherence that he does not make, he has, at least, referred us to ideas from Quine that might help us identify a different strategy concerning the overreaction of the skeptic.¹⁵

There is much, in fact, to suggest that even though Quine knows that we are *logically* free to “kick away the ladder,” he does not think this implies any skeptical threat. Immediately after saying that accepting the possibility of proxy functions does *not* imply that we are forced to repudiate our ontology, he also says:

We *can* repudiate it. We are free to switch, without doing violence to any evidence....But it is a confusion to suppose that we can stand aloof and recognize all the alternative ontologies as true in their several ways, all the envisaged worlds as real. It is a confusion of truth with evidential support. Truth is immanent, and there is no higher. We must speak from within a theory, albeit any of various. (1981a: p. 21)

Earlier in the essay, Quine tells us that even when observation sentences are no longer treated “holophrastically” (as wholes), but instead as composed of referring terms—even after we become adult philosophers and catch a glimmer of the possibility of replacing our terms with proxies—there is a way in which we are insulated from the effects of inscrutability:

The point is not that we ourselves are casting about in vain for mooring. Staying aboard our own language and not rocking the boat, we are borne smoothly along on it and all is well; ‘rabbit’ denotes rabbits, and there is no sense in asking ‘Rabbits in what sense of “rabbit”?’ Reference goes inscrutable if, rocking the boat, we contemplate a permutational mapping of our language onto itself, or if we undertake translation. (1981a: p. 20)

Quine had hinted at his “no boat rocking” strategy earlier in “Ontological Relativity,” arguing that questions about the reference of terms are answered only by translating them into another language and that the resulting regress of translations could be halted only by “acquiescing in our mother tongue and taking its words at face value” (1969b: p. 49).¹⁶ Apparently what we do to refrain from rocking the boat is simply to acquiesce in this manner. Once we do this, we are able to maintain a “robust realism” about the reference of our terms, and affirm an “unswerving belief in external things—people, nerve endings, sticks, stones” (1981c: p. 245). Quine sees this realism as a reflection of his naturalism, the idea that truth is “immanent” to theory, that “it is within science itself, and not in some prior philosophy, that reality is to be identified and described” (1981c: p. 246). So even if we can permute our preferred reference scheme with proxy functions, Quine’s point is that *we need not do what we can*. By acquiescing in our mother tongue, we simply accept a scheme of reference, and there is no question about other possible schemes. Presumably a similar story can be told about our acceptance of theories, *mutatis mutandis*, that would obviate worries concerning underdetermination.

Does this strategy of acquiescence, based on the difference between what we can do and what we in fact do, provide a response to the skeptic that would satisfy the *traditional* epistemologist? Retracing the steps by which Quine first formulated his inscrutability thesis suggests it does not. Consider one of his earliest formulations of that thesis in *Word and Object* (1960: pp. 51–2):

For, consider “gavagai”. Who knows but what the objects to which this term applies are not rabbits after all, but mere stages, or brief temporal segments, of rabbits? In either event the stimulus situations that prompt assent to “Gavagai” would be the same as for “Rabbit”. Or perhaps the objects to which “gavagai” applies are all and sundry undetached parts of rabbits; again the stimulus meaning would register no difference.

The argument here is roughly parallel to Quine’s argument for the indeterminacy of translation of whole sentences¹⁷: he implies that we do not *know* the reference of the term “gavagai” (and later, “rabbit” itself) because the term could be equally true of rabbits, rabbit stages, etc., given the same stimuli. In other words, Quine wants to say there is no “fact of the matter” to determine reference, given that the only naturalistically respectable facts to consider are sensory stimuli and dispositions to assent, and these stimulations are logically compatible with any number of possible reference schemes.

So, is the fact that there is a difference between whether we *can* and whether we *do* permute our terms into proxies relevant to blocking the skeptical implications of inscrutability? From the above argument for inscrutability, I do not see why the difference is relevant to addressing the concerns of the traditional epistemologist. The entire argument for inscrutability derives not from what we *do* in fact do, but merely from what we *can*. We *can* use a variety of proxies in the same manner as our original terms, without doing violence to our stimuli and speech dispositions—therefore we do not know the reference.¹⁸ This is because it is an argument about whether there is a *fact of the matter* constraining how we make reference to objects. The fact that we can permute our terms into any number of proxies reflects the fact that doing so is not inconsistent with our sensory stimuli and speech dispositions, i.e., it reflects the only facts of the matter, and there *is no* fact of the matter picking out one reference scheme from another. We are free to pick whichever reference scheme we like, including one that does not, perhaps, *remind us* of this thesis (the one according to which “rabbit” refers to rabbits). Whether or not we choose to remind ourselves of our ignorance does not change the fact of our ignorance. Simply saying that “rabbits” refers to rabbits does not create a *fact* about reference. To the extent that the absence of such a fact has skeptical consequences (as argued in section 2), the acquiescence strategy does not alter these consequences.

Given the above, it appears that every argument Quine advances for the inscrutability of reference diminishes the significance of the mother-tongue acquiescence strategy, *at least from the perspective of obviating the worries of the skeptic, to the satisfaction of the traditional epistemologist*. But of course Quine’s worries are not necessarily those of the traditional epistemologist. Let me suggest that each of Quine’s responses to the skeptic make much more sense provided that we stop trying to understand him as pursuing the goals of traditional epistemology. Of course insofar as Quine’s naturalized epistemology is understood in contrast with traditional epistemology, it might seem that we should never have thought of him as pursuing these goals in the first place, the goals of showing how beliefs in our ontologies can be

justified by reference to available sources of evidence. All that his epistemology shares with traditional epistemology is simply the goal of offering *some explanation or other* for the development of our beliefs. As it happens, the kind of explanation Quine seems to have in mind is also a form of “justification,” only not *logical* justification, but *pragmatic* justification.¹⁹ In the next section, I will explain more about what this means, and how each of the elements of Quine’s approach to the skeptic is imbued with this pragmatism.

3. Naturalism and pragmatism

First, let us consider Gibson’s point about Quine’s reciprocal containment thesis, the contention that skeptical doubts presuppose the acceptance of ordinary scientific ontology. We still want to know what might Quine mean by “presuppose” here. Clearly in order to get to the point of accepting the inscrutability and underdetermination thesis, one needs to have *once* accepted various putative truths of science. My point in the section above is that this does not guarantee that one accepts them any more. (It is possible to “kick away the ladder.”) I have also mentioned that inscrutability and underdetermination each have a perfectly *general scope*, i.e., each concerns every scientific term or theory, including the ones used to describe meager sensory input. Because of this, any scientific conclusions presupposed by arguments for the inscrutability and underdetermination theses might as well be “kicked away” in a *reductio ad absurdum* of our knowledge of scientific ontology. As I have continually emphasized, Quine claims that there is no incoherence in a skeptic’s use of this style of argument. What, then, does he think is epistemologically important about our scientific presuppositions?

I think that the answer is that Quine’s “presupposition” thesis can only make sense in combination with his “acquiescence” thesis, his idea that we face no problem of inscrutability when we acquiesce in our mother tongue. The acquiescence thesis helps us to see that there is, in effect, a use/mention confusion in the suggestion that there is an incompatibility between acceptance of inscrutability and the acceptance of scientific ontology. When a naturalized epistemologist argues for inscrutability of reference, he *uses* some scientific terms in order to come to a conclusion in which he *mentions* the terms “rabbit” and “rabbit stage” as having reference schemes compatible with the meager sensory input. When the naturalized epistemologist *uses* those scientific terms, he is *himself* acquiescing in his mother scientific tongue. If he should then turn to zoology and begin to reason about *rabbits*, he once again acquiesces in his mother tongue, but at this point he ceases to think of the reference of “rabbit” as inscrutable. And this acquiescence is fully compatible with his embrace of the inscrutability of reference, for that embrace merely mentions “rabbit” and its rivals; it does not use them.²⁰

The natural question to raise at this point is, what if the scientist, recognizing the inscrutability of reference, suddenly decides to abandon the disquotational reference scheme, and affirm that “rabbit” refers to rabbit-stages (mapping his own language onto itself)? Quine would have to allow for this possibility. Of course it does not immediately threaten the scientific ontology used to generate the inscrutability thesis,

since that ontology presumably contained nerve endings, etc., rather than rabbits. Even so, Quine would have to allow that decisions to abandon disquotation are possible given the recognition of inscrutability. Why, then, does he seem unconcerned? Here, I think, is where his pragmatism enters. Why pick “rabbit” rather than “rabbit stages”? Because a disquotational reference scheme is *easier to apply*, linguistically, and more importantly, has the advantage of cohering simply and economically with the rest of our *existing* scientific ontology, in terms of which we are able to predict successfully the course of our experience. We have worked-out theories of zoology in terms of individual entities, not in terms of entity-stages or transcendent universals, theories that have proven empirically successful. Perhaps there will be cases in which we avoid disquotation—perhaps when we commit malapropisms—but these will be exceptional cases, and will make sense only against the background of lots of other disquotationally-generated reference. Accepting this reference scheme for reasons of its ease and coherence with an empirically successful ontology does not imply that we have found a new source of knowledge about reference-facts; it only means we have *pragmatic justification* for accepting the reference scheme. The “presupposition” that Quine has in mind is one that is pragmatically justified.

Quine’s pragmatism about choice of reference scheme is brought out more explicitly when he writes:

To say what objects someone is talking about is to *say no more* than how we propose to translate his terms into ours; we are free to vary the decision with a proxy function.... Structure is what matters to a theory, and not the choice of its objects....I extend the doctrine to objects generally, for I see all objects as theoretical....The objects, or values of variables, serve merely as indices along the way, and we may permute or supplant them as we please as long as the sentence-to-sentence structure is preserved. The scientific system, ontology and all, is a conceptual bridge of our own making, linking sensory stimulation to sensory stimulation. (Quine, 1981c: p. 20, emphasis mine)

Elsewhere Quine states:

What then does our overall scientific theory really *claim* regarding the world? *Only* that it is somehow so structured as to assure the sequences of stimulation that our theory gives us [sic] to expect. More concrete demands are indifferent to our scientific theory itself, what with the freedom of proxy functions. (Quine, 1981a, p. 474, emphasis mine)²¹

When speaking as a naturalized epistemologist on the meta-level, then, Quine seems to describe an *almost* fully instrumentalist or pragmatist semantics. I say “almost” because he does allow that our theoretical terms might at least refer to how the world is “structured so as to assure sequences of stimulation that our theory gives us to expect.” In mentioning the *structuring* here, Quine might mean that we refer to underlying essences which somehow order our sensations, as in a two-factor theory of reference. But what is important for Quine, who disavows the naturalistic respectability of natural kinds, is that any number of possible reference schemes can exhibit the same structure. There is a fine line, then, between the possibility of the world’s exhibiting the same structure through many different ontologies, and *our experience* having the same structure, regardless of the world’s ontology. When speaking on the meta-level, it is hard to see whether the naturalized epistemologist is committed to structural realism or simply to phenomenalism. In

either case, the pragmatic element is all that matters: what matters to speaking of objects is the role they play in permitting us to explain and predict our “sequences of stimulation.” Even if the content of our statements about objects is not exhausted by their pragmatic role, the inferential *significance* of our statements about objects is.

In describing the choice of reference scheme in these terms, Quine comes quite close to endorsing the classical “pragmatic maxim” of Peirce and James. Commenting on James’ version of that maxim (that “the effective meaning of any philosophic proposition can always be brought down to some particular consequence, in our future practical experience”) and its subsequent influence on another pragmatist, F.C.S. Schiller, Quine writes:

Why not just settle for the predictions and say, like any empiricist, that the test of a truth *is* the experience it foretells? . . .

[James] inspired F.C.S. Schiller . . . He had a doctrine of “postulation,” which had us believing whatever we wish were true until it proves troublesome. Now the funny thing is that this is a fair account of the hypothetico-deductive method—wishful thinking subject to correction. . . . I am bound to recognize that the systematic structure of scientific theory is manmade. It is made to fit the data, yes, but invented rather than discovered, because it is not uniquely determined by the data (Quine 1981b, 32-33).

Quine sees the essence of the pragmatic approach to meaning—and here, to justification of belief in general—as essentially aligned with the hypothetico-deductive view of confirmation. The meaning of a statement is the consequences of the statement for our experience, and if determining these consequences is a holistic process, then we choose our beliefs by reference to them, as well. This echoes James’ own characterization of pragmatism’s contrast with both skepticism and “dogmatism” in “The Will to Believe”:

But please observe, now, that when as empiricists we give up the doctrine of objective certitude, we do not thereby give up the quest or hope of truth itself. We still pin our faith on its existence, and still believe that we gain an ever better position towards it by systematically continuing to roll up experiences and think. Our great difference from the scholastic lies in the way we face. The strength of his system lies in the principles, the origin, the *terminus a quo* of his thought; for us the strength is in the outcome, the upshot, the *terminus ad quem*. Not where it comes from but what it leads to is to decide. It matters not to an empiricist from what quarter an hypothesis may come to him: he may have acquired it by fair means or by foul; passion may have whispered or accident suggested it; but if the total drift of thinking continues to confirm it, that is what he means by its being true (James 1921, 17).

James sees pragmatism or empiricism as distinct from both skepticism (the claim that we do not know), and from “dogmatism” (the claim that we know, and know that we know on the basis of “objective evidence”).

It is James’ disavowal of “objective evidence,” of a criterion that is supposed to indicate when we possess the truth, that is the most similar to Quine’s approach. For Quine as well as for James, it is the consequences of our belief that matter, not their source. Quine might think we can know, but not that we can know when know by applying a logical criterion based on the source of our belief. In this respect, Quine is certainly rejecting internalism about justification, even if he is not necessarily embracing any of the typical forms of externalism about justification (such as reliabilism). One might even go so far as to say

that his is not a pragmatic view of *justification* at all, but an abandonment of concern with justification, entirely, since the term suggests a concern with the origin, rather than the consequences of belief (and Quine certainly never makes much use of the term “justification”). But even if we think of “justification” as something more akin to “warrant,” as whatever it is that’s needed to turn true beliefs into knowledge, and consider Quine’s a pragmatic view of justification, traditional epistemologists may contend that this notion of justification is unserviceable for epistemological purposes, seeing that it does nothing to tell us of the truth-aptness of our beliefs we currently hold, but which have not yet been tested. But a pragmatist doesn’t think that we must answer the skeptic by offering a criterion of justification of this kind. Because of his inscrutability and underdetermination theses, Quine cannot accept that any such criterion is available, that there is anything like a criterion of logical justification of our beliefs on the basis of available sensory evidence. As a radical empiricist, Quine thinks we are limited to sensory evidence, and rejects all *a priori* standards of choice among competing empirical hypotheses. If, then, we cannot distinguish hypotheses prior to empirical tests, so much the worse for a view that would have us do so. The only serviceable notion of justification is the pragmatist method of hypothesis.

Even then, verification of observable consequences is not the only pragmatic aspect of Quine’s view about justification. Quine’s commitment to pragmatism is especially evident in his discussion of choice among empirically underdetermined theories. While he thinks that theory is underdetermined by empirical evidence, he thinks choices among empirically equivalent rivals are ultimately based on *further* pragmatic concerns. In his later works, he enumerates a list of “theoretical virtues” possessed by our preferred scientific theories: conservatism, generality, simplicity, refutability, and modesty (1992: p. 20). Elsewhere Quine (1992: p. 15) explicitly links theoretical virtues like simplicity and “minimum mutilation” with the pragmatic virtue of predictive power:

[T]he ultimate objective is so to choose the revision as to maximize future success in prediction: future coverage of true observation categoricals. There is no recipe for this, but maximization of simplicity and minimization of mutilation are maxims by which science strives for vindication in future predictions.

How, then, is Quine responding to the skeptic if he concedes that our beliefs lack “logical” justification or justification on the basis of an objective criterion that makes beliefs derived from a particular source more apt to be true? He is simply offering an alternative conception of what it is to be justified, a pragmatic conception that focuses on the consequences rather than the origins of belief. This can be seen in the revealing difference between his mention of the skeptic’s “overreaction” in “Reply to Stroud” and that in “Things and their Place in Theories.” In the first, he simply says that his “only criticism of the skeptic is that he is overreacting” (1981a: p. 475). In the second, he says the skeptic is merely “overreacting *when he repudiates science across the board*” (1981c: p. 22, my emphasis). The first excerpt doesn’t specify the respect in which Quine thinks the skeptic is overreacting. This has led some (including critics and defenders) to conclude that Quine thinks the skeptic’s embrace of *skepticism* is the overreaction. The second excerpt clarifies that it is simply the skeptic’s *repudiation of science* that is the problem. If

Quine is a pragmatist, however, he can embrace both the skeptic's thesis that our beliefs are not logically justified *and* embrace the pragmatic power of science that some skeptics might be inclined to reject. He can embrace the latter because even if science does not deliver logical justification of our beliefs in a way that circumvents inscrutability and underdetermination, it does deliver all the pragmatic justification we need to predict and control our experiences. To a traditional epistemologist who thinks an answer to skepticism requires articulating a criterion of "objective evidence," of how to know when we know on the basis of the origins of our belief, this may seem like an acquiescence in skepticism, not a rejection of it. But to a pragmatist who sees no possibility of articulating such a criterion, who wants to reject skepticism anyway, this could be the best alternative.

At this point it might be objected that in proposing an alternative standard of justification, Quine is simply following in a long line of fallibilists who *challenge* skepticism by loosening the skeptic's overly stringent standards for justification. So in conceding the limits of our ability to justify our beliefs logically, Quine would count as a skeptic only according to the *skeptic's* unreasonably high standards of justification. I think, however, that there is still an important difference between pragmatism and fallibilism. Fallibilists will loosen the constraints on justification by pointing out that knowledge does not require the impossibility of error, i.e. a guarantee of truth. Still, standard fallibilists will insist that justification is at least truth-linked, e.g., because various methods of justification increase the probability that beliefs formed by these methods are true. As we have seen, this is not true of a pragmatic theory of justification, because it is not primarily concerned with methods of forming beliefs, but methods of testing them once formed. Theoretical virtues may have some truth-conduciveness in this sense, if used to pick hypotheses for testing, but that is not the focus of this overall view of justification. Pragmatism may be a form of fallibilism, but it is a special form that reverses the usual perspective of the traditional epistemologist.

Accepting Quine as offering a pragmatist theory of justification helps to explain a number of the interpretative quandaries about Quine's response to skepticism that we have raised above.

One way in which Quine responds to Stroud's worries about the skeptical implications of inscrutability is to find solace in the fact that truth of an observation sentence is prior to reference. Inscrutability allows that given our stock of observations, we may still assert a constant set of observation sentences, which we have no option but to regard as true. Even if we cannot divide the reference of our sentences in a determinate way, taken *holophrastically* they can still be asserted as true. Truth here is understood in a deflationary manner: to say that "snow is white" true is simply to say that *snow is white*. We do not need correspondence relations to understand truth.

At first invoking the alleged priority of truth over reference seems unresponsive to Stroud's claim. Stroud has claimed that it is a straightforward endeavor to study the relationship between sensory input and theoretical output, provided that we are in a position to observe important facts about the subject's environment and its relationship to him. If we know that what a subject claims is true, and know that his claim is a reliable one, we have no problem explaining the origin of his knowledge. Stroud observes, however, that *the mere truth* of the subject's beliefs is not sufficient to explain this knowledge, although it

is necessary (1981: p. 461). If the subject claims there are bodies, and we see there are none, we know the subject does not *know* there are bodies. But even if the subject's output is a true statement, the subject does not necessarily know it: the output may be only accidentally true. If, for example, the subject claims there are bodies in front of him, and there are, but they are behind a screen past which he cannot see, then his output is only accidentally true and he does not know. What's more, if we glean from our naturalistic study of the subject's meager inputs that theory is underdetermined by evidence, then even if we supposed the subject's beliefs to be true, we will come to see *our own* theories (to say nothing of the subject's) as likewise underdetermined, and therefore unjustified (pp. 462–3). In response to this, Quine's assertion that one might assert true observation sentences in response to evidence seems to miss the point. So what if the observation sentences are true?

But Quine is only missing the point if Stroud is not missing it himself. Stroud appears to believe that Quine is trying to offer a *refutation* of the skeptic, some positive naturalistic case of how both we and the subject can have logically justified beliefs. But if Quine is not even trying to answer traditional epistemological questions, then Stroud is missing the point, not Quine. Quine seems to suggest as much in the following:

Stroud finds difficulty in reconciling my naturalistic stance with my concern with how we gain our knowledge of the world. We may stimulate a psychological subject and compare his resulting beliefs with the facts as we know them; this much Stroud grants, but he demurs at our projecting ourselves into the subject's place, since we no longer have the independent facts to compare with. My answer is that this projection must be seen not transcendently but as a routine matter of analogies and causal hypotheses. True, we must hedge the perhaps too stringent connotations of the verb "know"; but such is fallibilism (Quine, 1981a: p. 474).

This is the paragraph that directly precedes the paragraph in which Quine laments the skeptic's "overreaction." Seen in this context, it should be especially clear that whatever Quine's response is to the skeptic, it has little to do with traditional epistemological responses to skepticism. Quine's last line, about not being too stringent about the verb "know" is particularly revealing. It shows that he is not interested in holding onto an epistemology that explains the origin of *knowledge* understood traditionally. Quine is, after all, not interested in conceptual analysis as a method in philosophy. He is interesting only in *explication*: the process of taking some pre-existing concept and modifying it to make it *useful* for theoretical purposes—a timeworn pragmatist methodological tool. Quine would probably say that the traditional "justified true belief" concept of "know" serves no important theoretical purpose, and hence it is safe to discard and replace.

Another interpretive quandary resolved by treating Quine as a pragmatist is the paragraph that immediately follows his paragraph about the skeptic's overreaction:

Experience might, tomorrow, take a turn that would justify the skeptic's doubts about external objects. Our success in predicting observations might fall off sharply, and concomitantly with this we might begin to be somewhat successful in basing predictions upon dreams or reveries. At that point we might reasonably doubt our theory of nature in

even its broadest outlines. But our doubts would still be immanent, and of a piece with the scientific endeavor. (1981a: p. 475)

Commenting on this passage, Stroud (1984) considers that it may have something to do with Quine's criticism of the skeptic's overreaction. Indeed it does, but not in the way that Stroud proposes. Stroud suggests that Quine thinks that only if the predictive power of science wanes should we take the skeptic seriously. Since its predictive power has not waned, we should therefore reject skepticism. On this view, skepticism would be a doctrine that is itself subject to confirmation. Stroud notes that this is not what the skeptic says. The skeptic does not take a position endorsing some rival source of our beliefs (e.g., dreams rather than science): he only says none of our knowledge, whatever its content, is logically justified. As a result, Stroud thinks that Quine's alleged answer to skepticism is knocking down a straw man, and ineffective.

But in light of my reading of Quine as a pragmatist, we can interpret him differently here. Roger Gibson, a defender of Quine, castigates Stroud for alleging that Quine takes skepticism to be subject to confirmation (1988: p. 59). And surely skepticism understood in the traditional way, as a thesis that our beliefs are not justified by reference to the available evidence, is not a thesis that we would treat as subject to confirmation. Gibson goes on to object that Stroud misses the importance of reciprocal containment, which we have already discussed. Curiously, however, Gibson offers no alternative explanation for what Quine actually means in the passage about the possibility that our predictions might some day lose their power. Now I think we can offer an explanation. Even if the traditional thesis of skepticism is not subject to confirmation, a pragmatic version of the thesis might be. That is to say, if *pragmatist* skepticism is the idea that our beliefs are not *pragmatically* justified, then whether or not pragmatist skepticism is true will depend on whether or not our beliefs are pragmatically justified. And *that* is a thesis that we can imagine being subject to confirmation. Whether or not our beliefs are pragmatically justified depends on whether or not they have significant explanatory and predictive power. In the passage quoted above, Quine is saying that we trust scientific beliefs because they *do* allow us to predict observations. If someday they stop allowing this, then we would no longer regard them as pragmatically justified, and we would have to revise our beliefs and become skeptical about our preexisting theories. If dreams turn out some day to yield the best predictions, we would regard them as justified instead. So in a sense, the containment of epistemology in scientific ontology is relevant here after all, because in the event that our empirically derived scientific ontology fails, and dreams proved to have better predictive power, we would (paradoxically) have to abandon empiricism on the basis of our observations about the failings of empirical science. But Gibson does not make this clear.

Furthermore, there is also the tantalizing line at the end of Quine's description of making epistemology a "chapter of psychology," in which he mentions that one of the *purposes* of naturalized epistemology is to discover how "one's theory of nature transcends any available evidence." This seems to build the problem of underdetermination—and any associated traditional skeptical theses—into the naturalist project from the very beginning. If we accept that we can never logically justify our beliefs about

the external world strictly on the basis of the available evidence, there is a problem: if our beliefs have not been determined by evidence, what then *are* they determined by? What makes it possible for us to have scientific output that is “torrential” in comparison to our “meager” perceptual input? Quine’s answer is contained in *Word and Object*, *The Roots of Reference*, and his other works in which he describes the variety of accidental, analogical, and otherwise non-logical devices by which such theory is formed. He does not intend to show how our knowledge is justified by its sources, but how our “knowledge” arises in a world where justification by origin is not an option.²² He does not even intend to show us how our sensory evidence connects us cognitively to independent facts. As Quine wrote in “Epistemology Naturalized,” “Awareness ceased to be demanded when we gave up trying to justify our knowledge of the external world by rational reconstruction” (1969a: p. 84). The variety of accidental, analogical, and other non-logical devices that help explain the origin of our theory are *pragmatic* devices. As Quine (1953: p. 46) famously remarks in “Two Dogmas of Empiricism”:

In repudiating [the boundary between the analytic and the synthetic], I espouse a more through pragmatism. Each man is given a scientific heritage plus a continuing barrage of sensory stimulation; and the considerations which guide him in warping his scientific heritage to fit his continuing sensory promptings are, where rational, pragmatic.

It should come as no surprise that Quine is willing to abandon the traditional picture of justification of our beliefs, even if he thinks they are pragmatically justified. Quine (1969a: p. 72), after all, famously announced in “Epistemology Naturalized” that the doctrinal and conceptual projects of epistemology had failed, and that “the Humean predicament is the human predicament.” In addition to abandoning the possibility of the logical justification of our beliefs about matters of fact, Hume himself famously proposed a “skeptical solution” to doubts which stressed the practical utility of the “custom or habit” of believing in matters of fact. This is skepticism, but skepticism with a happy, pragmatic face. Quine is following in this Humean tradition.

Stroud, Williams and others have noted the statements about the Humean predicament, and have considered that Quine might not have intended to *refute* the skeptic. But they are usually perplexed by Quine’s statements, in *The Roots of Reference* and elsewhere, which analyze skeptical doubts as arising from science. These in combination with Quine’s claims that the skeptic is overreacting make critics think Quine is simply inconsistent: sometimes he concedes the full force of skepticism, other times he wishes to answer it. But if my reading is correct, Quine is not inconsistent. His remarks about the scientific source of (local) skeptical doubts are simply aspects of his attempt to show that even if we accept that our beliefs are not justified in the traditional sense, this is no cause for concern. The skeptic overreacts by ignoring the possibility of pragmatic justification, which in turn explains why we are able to acquiesce in our mother tongue and mother scientific theory. This is satisfactory if you share Quine’s tolerance of pragmatism, but not otherwise. Since his acquiescence strategy does nothing to calm traditional skeptical doubts or show that our beliefs have some form of logical justification after all, some criterion of “objective evidence” to which they can appeal, from the perspective of the traditional epistemology, Quine is acquiescing in

skepticism itself. Speaking in the language of the traditional epistemology, Quine is arguing that we should learn to live with skepticism, by taking pragmatism as a source of solace.

4. Conclusion

Quine thinks epistemology is prompted by skeptical doubts. This essay was also prompted by a doubt, one concerning how Quine intends to respond to skepticism. Critics of Quine like Stroud and Williams take him to be trying but failing to refute it; defenders like Gibson seem to agree he is trying to refute it, and believe he succeeds. I have argued that neither party completely appreciates Quine's total project. Quine is not trying to refute the skepticism that concerns the traditional epistemologist, skepticism about the availability of a criterion of "objective evidence." Because of his inscrutability and underdetermination theses, he takes it for granted that none is available.

Naturalized epistemology is not a refutation of skepticism about "objective evidence," but an accommodation to it. It is the attempt to explain how our beliefs come to be empirically successful even when or if they do not originate in any epistemically privileged source. This is the full meaning of Quine's idea that doubt is what prompts epistemology. The language of "prompting" is quite appropriate here, because we epistemologists, for Quine, are just like our behavioristic subjects. We too are prompted by stimuli in our environments. In this case, the stimulus is our own skeptical doubts. Doubt prompts naturalized epistemology, not because we wish to erase this doubt and find secure foundations for our knowledge, which are impossible according to Quine, but because we take this doubt for granted and want to understand how we were ever able to erect an edifice of theory *in spite* of having no secure foundations. From Quine's perspective, it is an impressive feat our species has achieved—the erection of modern science on the basis of sloppy analogies, wistful symmetries, and various other doctrines "conceived in sin."

In criticizing Quine, Stroud and Williams made the sensible assumption that he shared their own theoretical goal: to defend our knowledge of the external world against the skeptic. To discover that he may not have shared this goal might then count as sufficient evidence that he has changed the subject, and not doing real epistemology. But of course even then, there is a question about how the concept of "epistemology" is to be understood—through conceptual analysis, or pragmatic explication? It seems difficult to find common ground by which to adjudicate the dispute between traditionalists and pragmatists. But the need for pragmatic justification—whether of concepts or of theories—arises only because traditionalist arguments are perceived to have failed. A more successful criticism against Quine is likely to be found by revisiting those traditionalist arguments, to see if they can be revived. It is not as likely that Quine can be refuted on his own terms. If we take his pragmatism as an implausible response to skepticism even after clarifying his terms and goals, it will have to be because we think that traditionalist terms and goals can succeed, after all. It is our burden to show that the default position of pragmatism is unnecessary.

References

- Bayer, B. (2007). 'How Not to Refute Quine: Evaluating Kim's Alternatives to Naturalized Epistemology', *The Southern Journal of Philosophy* 45: 1-23.
- Bergstrom, L. (1993). 'Quine, underdetermination and skepticism', *The Journal of Philosophy* 90 (7): 331–58.
- . (2004). 'Underdetermination of physical theory', in R. Gibson (ed.), *The Cambridge companion to Quine*, New York: Cambridge University Press, 91–114.
- Davidson, D. (1990a). 'Meaning, truth and evidence', in R. Barrett and R. Gibson (eds.) *Perspectives on Quine*, Oxford: Blackwell, 68–79.
- . (1990b). 'The structure and content of truth', *The Journal of Philosophy* 88 (6): 279–328.
- Dummett, M. (1973). *Frege: philosophy of language*, London: Duckworth.
- Gibson, R. (1988). *Enlightened empiricism: an examination of W.V. Quine's theory of Knowledge*, Tampa, FL.: University of South Florida Press.
- James, W. (1921). *The will to believe and other essays in popular philosophy*, New York: Longman, Green and Co.
- Kim, J. (1988). 'What is "naturalized epistemology"?', in J. Tomberlin (ed.), *Philosophical Perspectives* 2, Epistemology: 381–405.
- Koppelberg, D. (1998). 'Foundationalism and coherentism reconsidered', *Erkenntnis* 49: 255–83.
- Quine, W.V.O. (1947). 'On universals', *The Journal of Symbolic Logic* 12 (3): 74–84.
- . (1953). 'Two dogmas of empiricism', in W.V.O. Quine, *From a logical point of view*, Cambridge, MA.: Harvard University Press, 20–46.
- . (1960). *Word and object*, Cambridge, MA: Harvard University Press.
- . (1969a). 'Epistemology naturalized. (In W.V.O. Quine, *Ontological relativity and other essays*, (69–90). New York: Columbia University Press.
- . (1969b). 'Ontological relativity', in W.V.O. Quine, *Ontological relativity and other essays*, New York: Columbia University Press, 26–68.
- . (1970). 'On the reasons for the indeterminacy of translation', *Journal of Philosophy* 67: 178–83.
- . (1974). *The roots of reference*, LaSalle, IL: Open Court Press.
- . (1975). 'On empirically equivalent systems of the world', *Erkenntnis* 9: 313–28.
- . (1981a). 'Reply to Stroud', *Midwest Studies in Philosophy* 6: 473–5.
- . (1981b). 'The Pragmatists' Place in Empiricism', in R. Mulvaney and P. Zeltner (eds.), *Pragmatism: Its sources and prospects*, Columbia, SC: University of South Carolina Press, 21–39.
- . (1981c). 'Things and their place in theories', in W.V.O. Quine, *Theories and things*, Cambridge, MA: Harvard University Press, 1–23.

———. (1986a). 'Reply to Morton White', in L. Hahn and P. Schilpp (eds.), *The philosophy of W.V. Quine*, La Salle, IL: Open Court, 663–5.

———. (1986b). 'Reply to Roger Gibson', in L. Hahn and P. Schilpp (eds.), *The philosophy of W.V. Quine*, La Salle, IL: Open Court.

———. (1992). *Pursuit of truth*, Cambridge, MA: Harvard University Press.

———. (1995). *From stimulus to science*, Cambridge, MA: Harvard University Press.

———. (2004/1975). 'The nature of natural knowledge', in R. Gibson (ed.) *Quintessence: basic Readings from the Philosophy of W.V. Quine*, Cambridge, MA: Harvard University Press, 287–300. Originally published in S. Guttenplan (Ed.) (1975) *Mind and Language*, 67–81. Oxford: Oxford University Press.

Stroud, B. (1981). 'The significance of naturalized epistemology', *Midwest Studies in Philosophy* 6: 455–471.

———. (1984). *The significance of philosophical skepticism*, Oxford: Oxford University Press.

Williams, M. (1996). *Unnatural doubts: epistemological realism and the basis of skepticism*, Princeton, NJ: Princeton University Press.

Wittgenstein, L. (1969). *On certainty*, eds. G.E.M. Anscombe and G.H. von Wright, New York: Harper Torchbooks.

¹ See Bayer (2007, 5-6) for more.

² In one line of thinking, if Quine doesn't intend to establish the foundations of science, he should at least show how to "dissolve" the problem of skepticism, perhaps by showing, in the manner of Wittgenstein (1969: p. 2e), that it doesn't make sense to doubt what the skeptics ask us to doubt. Yet Quine's estimate of the Wittgensteinian strategy is not supportive. He pejoratively characterizes it as offering philosophers a "residual philosophical vocation in therapy," and urges that contrary to the Wittgensteinian idea that philosophical problems are delusions, "epistemology still goes on" after the death of foundationalism (Quine, 1969a: p. 82).

³ See also Quine (1960, 2) and Quine (1974, 1-4).

⁴ Stroud contends, in particular, that to *explain* the origin of some subject's knowledge, two conditions must hold: we, the explainer, must know that the subject's belief is true; and we must be able to show that it is not an accident, that the subject's posit turns out to be true because of some connection to the truth. Yet Quine's naturalistic investigation also reveals and is further motivated by the thesis that our subject's sensory inputs are "meager" in comparison to his outputs. If, as Quine suggests, our position is similar to the subject's, then there is a serious question about whether we, the investigators, are in a position to fulfill the two conditions of explaining the origin of knowledge, not only for our subject, but for ourselves. Our own conclusions about the subject's circumstances—about whether his connection to facts is accidental or not—would also be mere posits, each with its own rival hypotheses.

⁵ Or perhaps we make our psychology more rigorous, and note the more general distinction between perception and judgment (as Descartes did, as well)—and that only latter can be true or false, discounting the claim that it is *perception* that is unreliable. I actually think that this and other attempts to block the *reductio* by appealing to the wider scientific context would be a fruitful response to the skeptic. The present point is that the option is not available to Quine in the grander scheme of his work.

⁶ This is, at least, Williams' take on the underdetermination problem. It is possible, however, that there may be a way of showing that the underdetermination skeptic is *also* overreacting, and pointing to additional scientific evidence that shows that the problem arises only from an impoverished understanding of the nature of sensory perception, or from an overly narrow hypothetico-deductive conception of confirmation. In any case, this is evidence that Quine does not consider, nor would it be characteristic of him to do so, since he takes it for granted the hypothetico-deductivism is central if not exhaustive to the scientific method.

⁷ In their exchange, both Stroud and Quine discuss the inscrutability of reference thesis explicitly. Stroud is worried that on Quine's view, there is a "possibility that the world is completely different in general from the way our sensory

impacts and our internal makeup lead us to think of it.” In response, Quine proposes to understand this point in terms of “proxy functions and displaced ontologies” (1981a). “Proxy functions” are logical devices Quine has exploited to bolster the argument for his inscrutability of reference thesis.

⁸ Suppose, for example, that Jones sees a look-alike of Smith in the room, and claims that Smith is in the room, so fails to know this even though Smith is truly in the room (he’s hiding). Here we can diagnose the failure of knowledge as resulting from the fact that the person to whom Jones is *referring* is not actually Smith. Because Jones does not successfully refer to Smith in this circumstance, he cannot know that Smith is in the room. If term reference is systematically inscrutable, such that there are no facts of the matter determining what *any* of our terms refer to, then we may be faced with universal Gettierization of our knowledge. If there is no way at all to specify facts that our knowledge refers to, there is no way to show any non-accidental connection between these facts and our justification for believing in them.

⁹ It might be alleged that the absence of determinate reference facts need not imply skepticism, if one adopts something akin to the “ecumenical” strategy outlined in footnote #10 below. That is, it might be argued that there may simply be no important difference in content between the belief that $\langle p \rangle$ and the belief that $\langle \text{proxy } p \rangle$. One might take inscrutability arguments as simply expressing skepticism about “intensional objects” such as Fregean or Russellian propositions, but Quine sees his arguments against propositions as distinct from his arguments for the inscrutability of reference. Inscrutability of reference is directed against the reference of terms, not propositions. While it is true that one route to the indeterminacy of translation of whole sentences is through term inscrutability, Quine says there are multiple routes to the same conclusion, including another drawn from confirmation holism (Quine 1970). What’s more, Quine sees inscrutability of reference as applying even to the terms of observation sentences, where he does not have a problem with indeterminacy of translation. Anyway, as I have already argued, indeterminacy about the *objects* of belief (via inscrutability about the reference of terms) spells trouble for identifying a determinate relationship between these objects and our reasons for believing in them, which threatens universal Gettierization and therefore skepticism—this is a problem that stands independently of considerations about propositions. What’s more, Quine himself abandons the ecumenical strategy (1986b; 1992: pp. 99–101).

¹⁰ This is particularly clear in a case in which there are two theories, T_0 and T_r , which are equivalent in evidence and theoretical virtues, but *known* to be incompatible. Bergstrom says that if we know that T_r rivals our home theory T_0 , the only rational option is to suspend judgment between the two. We cannot justifiably pick one or the other, and so we do not know which one is true. Bergstrom thinks the same is true even if we don’t know the nature of T_r , but simply know it exists (if, for example, we accept Quine’s underdetermination thesis).

Recently, Bergstrom (2004: p. 105) has pointed out that the skeptical implications of underdetermination are clearest when the rival empirically equivalent theories are actually incompatible, i.e., not possibly both true. Earlier (1993: pp. 343, 345), he does suggest that if T_0 and T_r are not incompatible but merely different, there might still be something irrational about accepting one rather than the other when both account equally well for the evidence. Indeed, if T_0 and T_r are empirically equivalent but not logically incompatible, it is trickier to show the skeptical implication, because then perhaps Quine could take what he calls an “ecumenical” (rather than a “sectarian”) line, and say that *both* of these theories could be said to be true (Quine, 1986b). If both can be said to be true, then there is no question to be agnostic about, no reason to think one’s present theory is threatened. In fact Quine believes that many cases of apparently incompatible rivals can be reduced to compatible ones, if incompatibilities arising from theoretical terms are eliminated by spelling the relevant theoretical terms differently in each theory (e.g., “the universe expands” vs. “the youniverse does not expand”).

But Bergstrom gives a variety of reasons (related to simplicity and economy) for thinking it strange that one could be warranted in believing the conjunction of T_0 and T_r to be true (1993: p. 347), and argues that the spelling expedient would not *eliminate* the existence of incompatible theories—if there are such—but only allow us to deal with their compatible counterparts (pp. 350–1). But as late as “The Empirically Equivalent Systems of the World” (1975) Quine still stresses the importance (or threat) of the *possibility* of incompatible rivals, even if not all empirically equivalent rivals are actually incompatible. And Quine later (1986b; 1992: pp. 99–101) distances himself from the ecumenical position, though he leaves open the possibility that a sectarian might oscillate back and forth between compatible rivals, without believing both at the same time. There are even some philosophers of a verificationist bent doubt that there could ever be such things as empirically equivalent but incompatible rivals (Dummett, 1973: p. 617; Davidson, 1990b: p. 306). The issues involved in deciding whether these doubts are warranted are difficult and beyond the scope of this essay, so I will not dwell on them further here. See Bergstrom (2004, 101–4) for a summary of the debate.

In any case, I will assume that Quine adopts underdetermination with incompatibility here, especially since it is the version of the thesis that has the most significant implications for the rest of his philosophy. A full-fledged underdetermination thesis that assumes incompatible rivals is crucial in establishing the indeterminacy of translation, and thereby undermining the “conceptual project” in epistemology”, is another central motivation for naturalizing epistemology (Bayer 2007: pp. 11–2, 14–8). If underdetermined theories are all equally true—as the ecumenical position suggests—then there is no reason to say there is no fact of the matter involved in choosing a translation manual. If all translations are equally right, then there are many facts of the matter on which they are based, and translation is not indeterminate—and Quine loses his argument for naturalized epistemology from the indeterminacy of

translation (which he invokes against Carnap's last-ditch attempt at empiricist epistemology). So, if underdetermination is watered down to not require the incompatibility of empirically equivalent rivals, it is true that its skeptical implications become less clear, but by that same token it also loses its significance as a motivation for naturalizing epistemology

¹¹ The only reason that Descartes considers such scenarios is because they imply systematic alternatives to common sense which are indistinguishable from common sense on the basis of the available evidence—and the underdetermination thesis implies the existence of the same kind of alternatives.

¹² Stroud's second response (1984) is a recapitulation of much already noted in his earlier article (1981)),

¹³ Thus it seems we should concur with Stroud, along with Davidson (1990a: p. 74) and Koppelberg (1998: pp. 266–7) who urge that the containment of epistemology in ontology is no panacea for the naturalistic response to skepticism.

¹⁴ I myself am sympathetic to the idea that the skeptic's doubts are incoherent, and that this by itself is sufficient to diagnose the skeptical illness. But I also agree with Stroud (1984, 227) that Quine's "view of language and his rejection of the philosophical use of synonymy or analyticity leave him in no position to appeal to what is or is not included in the meaning of a particular term," and that arguments from coherence do tend to presuppose specific theories of meaning, whether analytic or otherwise.

¹⁵ It is odd that both Stroud and Gibson focus their respective interpretations on only the final three paragraphs of "Reply to Stroud," neglecting to discuss the main body of the essay.

¹⁶ Here Quine was pulling back from a brink reached in "Ontological Relativity" (1969b), in which the notion of reference—a concept he originally thought to be respectable and objective in "Notes on a Theory of Reference" (1953a)—appeared to lose all such respectability and drop to the status enjoyed by murkier notions such as meaning.

¹⁷ Except of course that Quine thinks inscrutability applies to terms even in observation sentences, while indeterminacy does *not* apply to observation sentences taken as wholes.

¹⁸ This is especially clear when, after showing how reference can only be specified by bringing in (equally inscrutable) questions about identity and diversity ("Is this the same gavagai as that?," etc.), Quine states:

Two pointings may be pointings to a numerically identical rabbit, to numerically distinct rabbit parts, and to numerically distinct rabbit stages; the inscrutability lies not in resemblance, but in the anatomy of sentences. We *could* equate a native expression with any of the disparate English terms 'rabbit', 'rabbit stage', 'undetached rabbit part', etc and still, by compensatorily juggling the translation of numerical identity and associated particles, preserve conformity to stimulus meanings and occasion sentences. (1960: pp. 53–4, emphasis mine)

¹⁹ Later I will say more about what I take the difference between these to be. For now, what's clear is that Quine does not think that there is a logical method of deciding between rival theories on the basis of the available evidence (where he assumes the primary evidence to be sensory), and whatever it is that *does* eventually help us decide must be something other than this logical method. "Pragmatic" is for the moment a placeholder term, denoting whatever it is that allows us to make choices among underdetermined theories. "Logical" justification is also something of a placeholder, referring to whatever it is with respect to which theories are underdetermined: our existing stock of deductive and inductive rules of inference, which cannot decide between empirically equivalent theories. I think it would be misleading to call this "epistemic" justification, because according to Quine, *epistemology* is concerned with forms of justification beyond "logical" forms. So pragmatic justification would count as a form of "epistemic" justification on his philosophy, as well.

²⁰ My understanding of this point has been informed by numerous conversations with Gary Ebbs.

²¹ It has been brought to my attention by Patrick Maher that if Quine accepts this as a serious statement about the content of scientific theories, it may have the effect of truly trivializing his statement of the underdetermination thesis. It would imply that empirically equivalent theories are also logically equivalent, and therefore certainly logically compatible. Of course, this is only if the statement is interpreted in a purely phenomenalist manner, not in the structural realist manner that I will shortly mention. As I've said, there's a fine line between the two. In any case, I think that Quine did have a tendency to entertain more and more trivial versions of underdetermination as the years went by. All I can say is that the more trivial they become, the less motivated naturalized epistemology becomes. The trouble is that while Quine lost confidence in underdetermination, he kept confidence in the project of naturalizing epistemology. This is trouble because without the first, there may have been little motivation for the second.

²² Note that this does not imply that Quine has necessarily abandoned epistemology as a normative project. As I have already suggested, he still has the option of naturalizing normativity, of showing how these various theoretical developments have served some adaptive function for us. So they would count as "good" beliefs from the perspective of natural selection, perhaps. Even so, they would only be normative in this new sense, not in the traditional epistemological sense of justifying our beliefs.