

## QUINE ON THE NATURE OF NATURALISM

**Abstract:** Quine’s metaphilosophical naturalism is often dismissed as overly ‘scientific’. Many contemporary naturalists reject Quine’s idea that epistemology should become a “chapter of psychology” (1969a, 83) and urge for a more ‘liberal’, ‘pluralistic’ and/or ‘open minded’ naturalism instead. Still, whenever Quine explicitly reflects on the nature of his naturalism, he always insists that his position *is* modest and that he does not “think of philosophy as part of natural science” (1993, 10). Analyzing this tension, Susan Haack has argued that Quine’s naturalism contains a “deep-seated and significant ambivalence” (1993a, 353). In this paper, I argue that a more charitable interpretation is possible; a reading that does justice to Quine’s own pronouncements on the issue. I reconstruct Quine’s position and argue (i) that Haack and Quine, in their exchanges, have been talking past each other and (ii) that once this mutual misunderstanding is cleared up, Quine’s naturalism turns out to be more modest, and hence less scientific, than many contemporary naturalists have presupposed. I show that Quine’s naturalism is first and foremost a rejection of the transcendental. It is only after adopting a broadly science-immanent perspective that Quine, in regimenting his

language, starts making choices that many contemporary philosophers have argued to be unduly restrictive.

## 1. Introduction

Naturalism is the metaphilosophical thesis that philosophy ought to be in some sense continuous with science. According to W. V. Quine, arguably the intellectual father of contemporary naturalism, there is no distinctively philosophical perspective from which to determine whether our scientific theories are ‘truly’ justified or whether the entities posited by the sciences ‘really’ exist. Rather, the naturalist addresses these traditional philosophical questions by trying to “improve, clarify, and understand” her system “from within” (1975a, 72). As a result, Quine argues, epistemology “simply falls into place as a chapter of psychology” (1969a, 83) and traditional metaphysical questions can “be answered within our total empirical, scientific system of the world” (1984a, 323).

Although metaphilosophical naturalism has become increasingly popular in the past few decades,<sup>1</sup> many contemporary naturalists dismiss Quine’s variant of the position as overly ‘scientistic’. According to Robert Almeder (1998, 2-6), for example, Quine’s idea that

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<sup>1</sup> In a recent survey among 931 leading philosophers, 49.8% of the respondents chose ‘Naturalism’ to describe their metaphilosophical position, whereas only 25.9% chose the non-naturalist option (Bourget and Chalmers 2013). See also Leiter (2004, 3), who speaks about a “naturalistic turn” in recent philosophy.

“the only legitimately answerable questions about the nature of human knowledge [...] are those we can answer in natural science” is a deeply scientific thesis that is without “rational justification”. Likewise, Andrew Lugg (2016, 204) has argued that even the philosophers who, like Quine, “despair of past philosophy”, regard his scientism “as a step too far”.<sup>2</sup> Indeed, many contemporary naturalists have urged for a variant of naturalism that is more modest; i.e. a variant of naturalism that can be qualified as ‘soft’, ‘open minded’, ‘naïve’, ‘harmless’, ‘nonscientistic’, ‘pluralistic’, and/or ‘liberal’.<sup>3</sup>

Despite the widespread diagnosis that Quine advocates a strongly scientific worldview, however, his own pronouncements on the issue draw a different picture. For, whenever Quine explicitly reflects on the nature of his naturalism, he always emphasizes that he does not “think of philosophy as part of natural science” (1993, 10), that there is nothing epistemologically distinctive about science (1960, §1), and that he intends to use the notion of ‘science’ “broadly” (1995, 49). Indeed, when confronted with P. F. Strawson’s distinction

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<sup>2</sup> See also Siegel (1995), Glock (2003), Putnam (2004), and Weir (2014). Some scholars classify Quine’s naturalism as ‘scientific’ without intending to use the term pejoratively. See, for example, Gibson (1988) and Gaudet (2006).

<sup>3</sup> See Strawson (1985), Stroud (1996), Hornsby (1997), Almeder (1998), De Caro and Macarthur (2004a), and Dupré (2004) respectively. The last term (‘liberal naturalism’) is from Mario De Caro and David Macarthur, who have edited two volumes (2004, 2010) devoted to developing this position. They define ‘liberal naturalism’ as a philosophical perspective “that wants to do justice to the range and diversity of the sciences, including the social and human sciences [...] and to the plurality of forms of understanding, including the possibility of non-scientific, nonsupernatural forms of understanding” (2010a, 9).

between “*strict* or *reductive* naturalism” on the one hand, and a more “*catholic* or *liberal* naturalism” on the other (1985, 1), Quine simply responds by claiming that the difference between the two variants “seems to waver and dissolve” (1985, 208), suggesting that Strawson “wouldn’t find the discrepancy” between the two if he had simply adopted “a more liberal or catholic conception of science” (1993, 13). Although Quine advances the view that naturalism “assimilates [epistemology] to empirical psychology” (1975a, 72), in other words, he seems to think of himself as a modest, nonscientistic naturalist.

Arguably the most detailed analysis of this tension in Quine’s work is from Susan Haack, who has argued in a series of papers (1990, 1993a, 1993b, 1997, 1998) that Quinean naturalism contains a “deep-seated and significant ambivalence” (Haack 1993a, 353). According to Haack, Quine’s naturalism is ambiguous because he unconsciously shifts between two notions of ‘science’. In some places, Quine seems to use the notion broadly, referring to empirical inquiry in general, whereas in other places he speaks narrowly about the ‘natural sciences’. When Quine uses the notion broadly he seems committed to a modest variant of naturalism, arguing that we may freely use our best scientific theories in resolving the traditional problems of epistemology. Yet when Quine defines naturalism using a narrow notion of science, Haack argues, he is committed to an implausible “revolutionary scientism” in which traditional epistemological problems are rejected as illegitimate (Haack 1998, 50-1). Because questions about the epistemic status of natural science cannot be answered from within natural science itself, Quine seems forced to maintain that such questions are ill-conceived, and hence to presuppose that the natural sciences have a privileged epistemic status. Haack’s alternative to Quine, her modest ‘aposteriorist’ variant of naturalism, on the other hand, *does* acknowledge the legitimacy of those epistemological questions. She argues

that natural science is “epistemologically distinguished”, not privileged, “the point being that distinction, unlike privilege, is earned” (1997, 497).

On two occasions, Quine has responded to Haack, arguing that he *is* committed to a modest variant of naturalism. Yet, in the light of the Haack’s forceful arguments, Quine’s replies seem somewhat disappointing. Quine does not attempt to dissolve the supposed ambiguity in his position, nor does he respond to Haack’s objection that his naturalism wrongly grants natural science a privileged epistemological status (Quine 1990b, 128). If anything, his replies seem to confirm Haack’s analysis. For immediately after claiming that he intends to use ‘science’ “[v]ery broadly almost always,” he argues that he sees “epistemic standards as internal to the *natural* sciences” (1997, 255, my emphasis).

Haack resolves the above-mentioned tension in Quine’s position by arguing that his ideas about the nature of naturalism are incoherent. In this paper, I will argue that a more charitable interpretation is possible; a reading in which Quine, like Haack, is genuinely committed to a modest variant of naturalism. In this paper, in other words, I aim to do justice to Quine’s own pronouncements on the issue and to resolve the tension in his position by offering a new perspective on his views about the nature of naturalism. Using both published and unpublished papers, lectures, and correspondence, I reconstruct Quine’s position and argue that he does not believe the natural sciences to be epistemically privileged. I show that Haack and Quine, in their exchanges, have been talking past each other because they have different conceptions of what constitutes a traditional epistemological question. Once this

mutual misunderstanding is cleared up, Quine's naturalism will turn out to be more modest, and hence less scientific, than many contemporary naturalists have presupposed.<sup>4</sup>

This paper is structured as follows. After introducing Haack's objections to Quine's ambivalent ideas about naturalism in more detail (§2), I argue that Quine is genuinely committed to a modest variant of naturalism. My argument proceeds in three steps. First I show that Quine, in his replies to Haack, misunderstands the latter's objection and that his responses need not be interpreted as confirming her diagnosis (§3). Second, I argue that Quine's epistemology should not be described as implausibly deferential, given his ideas about justification and the relation between science and common sense (§§4-5). Third, I argue that Quine's rejection of some traditional epistemological questions makes perfect sense even from within Haack's modest variant of naturalism (§6).

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<sup>4</sup> Note that I will be focusing solely on Quine's *metaphilosophical* naturalism, the view that philosophy ought to be continuous with science. Quine's views have also contributed to contemporary debates about *ontological* naturalism, the view that reality is exhausted by the natural world that is studied by the sciences. I thank an anonymous referee for pressing this issue. For what it is worth, I believe that in Quine's mature philosophy, ontological naturalism is implied by metaphilosophical naturalism. After all, Quine collapses the distinction between ontological commitment ("to what entities are we committed if we accept this scientific theory?") and metaphysics ("what entities *really* exist?") *because* he accepts no strict distinction between science and philosophy—i.e. *because* he rejects extra-scientific perspectives. For a discussion of Quine's views about metaphysics and ontology, see Verhaegh (forthcoming),

## 2. Haack's diagnosis

A natural starting point for our discussion is Haack's taxonomy of naturalisms. Haack distinguishes between two notions of 'science' and categorizes the different ways in which we might say that science and epistemology are continuous.<sup>5</sup> Haack's first notion of 'science' tracks the way in which the concept is most commonly used in the English-speaking world and is roughly coextensional with the *natural* sciences.<sup>6</sup> The second notion of 'science', on the other hand, refers to our empirical beliefs in general, including, next to the natural sciences, also our everyday empirical beliefs, history, and the humanities. This second notion, in other words, refers to our "web of empirical beliefs" in general (Haack 1993b, 172). In order to distinguish between the two notions, Haack dubs the first narrow usage '*science*' and the second broader usage 'SCIENCE'.

Haack uses her *science*/SCIENCE distinction to differentiate between three variants of naturalism of increasing strength:

- (a) *Reformist aposteriorist naturalism*: the thesis that traditional problems of epistemology can be resolved within SCIENCE.

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<sup>5</sup> Haack is not the only philosopher to have structured the way in which epistemologists use the term 'naturalism'. Maffie (1990) gives an overview of six different kinds of 'continuity' naturalists have appealed to, whereas Shook (2011) distinguishes between seven 'viable varieties of naturalism'.

<sup>6</sup> It should be noted that Haack's first notion also includes the cognitive sciences and might therefore not be completely identical to '*natural* science' as usually defined. I take it that Haack is just following Quine here, who also lists psychology as one of the natural sciences.

(b) *Reformist scientific naturalism*: the thesis that traditional problems of epistemology can be resolved within *science*.

(c) *Revolutionary scientific naturalism*: the thesis that traditional problems of epistemology are illegitimate or misconceived, and should be abandoned, to be replaced by questions of *science*. (Haack 1993b, 167-8)

(a) and (b) are both reformist because they propose to replace the traditional a priori *methods* of epistemology by the methods of either SCIENCE or *science*, whereas (c) is revolutionary because it proposes to abandon the traditional epistemologists' *problems*. (b) and (c) are both scientific because they make epistemology an enterprise internal to *science*, whereas (a) does not, positioning epistemology more broadly within the web of empirical belief.<sup>7</sup>

Haack herself defends (a), and justifies her position using Quine's gradualist picture of inquiry according to which we can only reason from within our "inherited world theory as a going concern" (Quine 1975a, 72):

reformist, aposteriorist naturalism is a straightforward consequence of Quine's repudiation of the a priori, of his gradualist conception of philosophy as differing

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<sup>7</sup> It should be noted that Haack's catalogue of naturalisms is substantially richer than presented here. For one thing, Haack also identifies two variants of naturalism that are weaker than (a). Second, for all variants of naturalism (a)-(c), Haack differentiates a narrow and a broad version depending on whether the thesis applies to all or only some problems of traditional epistemology. Because these further distinctions are not relevant for assessing the differences between Haack and Quine, however, I have left them out in my overview.



only in degree of generality and abstraction, not in the metaphysical or epistemological status of the truths it seeks, from the natural sciences. (Haack 1993b, 171)

According to Haack, Quine's gradualism only supports the thesis that epistemology and metaphysics are continuous with *science*, not the thesis that they are projects *within* science narrowly conceived. Epistemology and metaphysics, in other words, are projects within SCIENCE, not *science*.<sup>8</sup> Still, Haack complains, Quine himself often seems to defend a variant of naturalism that is closer to (b) or (c); for example, when he proposes to abandon traditional epistemology and settle for psychology (1969a, 82).

So how might we explain the gap between Quine's gradualist picture of inquiry, which only justifies (a), and his flirtations with stronger variants of naturalism? According to Haack, Quine shifts from (a) to (b) and even (c) due to his ambiguous use of the notion of 'science':

Here is a sketch of my diagnosis [...] Quine uses the term 'science' ambiguously, sometimes in the usual sense, to refer to those disciplines ordinarily classified as sciences, sometimes in a broader sense, to refer to our presumed empirical knowledge, generally [...] This explains how Quine shifts, apparently unselfconsciously, from aposteriorism to scientism. Because the traditional

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<sup>8</sup> See also Strawson (1990, 310), who, in response to Quine's claim that philosophy is continuous with science, remarks "'continuous with', not 'identical with'". Haack (1998, 50) approvingly cites Strawson's comment.

problems of epistemology do not lend themselves readily or obviously to resolution within the psychological or biological sciences of cognition, however, Quine then finds himself, in his scientific mood, under pressure to shift and narrow the questions with which he is concerned—to such a point that continuity with the familiar questions of epistemology is broken, and Quine finds himself tempted to cast doubt on the legitimacy of the old projects. This explains how Quine shifts, apparently unselfconsciously, from a reformist to a revolutionary stance. (Haack 1993b, 171-2)

Haack, in other words, argues that Quine first moves from (a) to (b) because he fails to differentiate between SCIENCE and *science*, speaking about the natural sciences where he should have spoken about our empirical beliefs in general. Quine is then pressured to shift from (b) to (c) because some traditional epistemological problems obviously cannot be resolved within *science*.

Haack illustrates her diagnosis by means of Quine's argument against scepticism, an argument that is supposed to show that sceptical worries are relatively innocent because they arise from within science. Haack argues that Quine's argument is ambiguous precisely because he shifts in the ways identified above. First, Quine moves from a claim about empirical knowledge in general to a claim about natural science. Consider, for example, the following passage:

Doubt prompts the theory of knowledge, yes; but knowledge, also, was what prompted the doubt. Scepticism is an offshoot of science. The basis for scepticism is

the awareness of illusion, the discovery that we must not always believe our eyes. [...] Illusions are illusions only relative to a prior acceptance of genuine bodies with which to contrast them [...] Common sense about bodies is thus needed as a springboard for scepticism [...] Epistemology is best looked on, then, as an enterprise within natural science. (1975b, 257-8)

In claiming that scepticism is an offshoot of ‘science’, Quine seems to be referring to SCIENCE, since he equates the term with both “knowledge” and “common sense about bodies”. Yet, he concludes that epistemology is to be seen as an enterprise within “*natural science*” (my emphasis). As a result, Quine shifts from the thesis that the philosopher requires SCIENCE as ‘a springboard for scepticism’ to the conclusion that scepticism is a problem within *science*. Quine here, in other words, shifts from (a) to (b).

According to Haack, Quine’s failure to distinguish between SCIENCE and *science*, leads to an ambiguous position about the legitimacy of the traditional epistemological problem posed by the sceptic. In “Things and Their Place in Theories”, for example, Quine defends the reformist view that “[r]adical scepticism [...] is not of itself incoherent”, thereby granting the legitimacy of the traditional epistemological problem (1981a, 21). From within our broad empirical web of knowledge (from within SCIENCE) this position makes sense. After all, Quine’s sceptic uses common sense experiential knowledge about illusions to claim that we might be mistaken about other knowledge as well, which seems perfectly legitimate. Quine, in these moods, only argues that “the skeptic may be seen [...] as overreacting when he repudiates knowledge across the board”, which seems fair given that the sceptic himself

presupposes SCIENCE in getting his argument of the ground (ibid.). Yet, on the very same page of his paper, Quine also seems to claim that scepticism *is* an incoherent position:

Transcendental argument, or what purports to be first philosophy, tends generally to take on [the] status of immanent epistemology insofar as I succeed in making sense of it. What evaporates is the transcendental question of the reality of the external world. (ibid.)

In this passage, Haack argues, Quine does *not* seem willing to concede that scepticism is coherent. Rather, he claims that the very question of the reality of the external world ‘evaporates’ within a naturalized epistemology. According to Haack, Quine’s move here is exemplary of the second shift distinguished above (i.e. from (b) to (c)): because the problem of scepticism does not make sense from within *science*, he is pressured to deny the legitimacy of the sceptical problem: “From the point of view of scientific naturalism, Cartesian hyperbolic skepticism must be ruled senseless” (Haack 1993a, 343).

Haack’s problem with Quine’s scientific variant of naturalism, therefore, is that it cannot do justice to the traditional epistemologists’ problems. This is especially clear when one considers the question whether natural science has a special epistemic status. According to Haack, this question “seems patently legitimate” but it is “implausible to suppose” that it can be settled “exclusively by or exclusively within *science*” (1993b, 187). For examining the epistemic status of *science* from within *science* is just as circular as examining the epistemic status of a Sacred Text by reference to that Text itself, or so Haack argues:

Qua scientific naturalist [...] Quine can allow no *suprascientific* tribunal; he can only inform us that [*science*] is certified by *science* itself. Reflecting, however, that that what is said in the Sacred Text is true may be certified as true by the Sacred Text itself, one realizes that this is scarcely the reassurance for which one hoped. (Haack 1993a, 250)

Because scientific naturalism does not allow a perspective outside *science*, Quine seems committed to the claim that *science* is epistemically privileged; he cannot but presuppose the legitimacy of *science* from the outset. This problem does not seem to arise for the modest aposteriorist naturalist, position (a) above, however. Haack, who defends (a), *can* appeal to a perspective outside *science* (i.e. the everyday empirical beliefs that are part of SCIENCE but not of *science*) in order to examine the epistemic status of *science*. And from within this broader perspective, she does not have to conclude that *science* is privileged:

*science* has had spectacular successes, has come up with deep, broad and detailed explanatory hypotheses which are anchored by observation and which interlock surprisingly with each other. [...] *Science*, as I see it, has done rather well, by and large, at satisfying the criteria by which we judge the justification of empirical beliefs [...] These criteria are not internal to, nor restricted to, *science*, they are the criteria we use in appraising the evidence for everyday empirical beliefs as well. (Haack 1993b, 187)

The aposteriorist naturalist, in other words, can appeal to her SCIENTIFIC criteria of good evidence to explain why *science* has been so successful; she does not, like Quine, have to *presuppose* that *science* is epistemically privileged.

### 3. Quine's Replies

Haack's arguments seem to pose a dilemma for Quine. Either he has to give up on the idea that his naturalism is modest or he has to abandon the idea that traditional epistemological problems are illegitimate and that epistemology should be "assimilate[d] to psychology" (1975a, 72). In his responses to Haack, however, Quine (1990b, 1997) seems to vacillate between these two options. On the one hand, it looks as though Quine commits himself to an aposteriorist variant of naturalism. In his first reply (1990b, 128), for example, he ignores Haack's claim that "Epistemology Naturalized" seems "to include reformist as well as revolutionary elements" (1990, 112), and argues that he is "happy" to be classified as an aposteriorist reformist naturalist (position (a) above). Similarly, in his second reply, Quine (1997, 255) waves away Haack's allegation that he uses "'science' ambiguously" (1997, 503), by claiming that he intends to use 'science' "[v]ery widely almost always— even including history". Yet, in response to Haack's explicit question whether he sees epistemic standards as internal to the *natural* sciences, on the other hand, Quine answers affirmatively: "yes, as engineering is" (1997, 255).

As a result, Quine's responses can be interpreted as confirming Haack's diagnosis that his ideas about naturalism are ambivalent. In this interpretation, Quine is committed to an

implausibly strong scientism, but when push comes to shove he appeals to a broad notion of ‘science’ and a modest variant of naturalism in order to escape the unwelcome consequences of his position. In what follows, however, I argue that this interpretation is misguided and show that a more charitable reading is possible; a reading in which Quine, like Haack, is genuinely committed to a modest, aposteriorist naturalism.

As a first step toward this alternative interpretation, let me dissolve the apparent inconsistency in Quine’s replies to Haack. The key to understanding Quine’s answer to Haack’s question about the source of our epistemic standards, is his reference to ‘engineering’. This indicates that Quine has misunderstood Haack’s question. For Quine has always used his engineering analogy in response to a slightly different objection, viz. the argument that his naturalized epistemology cannot account for our epistemic standards *at all*. Consider, for example, Quine’s response to Morton White’s (1986) suggestion that his naturalized epistemology has no way to account for our normative epistemic standards:

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 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, truth or prediction. The normative here, as elsewhere in engineering, becomes descriptive when the terminal parameter is expressed. (Quine 1986, 664-5)

In this passage, Quine does not use the engineering analogy to show that epistemic standards are internal to *science* instead of SCIENCE like he seems to do in his response to Haack. After all, in the passage he merely claims that a naturalist may make ‘free use of whatever scientific findings may suit its purpose’. Rather, he uses the analogy to show that normative epistemology is not lost in the naturalization process.

When Quine, in his response to Haack, confirms that epistemic standards are internal to the natural sciences ‘as engineering is’, therefore, he misinterprets Haack’s question. Haack asks whether our epistemic standards are internal to *science* or SCIENCE, but Quine interprets the question as one about *whether* the naturalized epistemologist can account for epistemic standards *at all*. This reading is confirmed in *From Stimulus to Science*, where Quine explicitly claims that normative epistemology is a project within SCIENCE, not *science*: “A normative domain within epistemology survives the conversion to naturalism [...] Normative epistemology is the art or technology *not only of science, in the austere sense of the word, but of rational belief generally*” (1995, 49-50, my emphasis).

#### **4. SCIENCE vs. *science***

I have argued that Quine’s replies to Haack need not confirm the diagnosis that his ideas about naturalism are ambivalent. His responses are also compatible with an interpretation in which he *does* fully subscribe to an aposteriorist variant of naturalism. In what follows, I argue that this reading is the only correct one by reconstructing what would have been Quine’s response if he had interpreted Haack’s question correctly. As I will make clear, Quine’s work



unambiguously shows that he would have agreed with Haack that epistemic standards are internal to SCIENCE and therefore that he does not believe *science* to be epistemically privileged. My argument proceeds in two steps. In the present section, I argue that although Quine often sloppily uses the two notions of science interchangeably, his epistemology cannot be described as scientific on the basis of his ideas about the relation between SCIENCE and *science*. In the final two sections, I show that Quine's revolutionary talk of abandoning certain epistemological problems as misconceived makes perfect sense even from within an aposteriorist naturalism, at least that is, when we get clear on the problems Quine has in mind when he dismisses traditional epistemology.

Let me start with Quine's ideas about the relation between SCIENCE and *science*. Throughout his career, Quine has always emphasized that the difference between the two notions is one of degree and not kind. The evidential standards of *science*, Quine argues, are nothing more than a refinement of the norms we all use in our everyday inquiries:

science is itself a continuation of common sense. The scientist is indistinguishable from the common man in his sense of evidence, except that the scientist is more careful. This increased care is not a revision of evidential standards, but only the more patient and systematic collection and use of what anyone would deem to be evidence. If the scientist sometimes overrules something which a superstitious layman might have called evidence, this may simply be because the scientist has other and contrary evidence which, if patiently presented to the layman bit by bit, would be conceded superior. (1954, 233)

Quine, in other words, does not believe in a special *scientific* method. Rather, the norms of *science* are continuous with the methods that guide us in our everyday inquiries.<sup>9</sup> Given Quine's genetic approach to epistemology, this conclusion should come as no surprise. For if Quine is right that "the evidential relation is virtually enacted [...] in the learning", that there is "a partnership between the theory of language learning and the theory of scientific evidence" (1975b, 264), then our best *scientific* methods are literally an outgrowth of the way in which we have all learned our common sense theories of the world. After all, in learning our language, we all first start with acquiring a theory of the world in which everything consists of middle-sized physical objects. It is only later in his career, that the scientist gets "ahead of common sense" by introducing "system into his quest and scrutiny of evidence", thereby broadening "the knowledge which the man in the street already enjoys, in moderation, in relation to the commonplace things around him" (1954, 229, 233).

Quine, therefore, has no incentive to strictly distinguish between SCIENCE and *science*. Indeed, whenever he reflects explicitly about his notion of 'science', he always claims that he intends to use it broadly.<sup>10</sup> So how then might we explain Quine's vacillation

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<sup>9</sup> See also, for example, Quine's (1960, 3): "science is self-conscious common sense"; his (1969b, 129): "[Science] [...] differs from common sense only in degree of methodological sophistication"; and his (1984b, 310): "science is refined common sense".

<sup>10</sup> Besides the claim in his response to Haack, he also commits himself to a broad notion of 'science' in his (1995, 49), (1995a, 462), (1995b, 34), and in a letter to Christopher Hookway (May 31, 1988), in which he protests against the narrow conception of science that is ascribed to him in Hookway (1988): "All these passages ascribe a far narrower conception of science to me than I hold. I even accept history". Quine always seems to have been committed to a broad notion of science.

between broad and narrow uses of science when he is not explicitly contemplating his use of the notion? Ironically, Haack herself provides the explanation. Recall that Haack grounds her aposteriorist naturalism on Quine's gradualist 'conception of philosophy as differing only in degree of generality and abstraction [...] from the natural sciences'. Now, according to Haack, it is this very gradualism which "disinclines [Quine] to attach much significance to the distinction between the broader and the narrower use" (Haack 1993b, 171):

Gradualism is the thesis that philosophy is essentially like, is continuous with, empirical inquiry generally; since the natural sciences constitute a major and central part of such inquiry, gradualism highlights the similarity in method and purpose between philosophy and the natural sciences. It thus encourages Quine to use the term "science", which ordinarily refers to those disciplines classified as natural sciences, as a convenient way of referring to our beliefs about the world, quite generally. (Haack 1993a, 339)

In other words, it is because *science* has so much in common with our ordinary empirical inquiries, that Quine has no reason to draw a strict distinction between *science* and SCIENCE.

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Already in "Two Dogmas of Empiricism", Quine equates "total science" with "[t]he totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic" (1951, 42).

Our common sense theories about the world are, for Quine, already primitive scientific theories.<sup>11</sup>

## 5. A Deflationary Theory of Justification

Quine's epistemology, therefore, cannot be described as scientific on the basis of his ideas about the nature of *science*. According to Quine, there is no reason to distinguish strictly between our ordinary empirical and our natural scientific inquiries. So far so good. Yet Haack's objection to Quine still stands. Haack's problem with Quine's naturalism is that he often seems to dismiss some legitimate epistemological questions as being misconceived. For example, when he proposes to “settle for psychology” and to examine how we in fact construct our scientific theories out of our sensory evidence (1969a, 75), or when he writes that his naturalized epistemology “evaporates [...] the transcendental question of the reality of the external world” (1981a, 22). So even if Quine has all the *resources* for a modest aposteriorism, he still seems committed to the revolutionary scientific claim that some traditional problems of epistemology *are* illegitimate. In this section and the next, however, I show that this final matter of contention can be dissolved as well. I argue that a closer examination of what Quine does and does not reject when he dismisses ‘traditional epistemology’ will show that his ‘revolutionary’ claims also make perfect sense from an aposteriorist perspective.

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<sup>11</sup> Indeed, Quine often speaks about our ordinary object-based ontology as “rudimentary physical science”. See, for example, (1975b, 258) and (1995, 15).

Let me first examine what Quine is *not* dismissing when he claims that we should settle for psychology. In naturalizing epistemology, Quine is not abandoning normative questions about justification. That is, he does not *replace* normative epistemology with descriptive psychology. Quine's epistemology remains deeply normative. For not only has he always explicitly insisted that the “[n]aturalization of epistemology does not jettison the normative” (1986, 664-5), also in his general theorizing he has shown how deeply concerned he is with the norms that guide us in our scientific theorizing beyond the strictures of logic.<sup>12</sup>

How we should think about Quine's normative epistemology becomes clear when we take seriously his commitment to a radically science-immanent perspective, i.e. his commitment to the view that “we can never do better than occupy the standpoint of some theory or other, the best we can muster at the time” (1960, 22). It is generally recognized that this commitment leads Quine to adopt a deflationary, immanent conception of truth.<sup>13</sup> Until quite recently, however, most scholars failed to recognize that this commitment also leads Quine to adopt an immanent, *deflationary theory of justification*, i.e. a theory which does not seek a substantive extra-scientific explanation for the justification of some of our statements beyond their being included in or excluded by our best scientific theory of the world.

Rather than interpreting Quine as offering a deflationary theory of justification, scholars usually interpret him as *rejecting* any talk of justification whatsoever as his project of examining how theory and evidence are actually related is thought to be incompatible with

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<sup>12</sup> See Verhaegh (2017, §3).

<sup>13</sup> See Quine (1994, 230): “the immanent is that which makes sense within naturalism, *in mediis rebus*, and the transcendent is not. Accordingly, truth better be immanent for me [...] too” (1994b, 230) .

any normative programme. Scholars, in short, usually interpret Quine as replacing normative epistemology with descriptive psychology. What is overlooked, however, is that Quine, in his project, does appeal to a deflationary notion of justification, a notion according to which facts about how we *actually* construct theory from evidence coincide with facts about how we *should* do this. When Quine defines naturalism as the view according to which our best scientific theories “are not in need of any justification *beyond* observation and the hypothetico-deductive method” (1975a, 72, my emphasis), he is not rejecting talk about justification; he is only rejecting substantive extra-scientific theories of justification.<sup>14</sup> Our best scientific theories are not in need of any extra-scientific justification because they are already justified *in virtue of* their being our best scientific theories.<sup>15</sup>

## 6. Quine and Haack on ‘traditional epistemology’

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<sup>14</sup> See, for example, Gregory (2008), Ebbs (2011), and Sinclair (2014). Ebbs aptly dubs Quine’s theory a “minimalist understanding of justification” (2011, 630).

<sup>15</sup> See also Johnsen (2005, 88): “so far is [Quine] from proposing to abandon the normative that he is proposing instead to *discover* the norms that govern theorizing by discovering the norms that we conform to in our theorizing [...] What he is [...] proposing is to *enlist the aid of psychology* in addressing the burden of epistemology: psychology will identify the norms we adhere to, and philosophy will tell us that, *by virtue of* their being the ones we adhere to, they are the ones we *are to* adhere to”.

Returning to Haack's accusation that Quine rejects some legitimate epistemological questions, we see now that this is largely a mistake. Quine does not abandon epistemology; he only rejects traditional epistemology when it is interpreted as a transcendental project; i.e. when it is interpreted as a SCIENCE-independent inquiry, taking place outside our empirical web of belief, and aiming to justify SCIENCE from a SCIENCE-independent perspective:

I think of the basic tenet [of naturalism] as a negative one, namely that we can't hope for any evidence, any avenue to truth higher than or more fundamental than ordinary scientific method itself. The method of prediction, and then experimental testing of the predictions. So that the traditional epistemological quest for something firmer than science that would serve as a justification of scientific method is dismissed as a mistake. (1994a, 71-2)

Quine has no problem with any epistemological project in particular. He only rejects the idea that these projects can be carried out in a SCIENCE-independent fashion. For, according to Quine, “[t]here is no such cosmic exile” (1960, 275).

This interpretation of Quine is confirmed when we examine closer his supposedly contradictory position about the legitimacy of sceptical questions. As we have seen in §2, Quine both allows and dismisses sceptical questions, sometimes even on the very same page. Now let us re-examine his claims with the above interpretation in mind. When Quine argues that his naturalized epistemology “evaporates the transcendental question of the reality of the external world” (1981a, 22), we should note that he is explicitly talking about a *transcendental* question; that is, a question asked from a SCIENCE-independent vantage

point. And when Quine, on the same page, argues that “radical scepticism [...] is not of itself incoherent”, he again qualifies his claim by adding that these sceptical doubts “would still be *immanent*, and of a piece with the scientific endeavour” (my emphasis). Quine, in other words, allows scepticism when it is interpreted immanently, but dismisses it when it is interpreted transcendentally. This qualified response makes perfect sense when we keep in mind Quine’s rejection of transcendental epistemology. When the sceptic argues that there is no absolute SCIENCE-independent foundation for science, no Cartesian certainty, Quine can simply dismiss the argument as illegitimate. After all, his naturalism implies that the very idea of such an external vantage point is a mistake: “the immanent is that which makes sense within naturalism, *in mediis rebus*, and the transcendent is not” (1994b, 230). But when the sceptic admits that her doubts about science arise from within our empirical web of beliefs, because science seems “vulnerable to illusion on its own showing” (1981a, 22), Quine no longer has any reason to believe that the sceptic’s questions are incoherent.<sup>16</sup>

In dismissing ‘traditional epistemology’, Quine is therefore primarily rejecting Cartesian *interpretations* of epistemology according to which it is the philosopher’s task to validate science from some science-independent perspective. This is a radical break with the epistemological tradition, but it is perfectly consistent with Haack’s modest variant of naturalism. After all, as we have seen, Haack’s aposteriorism too is based on Quine’s “conception of philosophy as differing only in degree of generality and abstraction, not in the metaphysical or epistemological status of the truths it seeks, from the natural sciences” (Haack 1993b, 171). In rejecting the traditional a priori methods of epistemology, in other

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<sup>16</sup> See Verhaegh (2014, §5) for a more extended defense of this interpretation of Quine’s response to the sceptic.



words, Haack too claims that there is no SCIENCE-independent foundation for SCIENCE. Indeed, when Haack reflects on the possibility of vindicating her own criteria of justification, she argues that her attempts will always be conditional on what she herself takes “to know about human subjects and their cognitive abilities and limitations”. The best any naturalist can do, Haack argues, is to investigate “the satisfactoriness of our criteria of justification from within the web of belief” (1990, 122-4).<sup>17</sup>

When Haack and Quine discuss the latter’s ‘revolutionary’ claims, therefore, they are talking past each other. Quine’s claim that some problems of ‘traditional epistemology’ are illegitimate does not constitute a rejection of traditional epistemological talk about justification and scepticism. Rather, he dismisses traditional *interpretations* of justification and scepticism, interpretations which Haack, as a naturalist, dismisses herself as well. More schematically, any theory about justification will be (1) a *scientific* theory, (2) a SCIENTIFIC but not a *scientific* theory, or (3) a transcendental theory. Haack interprets Quine as arguing against the idea that epistemological theories can be of type (2) and as rejecting the traditional problems of justification and scepticism because there is no plausible

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<sup>17</sup> As a result, Haack’s comparison of the claim that we should examine the epistemic status of *science* from within *science* itself with the claim that we should examine the epistemic status of a Sacred Text by reference to that Text itself (Haack 1993a, 250) is not entirely fair. For Haack’s position itself implies that we ought to examine the epistemic status of SCIENCE from within SCIENCE itself. It is perhaps because of this reason that Haack’s ‘Sacred Text-argument’ is omitted from her (1993b, ch. 6), even though this chapter largely resembles her (1993a) in other respects.

reinterpretation of those problems within *science*.<sup>18</sup> But in fact, Quine is merely arguing against the idea that epistemological theories can be of type (3), a claim with which not even a modest naturalist will disagree.<sup>19</sup>

This mutual misunderstanding about what defines ‘traditional epistemology’ is probably best explained by the different contexts in which Quine and Haack conducted their inquiries. In much of his early work, Quine was primarily out to defend his naturalism against a conception of epistemology in which “the epistemologist’s goal is *validation* of the grounds of empirical science” (1969a, 75, my emphasis). His main concern, therefore, was the distinction between theories of type (1) or (2) on the one hand, and theories of type (3) on the other. Haack, on the other hand, wrote *Evidence and Inquiry* in the early 1990s, when

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<sup>18</sup> That it is a mistake to think that Quine sees philosophical problems as problems within *science* also becomes clear from his response to Paul Horwich’s suggestion that he “think[s] of philosophy as part of natural science”. Quine explicitly denies that the characterization is correct: “No, that is not the characterization I intend. I may occasionally say things which sound very much like that, or even exactly like that. But what I mean is that philosophy is *continuous with science*” (1993, my emphasis).

<sup>19</sup> Of course Haack and Quine can disagree about the details of what a SCIENCE-immanent theory about justification should look like. There are many ways in which one might set up a SCIENCE-immanent theory of justification. In broad outlines, however, Quine and Haack agree. In *Evidence and Inquiry*, Haack develops what she calls a “foundherentist” notion of justification (1993a, 13). In his response to Haack, Quine explicitly expresses his sympathy with foundherentism (1990b, 128). See also Quine’s letter to Haack (December 6, 1993), in which he claims that Haack’s “blend of foundationalism and coherentism” strikes him “as the way to go” (my transcription).

broadly anti-Cartesian interpretations of epistemology were already commonplace.<sup>20</sup> She primarily intends to defend her ideas about the nature of philosophy against approaches that have become *too* sceptical about epistemology.<sup>21</sup> In other words, she takes Quine's rejection of type-(3) theories for granted and focuses more narrowly on the distinction between theories of type-(1) and type-(2), a distinction to which Quine is not sensitive given his ideas about the relation between *science* and SCIENCE (§4). Because Quine and Haack have different distinctions in mind, they are talking past each other. Quine, as we have seen in §3, misunderstands Haack's question as a question about whether the naturalized epistemologist can account for epistemic standards in terms of either type-(1) or type-(2) statements; and Haack misunderstands Quine when he abandons certain type-(3) statements as misconceived.

Now this mutual misunderstanding is cleared up, we can see that although Quine and Haack's epistemologies differ in emphasis, they have a common enemy: the traditional Cartesian epistemologist who dismisses any attempt to incorporate scientific results in our

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<sup>20</sup> Indeed, in his early 1990s book *Pursuit of Truth*, Quine claims that he is of "*that large minority or small majority* who repudiate the Cartesian dream of a foundation for scientific certainty firmer than scientific method itself" (1990a, 19, my emphasis).

<sup>21</sup> Next to her chapter on Quine, two other chapters of Haack's *Evidence and Inquiry* are concerned with defending her conception against such sceptics—i.e. one chapter is concerned with reliabilist rejections of internalism and one chapter is concerned with Rorty's "vulgar pragmatism". Note that Quine would be critical about these sceptical theories, *qua* theories about justification, as well. For Quine's rejection of Rorty's (1979, 202) claim that his theory is devoid of talk of justification, see his (1990c, 151). For a suggestion about how Quine would have responded to reliabilism, see Johnsen (2005, 92-3).

theories of knowledge as circular. Both believe that our theories about justification should be immanent and both reject the circularity charge as misconceived. There are no external vantage points; even the epistemologist who is interested in ratifying our criteria of justification can only examine and evaluate our epistemic norms from within the web of empirical beliefs in which those very norms are employed. Both Quine and Haack, in other words, are modest aposteriorist naturalists.

## 7. Conclusion

I have offered a reading of Quine's naturalism in which the adoption of a radically *immanent* perspective lies at the heart of his philosophy. First and foremost, Quinean naturalism is a rejection of the transcendental, i.e. a dismissal of any philosophy that purports to offer an outside vantage point.<sup>22</sup> Quine rejects traditional epistemology because it presupposes an external perspective, not because it is inherently unscientific. In response to the question as to wherein our perspective should be immanent, Quine's answer, of course, is 'science'. It is partly because of this reason that his naturalism is often interpreted as scientific. It is my contention, however, that such a reading presents Quine's philosophy the wrong way around. Even if we, like Quine, adopt a strictly science-immanent perspective, a question that remains to be answered is how broad our conception of science ought to be. Quine's notion of science, we saw, is quite broad as it encompasses what Haack (1993a, 172) calls our complete 'web of empirical beliefs', including common sense. It is only *after* adopting such a

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<sup>22</sup> See also Verhaegh (in press, §2).

broadly science-immanent perspective that Quine, in regimenting his language, starts making choices that many contemporary philosophers have argued to be unduly restrictive. Quine's ideas about the *ultima facie* bounds of science, in other words, are established from within as well (Ricketts, 1982). Quine's *naturalism*, in conclusion, is not overly scientific; whether or not one ends up with a scientific philosophy depends on the choices one makes while trying to "improve, clarify, and understand [one's] system from within" like "the busy sailor adrift on Neurath's boat" (1975a, 72).

### References

- Almeder, R. (1998). *Harmless Naturalism: The Limits of Science and the Nature of Philosophy*. Open Court, Chicago.
- Barrett, R. B. and Gibson, R. F., editors (1990). *Perspectives on Quine*. Basil Blackwell, Cambridge, MA.
- Bourget, D. and Chalmers, D. (2014). What do Philosophers Believe? *Philosophical Studies*, 170(3):465–500.
- De Caro, M. and Macarthur, D., editors (2004). *Naturalism in Question*. Cambridge University Press, Cambridge, MA.
- (2004a). Introduction: The Nature of Naturalism. In De Caro and Macarthur (2004), pp. 1-17.
- , editors (2010). *Naturalism and Normativity*. Columbia University Press, New York.

- (2010a). Introduction: Science, Naturalism, and the Problem of Normativity. In De Caro and Macarthur (2010), pp. 1-19.
- Dupré, J. (2004). The Miracle of Monism. In De Caro and Macarthur (2004), pp. 36-58.
- Ebbs, G. (2011). Quine Gets the Last Word. *The Journal of Philosophy*, 108(11):617–632.
- Gaudet, E. (2006). *Quine on Meaning: The Indeterminacy of Translation*. Continuum, London.
- Gibson, R. F. (1988). *Enlightened Empiricism: An Examination of W. V. Quine's Theory of Knowledge*. University of South Florida Press, Tampa.
- Glock, H. J. (2003). *Quine and Davidson on Language, Thought and Reality*. Cambridge University Press, New York.
- Gregory, P. A. (2008). *Quine's Naturalism: Language, Theory and the Knowing Subject*. Continuum, London.
- Haack, S. (1990). Rebuilding the Ship while Sailing on the Water. In Barrett and Gibson (1990), pp. 111-127.
- (1993a). The Two Faces of Quine's Naturalism. *Synthese*, 94(3):335–356.
- (1993b). *Evidence and Inquiry*. Second and expanded edition (2009). Prometheus Books, Amherst.
- (1997). The Puzzle of 'Scientific Method'. *Revue Internationale de Philosophie*, 51(4):495–505.
- (1998). Between the Scylla of Scientism and the Charybdis of Apriorism. In Hahn, L., editor. *The Philosophy of P. F. Strawson*. Volume XXVI, pp. 49-63. Open Court, La Salle, Ill.
- Hahn, L. and Schilpp, P. (1986). *The Philosophy of W. V. Quine*. The Library of Living

- Philosophers. Volume XVIII. Expanded edition (1998). Open Court, La Salle, Ill.
- Harman, G. and Lepore, E., editors (2014). *A Companion to W.V.O. Quine*. Wiley Blackwell, Chichester.
- Hookway, C. (1988). *Quine: Language, Experience and Reality*. Polity Press, Cambridge.
- Hornsby, J. (1997). *Simple Mindedness: In Defense of Naïve Naturalism in the Philosophy of Mind*. Harvard University Press, Cambridge, MA.
- Janssen-Lauret, F. and Kemp, G., editors (2016). *Quine and his Place in History*. Palgrave Macmillan, New York.
- Johnsen, B. (2005). How to Read ‘Epistemology Naturalized’. *The Journal of Philosophy*, 102(2):78–93.
- Leiter, B. (2004). Introduction. In Leiter, editor. *The Future to Philosophy*, pp. 1-23. Oxford University Press, Oxford.
- Lugg, A. (2016). Quine, Wittgenstein and ‘The Abyss of the Transcendental’. In Janssen-Lauret and Kemp (2016), pp. 198-209.
- Maffie, J. (1990). Recent Work on Naturalized Epistemology. *American Philosophical Quarterly*, 27(4):281–293.
- Putnam, H. (2004). *Ethics without Ontology*. Harvard University Press, Cambridge, MA.
- Quine, W. V. (1951). Two Dogmas of Empiricism. In Quine (1953), pp. 20-46.
- (1953). *From a Logical Point of View*. Second and Revised Edition (1961). Harvard University Press, Cambridge MA.
- (1954). The Scope and Language of Science. In Quine (1966), pp. 228- 245.
- (1960). *Word and Object*. The M.I.T. Press, Cambridge, MA.
- (1966). *The Ways of Paradox and Other Essays*. Random House, New York. Revised

- edition (1976). Harvard University Press, Cambridge, MA.
- (1969). *Ontological Relativity and Other Essays*. Columbia University Press, New York.
- (1969a). Epistemology Naturalized. In Quine (1969), pp. 69-90.
- (1969b). Natural Kinds. In Quine (1969), pp. 114-138.
- (1975a). Five Milestones of Empiricism. In Quine (1981), pp. 67-72.
- (1975b). The Nature of Natural Knowledge. In Quine (2008a), pp. 257-270.
- (1981). *Theories and Things*. Harvard University Press, Cambridge, MA.
- (1981a). Things and Their Place in Theories. In Quine (1981), pp. 1-23.
- (1984a). Sticks and Stones; or, The Ins and Outs of Existence. In Quine (2008b), pp. 312-324.
- (1984b). What I Believe. In Quine (2008b), pp. 307-311.
- (1985). Four Hot Questions in Philosophy. Review of Strawson (1985). In Quine (2008b), pp. 206-210.
- (1986). Reply to Morton White. In Hahn and Schilpp (1986), pp. 663-665.
- (1990a). *Pursuit of Truth*. Revised edition (1992). Harvard University Press, Cambridge, MA.
- (1990b). Comment on Haack. In Barrett and Gibson (1990), p. 128.
- (1990c). Let Me Accentuate the Positive. In Quine (2008b), pp. 149-151.
- (1993a). In Conversation: Professor W. V. Quine. Interviews by Rudolf Fara. Unpublished Transcripts with Autograph Manuscript Revisions. W. V. Quine Papers (MS Am 2587): Box 086, Item 2498. Houghton Library, Harvard University.



- (1994a). Interview with Willard Van Orman Quine. Interview by L. Bergström and D. Føllesdal. In Quine (2008b), pp. 69-81.
- (1994b). Responses to Articles by Abel, Bergström, Davidson, Dreben, Gibson, Hookway, and Prawitz. In Quine (2008b), pp. 223-234.
- (1995). *From Stimulus to Science*. Harvard University Press, Cambridge, MA.
- (1995a). Naturalism; Or, Living within One's Means. In Quine (2008a), pp. 461-472.
- (1995b). Response to Gary Ebbs. In Janssen-Lauret and Kemp (2016), pp. 33-36.
- (1997). Responses to Essays by Smart, Orenstein, Lewis and Holdcroft, and Haack. In Quine (2008b), pp. 251-256.
- (2008a). *Confessions of a Confirmed Extensionalist and Other Essays*. Edited by Føllesdal, D. and D. B. Quine. Harvard University Press, Cambridge, MA.
- (2008b). *Quine in Dialogue*. Edited by Føllesdal, D. and D. B. Quine. Harvard University Press, Cambridge, MA.
- and Haack, S. (1975-1997). The Quine-Haack Correspondence. W. V. Quine Papers (MS Am 2587): Box 017, Item 447. Houghton Library, Harvard University.
- and Hookway, C. (1988). The Quine-Hookway Correspondence. W. V. Quine Papers (MS Am 2587): Box 020, Item 529. Houghton Library, Harvard University.
- Ricketts, T. G. (1982). Rationality, Translation, and Epistemology Naturalized. *The Journal of Philosophy*, 79(3):117–136.
- Rorty, R. (1979). *Philosophy and the Mirror of Nature*. Princeton University Press, Princeton.
- Siegel, H. (1995). Naturalized Epistemology and 'First Philosophy'. *Metaphilosophy*,

26(1):46–62.

Shook, J. (2011). Varieties of Twentieth Century American Naturalism. *The Pluralist*, 6(2):1-17.

Sinclair, R. (2014). Quine on Evidence. In Harman and Lepore (2014), pp. 350-372.

Strawson, P. F. (1985). *Scepticism and Naturalism: Some Varieties*. Methuen, London.

——— (1990). Two Conceptions of Philosophy. In Barrett and Gibson (1990), pp. 310-318.

Stroud, B. (1996). The Charm of Naturalism. *Proceedings and Addresses of the American Philosophical Association*, 70(2):43-55.

Verhaegh, S. (2014). Quine’s Argument from Despair. *British Journal for the History of Philosophy*, 22(1):150-173.

Verhaegh, S. (2017). Quine’s ‘Needlessly Strong’ Holism. *Studies in History and Philosophy of Science, Part A*, 61(1):11-20.

Verhaegh, S. (in press). Boarding Neurath’s Boat: The Early Development of Quine’s Naturalism. *Journal of the History of Philosophy*, 55(2).

Verhaegh, S. (forthcoming). Blurring Boundaries: Carnap, Quine, and the Internal-External Distinction. *Erkenntnis*.

Weir, A. (2014). Quine’s Naturalism. In Harman and Lepore (2014), pp. 114-147.

White, M. (1986). Normative Ethics, Normative Epistemology, and Quine’s Holism. In Hahn and Schilpp (1986), pp. 649-662.