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NATURALISM IN EPISTEMOLOGY AND THE PHILOSOPHY OF LAW

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ABSTRACT. In this paper, I challenge an influential understanding of naturalization according to which work on traditional problems in the philosophy of law should be replaced with sociological or psychological explanations of how judges decide cases. W.V. Quine famously proposed the 'naturalization of epistemology'. In a prominent series of papers and a book, Brian Leiter has raised the intriguing idea that Quine's naturalization of epistemology is a useful model for philosophy of law. I examine Quine's naturalization of epistemology and Leiter's suggested parallel and argue that the parallel does not hold up. Even granting Leiter's substantive assumption that the law is indeterminate, there is no philosophical confusion or overreaching in the legal case that is parallel to the philosophical overreaching of Cartesian foundationalism in epistemology. Moreover, if we take seriously Leiter's analogy, the upshot is almost the opposite of what Leiter suggests. The closest parallel in the legal case to Quine's position would be the rejection of the philosophical positions that lead to the indeterminacy thesis.

* This essay was written for a conference entitled 'Naturalism and Other Realisms in Philosophy of Law', held in 2001 at Columbia University. It has never been published, but the conference paper has circulated since 2001 and has been available on the Internet for several years. (The paper has circulated under different titles; the conference paper was entitled: 'Unnatural Proposal: Indeterminacy as a Motivation for the Naturalization of Legal Philosophy'.) The paper has been fortunate enough to attract commentary, published and unpublished, from several writers, including Brian Leiter himself (in his 2007 book). For this reason among others, I have decided to publish the conference paper in a form pretty close to the original and to write a new paper, 'Implications of Indeterminacy: Naturalism in Epistemology and the Philosophy of Law II' (2011, this volume; hereafter, *Naturalism II*), in which I give my present take on the issues. (In addition, given the length of time that has elapsed since I wrote the original paper, if I were to begin revising it now, I would probably end up rewriting it completely.) From my present vantage point, the substantive issue of the implications for philosophy of law of the American Legal Realists' indeterminacy thesis strikes me as more important than Leiter's analogy between the Legal Realists and Quine. In the new paper, I therefore focus on that issue in addition to responding to Leiter's discussion of my original paper.

I. INTRODUCTION

Over the past few decades, motivated in part by the explanatory achievements of the natural sciences, there has been a powerful movement toward the naturalization of philosophy. To naturalize an area of philosophy is, roughly speaking, to make it consistent with the natural sciences' methods and understanding of the world. Recently, naturalization has become an important topic of discussion in the philosophy of law. In this paper, I criticize an influential understanding of naturalization according to which work on traditional problems in the philosophy of law should be replaced with sociological or psychological explanations of how judges decide cases.

W.V. Quine, the seminal figure in the naturalization of philosophy, famously proposed the 'naturalization of epistemology' (1969). Very roughly, Quine apparently argued that we should replace certain traditional philosophical inquiries into the justification of our beliefs with empirical psychological inquiry into how we actually form beliefs. In a prominent series of papers and a recent book, Brian Leiter (1997; 1998; 2001; 2007) has raised the intriguing idea that Quine's proposed naturalization of epistemology is a useful model for philosophy of law.

Leiter develops a parallel between the epistemological and legal cases. On the epistemological side, Quine's starting point is a traditional philosophical project that involves showing that our beliefs – in particular, our beliefs in scientific theories – can be validated as certain by means of logical deduction from sense data. On Leiter's reading of Quine, the recognition of the failure of this traditional project – *Cartesian foundationalism*, or, for short, *foundationalism* – leads Quine to propose abandoning traditional epistemological concerns with the justification of beliefs in favor of empirical psychological investigation of the actual process of belief formation. Leiter's idea is that a failure of a parallel traditional jurisprudential project should lead us to abandon traditional jurisprudential concerns with the justification of judicial decisions in favor of empirical investigation of the actual process by which judges decide cases. He views the American Legal Realist movement as an early attempt to carry out this kind of naturalization.

Leiter suggests that the analogue in law to the relation between evidence and beliefs is the relation between the determinants of the content of the law or, as I will often say, the *grounds of law* – e.g., statutes, regulations, cases, and so on – and judicial decisions. And, as Leiter develops the parallel, the analogue of the epistemological view that evidence is supposed to justify belief in one scientific theory over others is the traditional jurisprudential view that the grounds of law are supposed to justify one way of deciding a case over others.

Accordingly, the parallel to the claim that evidence cannot justify our beliefs is supposed to be the claim, which Leiter associates with the American Legal Realists, that the grounds of law do not justify a unique decision in a case. 'Just as sensory input does not justify a unique scientific theory, so legal reasons, according to the Realists, do not justify a unique decision' (1997, p. 295). Leiter concludes that, on the Quinean model, the appropriate reaction to the recognition that the grounds of law do not justify unique outcomes is a replacement of traditional jurisprudential concerns with the empirical study of how judges actually decide cases. This reaction, according to Leiter, is the analogue of Quine's proposed replacement of traditional epistemological concerns with the empirical study of how people actually form beliefs.

Leiter's proposal offers an opportunity to consider, in a specific legal philosophical context, the proper understanding of naturalism. For it raises in a concrete form the question of when naturalistic considerations warrant abandoning philosophical questions and explanations.

In this paper, I examine Quine's naturalization proposal and Leiter's suggested parallel. I argue that the parallel does not hold up. As described above, Leiter sometimes seems to assimilate Quine's starting point – the failure of foundationalism – to the thesis that belief in scientific theories cannot be justified by the evidence. The thesis that belief in scientific theories cannot be justified is, however, an anti-naturalistic one, certainly not one that a naturalist should take as a starting point. And that thesis would not support replacing philosophical investigations with scientific ones.

A proposal to replace a philosophical project with natural science can be sound only if there is reason to conclude that the philosophical project is in some way confused or bankrupt. I clarify the

respect in which Quine concluded that foundationalism in epistemology was a failure. At bottom, the idea that science needs and could have philosophical validation from outside of science was a confusion, an overreaching on the part of philosophy. The correct conclusion to draw from this starting point is an indictment not of science, but of certain philosophical preconceptions.

It is, therefore, a mistake to treat the claim that foundationalism is a failure as tantamount to the thesis that evidence cannot justify belief in scientific theories. The former claim is that a particular philosophical project fails; the latter thesis would be a startling philosophical indictment of science (and no failure of philosophy). The claim that Cartesian foundationalism is a failure could support abandonment of *a philosophical view* about the kind of justification that science needs; it does not support the conclusion that belief in scientific theories is never justified.

In sum, the failure of foundationalism is the failure of a certain philosophical understanding of the kind of justification that science needs. I show that, granting Leiter's substantive assumption that the law is indeterminate, there is no philosophical confusion or overreaching in the legal case that is parallel to the philosophical overreaching of foundationalism in epistemology. I also argue that, even if we interpret Quine as holding that questions about epistemic justification cannot be fruitfully addressed, there is no parallel in the legal case.

Moreover, if we take seriously Leiter's analogy between, on the one hand, the justification of belief in scientific theories and, on the other, the justification of decisions in legal cases, the result is almost the opposite of what Leiter suggests. In effect, Quine took the conclusion that belief in scientific theories cannot be justified to provide a *reductio ad absurdum* of the foundationalist project, including its understanding of what epistemic justification requires. Foundationalism cannot be an appropriate project if it leads to the conclusion that belief in scientific theories, and in the external world generally, is not justified by the evidence. Given the way Leiter sets up the analogy, the closest parallel in the legal case to Quine's position would therefore be the rejection of the philosophical positions that lead to the indeterminacy thesis.

Finally, the conclusion that law is indeterminate could not establish the bankruptcy of philosophical investigation of the relation between the grounds of law and the content of the law. After all, the argument for that conclusion *depends on* a philosophical account of the relation between the grounds of law and the content of law. The argument therefore presupposes that that relation is an appropriate subject for philosophical inquiry.

In section II, I briefly summarize Quine's arguments and conclusions and describe Leiter's suggested parallel with the legal case. Sections III and IV are the two main sections of the paper. In section III, I explore Quine's proposal in detail, clarifying the motivation for the replacement and what is being replaced. In section IV, I turn to the legal case and show that the parallel does not hold up. Finally, in section V, I conclude.

II. OVERVIEW OF QUINE'S PROPOSAL AND THE LEGAL PARALLEL

Quine's proposal for naturalizing epistemology begins from his brief account of the Cartesian foundationalist program in epistemology (1969, pp. 69–75). According to Quine, that program was an attempt to validate or legitimate science by showing that scientific theories could be logically deduced from sense experience.[1] Quine's starting point is that the program cannot be carried out (1969, pp. 74–83). The appropriate reaction, he thinks, is to pursue a different, but related goal (1969, pp. 82–83). Once we have 'stopped dreaming of deducing science from sense data' (1969, p. 84), we can still study the relation between evidence and theory. We were trying to show that sense experience justifies scientific theories; instead, we can turn to psychology and study how we actually construct our picture of the world from sense experience (1969, pp. 75, 83).

Leiter (1998, pp. 86–87)[2] suggests the following generalization of Quine's proposal:

> For any pair of relata that might stand in a justificatory relation… if no normative account of the relation is possible, then the only theoretically fruitful

[1] On Quine's account, the foundationalist program also included an attempt to reduce scientific language to sense data language, but this aspect of Quine's discussion is less relevant to Leiter's parallel. See section III.A. below.

[2] I generally cite to Leiter 1998, but substantially the same material appears in his 2007 book at pp. 31–46.

account is the descriptive/explanatory account given by the relevant science of that domain.

Leiter develops the parallel with the legal case in the following way. Just as sense experience (or evidence) is supposed to justify belief in scientific theories, the grounds of law are supposed to justify courts' decisions. If the law is indeterminate in some class of cases, for example, those that reach the appellate courts,[3] the grounds of law cannot justify judicial decisions in those cases (1998, pp. 92–93). Leiter characterizes this consequence as a finding that 'no normative account' of the putatively justificatory relation is possible (1998, p. 86). He finds, in the writings of the American Legal Realists, arguments that the law is indeterminate in a substantial proportion of litigated cases (1998, p. 93).[4] According to Leiter, the appropriate reaction – the one that parallels Quine's proposal in the epistemological case – is to replace philosophy of law with a causal/nomological explanation of how judges decide cases – in short, to replace philosophy of law with sociology and psychology (1998, pp. 93–104).[5] Leiter argues that the Legal Realists are most charitably

[3] Leiter 1998, p. 94. In the interest of brevity, I will usually omit this qualification, talking simply of the indeterminacy of the law. The fact that Leiter is relying only on the limited claim that the law is indeterminate in some cases will become important when we turn to the legal domain in section IV below.

[4] In his discussion of naturalization, Leiter takes the indeterminacy of law for granted. Elsewhere (Leiter 2001), he discusses and endorses the arguments for indeterminacy that he attributes to the Legal Realists. See note 24 below.

[5] Leiter also develops a different parallel, though more briefly. According to what Leiter calls 'Normative Naturalism', the goal of theorizing is instrumental: 'the regulation of practice through the promulgation of norms or standards' (1998, pp. 85, 90–92). In epistemology, the normative naturalist tries to determine what advice or guidance will be most effective in helping us reach our epistemic goals (1998, pp. 90–91). In law, the normative naturalist tries to determine what advice or guidance will be most effective in helping judges reach adjudicative goals (1998, pp. 100–101). I will not be concerned with this parallel in this paper. Leiter is surely correct that any theorist whose aim is to determine the most effective way of causing certain results should study empirically what works best (though some goals, such as a just state, may rule out some means, for non-instrumental reasons). But that fact provides no reason for philosophers of law who do not have that aim to abandon their projects or change their methods. (The fact that deceiving judges about the nature of law would be the most effective way to achieve some societal or adjudicative goal does not change the project of a philosopher of law whose aim is understanding the nature of law.) In general, philosophers of law are interested in understanding and explaining the law and related phenomena, not in causing the practice of law to go in a particular direction. Moreover, for some of the plausible goals – deciding cases in accordance with the law or doing justice – philosophy of law has a role in determining what achieving the goal would *be*. Given what he says in the epistemological case, Leiter presumably would not dispute this point (1998, p. 92).

understood as Quinean naturalists about law, ahead of their time.[6] As he interprets the Legal Realists, they reacted to their conclusion that the law is indeterminate in a substantial proportion of cases by turning to the empirical study of judicial decision-making (Leiter 1997). My concern will not be with the proper understanding of Legal Realism, but with the merits of the parallel between Quine's naturalization of epistemology and Leiter's proposal in the case of philosophy of law.

We need to be clear at the outset what Leiter's proposal to replace legal philosophy by science amounts to and, consequently, what could motivate it. Leiter's proposal – like Quine's apparent proposal with respect to epistemology – is that we should abandon certain traditional philosophical questions and explanations and turn instead to empirical methods to provide causal/nomological explanations. In particular, Leiter (1998, p. 96) characterizes the explanations that psychology or sociology would provide as 'descriptive accounts of what ''inputs'' cause what ''outputs''', where the outputs are judicial decisions. It is important to understand that Leiter's suggestion is not to use empirical methods to help to answer philosophical questions. Rather, Leiter suggests that we should replace questions about what makes it the case that certain outcomes are legally required with the question of the causal explanation of judicial decisions. In sum, the gist of Leiter's proposal is that we should abandon traditional philosophical questions and methods and turn instead to empirical methods to provide causal/nomological explanations of judicial decisions.[7]

First, doubts about the fruitfulness or possibility of pure *a priori* inquiry do not justify a replacement proposal such as Leiter's. Causal/nomological explanation is by no means the only alternative to pure *a priori* inquiry. Most philosophical inquiry draws on empirical facts – from familiar and banal facts about the world to those uncovered by the latest science. And if critics of the *a priori* are right that, for example, mathematical and philosophical reasoning

[6] I should clarify that Leiter does not explicitly endorse the suggestion that, if law is indeterminate, we should react by replacing philosophy of law with sociology. It is also not clear that he accepts Quine's proposal with respect to epistemology. He mainly restricts himself to developing the parallel and arguing that it neatly fits the American Legal Realist movement, though he plainly thinks that the replacement of philosophy of law has much to recommend it.

[7] In *Naturalism II*, I look closely at which projects Leiter is recommending that we replace, and I argue that in fact there are no projects that fall within the target zone of his proposal.

are not *a priori*, what follows is that the traditional conception of philosophy as *a priori* must be revised, not that philosophical questions and explanations must be abandoned. Leiter's replacement proposal involves not merely drawing on empirical facts, but abandoning philosophical explanations in favor of causal/nomological ones. Therefore, neither the claim that philosophy can fruitfully draw on empirical results nor the claim that *a priori* knowledge is not possible is sufficient to motivate the proposal.

Second, it should go without saying that naturalizing a philosophical project or area, understood as making it consistent with the methods and understanding of natural science, is not the same as replacing it with science. Ultimately, a particular philosophical project might turn out to be one that cannot be pursued in a naturalistically respectable way. But there is no easy route from a commitment to naturalism to the abandonment of philosophical questions and explanations. Ensuring that a philosophical explanation is consistent with natural science may require, for example, making sure that it does not appeal to properties that are not naturalistically respectable. Similarly, a naturalistic philosophical explanation should not depend on human beings' having a faculty the possession of which cannot be explained by the natural sciences. Which constraints are the appropriate ones, how such constraints should be understood, and which explanations satisfy them have been the subject of extensive discussion and controversy in philosophy of mind, metaethics, and other areas. It is not obvious, for example, what is required for a property to be naturalistically respectable. The point for present purposes is that a great deal of work would be required to show that a commitment to naturalism requires abandoning a given philosophical project. The argument would have to establish what the relevant naturalistic constraints are and show that they cannot be satisfied by any way of pursuing the project. I now turn to a detailed consideration of Quine's proposal.

III. QUINE'S PROPOSAL

A. The Failure of Cartesian Foundationalism

The failure of the traditional foundationalist program in epistemology is the motivation that Quine offers for the naturalization of

epistemology. The goal of this subsection is to elucidate what Quine took the nature of the failure to be.

According to Quine's account, the remote Cartesian goal of epistemology was to provide a philosophical justification for scientific theories by showing that they can be logically deduced from sense experience (Quine 1969, pp. 71–72, 74–76). The second, weaker goal was to legitimate scientific discourse (or talk of physical objects generally) by translating it into epistemologically more secure elements: sense experience (plus logic and set theory) – 'a legitimization by elimination' (1969, p. 78). I will mostly focus on the first goal because it offers the best case for Leiter's parallel: the indeterminacy thesis is supposed to be parallel to the recognition that scientific theories cannot be logically deduced from sense experience. Leiter does not propose a legal parallel to the project of translating scientific discourse into sense data language.

It will help to begin by distinguishing two different contrasts that the term 'foundational' can be used to make. First, a project can be foundational with respect to science in virtue of trying to provide a grounding or validation for science from outside of the scientific enterprise, as opposed to trying to show that scientific theories meet the standards of justification internal to scientific practice. A foundational justification in this sense is an *outside* justification – one that is not part of science. (Indeed, the Cartesian foundationalist tries to ground our knowledge of the external world entirely outside that world, in sense experience.) As Quine (1990, p. 19) writes: 'I am of that large minority or small majority who repudiate the Cartesian dream of a foundation for scientific certainty firmer than scientific method itself'. Second, more familiarly, the term 'foundational' is standardly used in epistemology for a justificatory structure that builds from a privileged or secure base, as opposed to a justificatory structure, such as a coherentist one, that does not rely on any such base.

The epistemological program from whose failure Quine begins was foundational in both senses. With respect to the first sense, the justificatory standard of the program – certainty or indubitability – and its justificatory base – sense experience and logic – are not those to which scientists appeal, but allegedly improved ones. It is no part of science to show that scientific theories can be logically deduced

from sense experience, or even translated into terms of logic and sense experience. As Quine explains (1969, pp. 75–76), it was because the goal was to validate science from the outside, rather than on science's own standards, that no appeal could be made to science, on pain of 'circularity': 'If the epistemologist's goal is validation of the grounds of empirical science he defeats his purpose by using psychology or other empirical science in the validation'.[8]

The failed project was also foundational in the second sense – it tried to give science a privileged base in sense experience.[9] As we will see, however, the *flaw* that Quine identifies in the project was with foundationalism in the first sense – the attempt to validate science from the outside – not with foundationalism in the second sense.

Let us grant Quine the failure of Carnap's foundationalist program.[10] (In fact, let us go further and grant that philosophy cannot provide any kind of outside validation for science.) Before we can evaluate any putative legal parallel, we need to pinpoint the nature of the problem with Carnap's program.

I should clarify at the outset that my aim is not to report Quine's view, but to determine what position is the most appropriate from the point of view of naturalism. Quine's arguments are notoriously hard to pin down, and his positions changed over time. Moreover, the background assumptions that shaped Quine's views in the area include behaviorism and a verificationist view of meaning, both misguided expressions of naturalism that should be rejected on substantive grounds.[11] Since our interest is in the implications of naturalism for philosophy of law, we should not become bogged down in exegesis of Quine, nor should we be distracted by aspects of Quine's view that are driven by misapplications of naturalistic ideals.

[8] Similarly, Quine 1992, p. 8 writes: 'Back when he was still fashioning a foundation for science in phenomena, Carnap had to keep science out of the foundations, on pain of circular reasoning'.

[9] The second aspect of Carnap's program – the translation of scientific discourse into terms of sense experience and logic – was not really an attempt to justify scientific theories but to legitimate the terms of science (Quine 1969, p. 76); thus, that part of the program was arguably not foundational in the second sense.

[10] I do not think that Quine's argument for the impossibility of translating physical discourse into sense experience or logic is sound since I do not think that we should accept meaning holism (or the indeterminacy of translation), certainly not for the reasons Quine thinks we should. But this is beside the point because we should certainly grant both of Quine's conclusions: that scientific theories cannot be logically deduced from sense experience (or, for that matter, grounded infallibly on any indubitable starting point) and that we cannot translate talk of physical objects into sense experience (or into anything more basic).

[11] See the concluding paragraphs of *Naturalism II*.

It is more relevant to our project and truer to Quine's own motivations to seek the best naturalistic understanding of his proposal.

There are at least three possible interpretations of the failure of foundationalism. The first interpretation is that scientific theories cannot meet the relevant standards of justification.[12] The second interpretation is that there is no such thing as epistemic justification – for example, that there is no genuine property of being epistemically justified. The third interpretation allows that belief in scientific theories can be justified, but maintains that the relevant standards of justification are internal to science, as opposed for example to the standard of certainty imposed by the Cartesian project. (Figure 1 provides a visual representation.) Let us consider the three interpretations in turn.

The first interpretation of the failure should be rejected. The Quinean conclusion is not that philosophy has established that scientific theories do not, or cannot, meet the applicable standards of justification. A failure to justify science in this sense would be an indictment of science, rather than a manifestation of the limits of armchair philosophy. It would be bizarre for a naturalist to decree that belief in a theory is unwarranted because the theory does not pass the standard – certainty or logical deducibility from sense experience, for example – that philosophers pronounce from the armchair.

In my view, the second interpretation should also be rejected.[13] The appropriate naturalistic conclusion is not that there is no such thing as epistemic justification. Such epistemic nihilism would imply, for example, that it is confused to ask whether, given a body of evidence, one theory is more warranted than another. A naturalist should not be in the business of pronouncing that scientists are confused to think that quantum mechanics is more warranted than

[12] There are different versions of such a position, depending on modal strength and other factors. The details will not matter for our purposes. See note 29. A very strong version of the position – necessarily, no belief is epistemically justified – is a form of epistemic nihilism, and the points that I make with respect to the second interpretation apply. Among other things, the legal analogue – necessarily, no outcome is legally required – is a non-starter and is inconsistent with the Legal Realists' position. Weaker versions – e.g., it is a contingent fact that, given current evidence, no belief in a scientific theory is justified – are, as discussed in the text, neither plausible readings of Quine, nor claims that a naturalist should accept.

[13] As I understand him, Leiter does not interpret Quine as rejecting epistemic justification, but as rejecting the possibility of philosophers' saying anything fruitful about it. See Leiter 1998, p. 87, fn. 35. (On the nihilistic interpretation, there would be no point in denying the possibility of a theory of justification, for there would be nothing to have a theory about.) See also note 22 and section III.B.1. below.

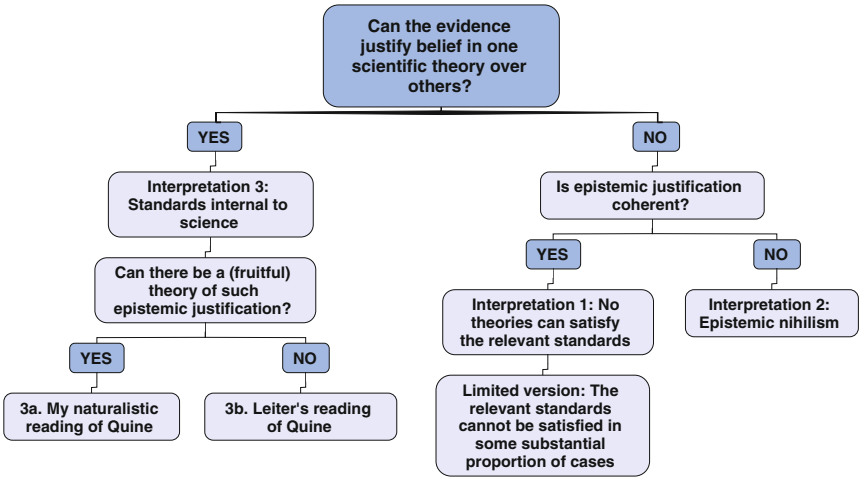

Figure 1. Three interpretations of the failure of Cartesian foundationalism.

Aristotelian physics, certainly not on the ground that philosophers cannot show that quantum mechanics can be logically deduced from sense experience. Epistemic nihilism amounts to telling scientists that they are confused about the very possibility of their theories being warranted. It leaves us with the unhappy position that the explanation of the success of science is not that scientific theories have some purchase on the truth; rather, scientific practice just happens, inexplicably, to generate good predictions, and that is all that can be said for it.

Although I believe that this second interpretation is not the one that is most consistent with naturalism, there is certainly support for it in Quine.[14] Even if we adopted this interpretation of Quine, however, it would not affect the main conclusions of this paper. In section IV, I show that the nihilistic reading of Quine does not improve the prospects for an appropriate parallel with law.

[14] Quine sometimes seems tempted by the idea that, at bottom, there is no such thing as genuine epistemic justification, only what we might call practical justification – what works. (His susceptibility to this temptation should not surprise us since, at bottom, Quine the behaviorist thinks that there are really no beliefs to be justified.) As I point out in the text below, Quine, in more prudent moments, rejects epistemic nihilism. And, once more, my goal here is not primarily Quine exegesis. I argue in the text that nihilism is a less plausible position, and a far less appropriate one for a naturalist, than the alternative. (In addition, given the resounding failure of behaviorism as a scientific theory, it would be truer to Quine the naturalist not to hold him to his behaviorist convictions.)

The remaining interpretation – the one we should adopt – allows that some scientific theories are justified, or better justified than other candidate theories (or at least that they may well be). On this view, the failure of philosophy to legitimate science does not impugn the justification of scientific theories. Rather, the appropriate conclusion is that the philosophical project of legitimating science from the outside was misguided in the first place. This is the most charitable reading of Quine.[15]

I have emphasized the anti-naturalistic character of the first two interpretations because my primary concern is not with exegesis of Quine. But it is worth noting that the third interpretation also is supported by Quine's other work.[16]

In a short piece in the *Times Literary Supplement*, Quine (1992) characterizes naturalized epistemology as follows:

> Something analogous to the old epistemologists' dream of a phenomenalistic foundation for science can still be entertained, however, with free access to scientific findings.... Naturalized epistemology is not calculated to yield a proof of the validity of scientific method, on pain of circularity, but it is calculated to improve our understanding and control of the scientific edifice.

More importantly, Quine continued to engage in substantive work on the justification of belief after EN, and insisted that he did not mean to reject such work. Indeed, *The Web of Belief* (1970/1978), published shortly after EN, is centrally concerned with the norms governing reasonable belief. After reviewing the impossibility of the traditional foundationalist project, Quine and Ullian (1970/1978, p. 65) state: 'It is now recognized that deduction from self-evident truths and observation is not the sole avenue to truth or even to reasonable belief'. The alternative, they suggest, is the framing and evaluating of hypotheses: 'A dominant further factor, in solid science as in daily life, is *hypothesis*.... It is the part of scientific rigor to recognize hypothesis as hypothesis and then to make the most of it'.

[15] I should note that, even on this reading, I do not mean to endorse or defend Quine's proposal. It raises many questions that I cannot pursue here. For example, what about alternative reactions to the failure of Cartesian foundationalism? Are the standards of justification 'internal to science' themselves deliverances of science? If not, what is their status? (As others have noted, Quine and Ullian 1970/1978 seem to develop their account of the virtues of hypotheses in an armchair way.)

[16] In EN, Quine 1969, p. 87 rejects a kind of 'epistemological nihilism' that denies the possibility of objective evidence; he defends the idea that observation can provide an objective source of evidence for science (1969, pp. 87–88).

They (1970/1978, pp. 65–82, chs. 6–9) proceed to a brief account of five norms or 'virtues' that can favor one hypothesis over others – in effect, a sketch of the standards for justification internal to science (as well as for belief revision in ordinary life). Similarly, in *The Pursuit of Truth*, Quine (1990, p. 20) claims 'naturalized epistemology on its normative side is occupied … with the whole strategy of rational conjecture in the framing of scientific hypotheses'.[17] In both works (1970/1978; 1990), Quine repeatedly casts his discussion of epistemic norms in terms of the way in which scientists form and evaluate hypotheses.

We can summarize the nature of the failure that triggers Quine's naturalization proposal: the Cartesian foundationalist project was misguided in thinking that science needed outside validation and that philosophy could supply it.[18]

The failure of foundationalism, understood as I have described it, could be taken to support two very different conclusions. According to the first, there is nothing more to be learned about the nature of justification in science (at least nothing that could take the form of a theory, as opposed to the practical know-how of scientists). As we will see, Leiter reads Quine in this way. According to the second, there is no reason that we cannot have a theory of the nature of justification in science, but, in order to produce such a theory, we need to leave our armchairs and examine scientific practice and history.[19] (These two readings are represented as 3a and 3b in

[17] Also, as Leiter himself points out, Quine makes the claim that all information about the world must derive from the senses, and concedes that this is a normative claim (Leiter 1998, p. 90). 'This [norm] is a prime specimen of naturalized epistemology, for it is a finding of natural science itself, however fallible, that our information about the world comes only through impacts on our sensory receptors' (Quine 1990, p. 19, quoted by Leiter 1998, p. 90). The present point is that Quine does think that belief can be justified: he is suggesting that the first principle of justification is empiricism. For other support in Quine, see *Naturalism II*, n. 4.

[18] It is worth noting that on all three interpretations Quine's problem with the Cartesian foundationalist project was not with its foundational justificatory structure (in the second sense distinguished above in which 'foundational' contrasts with 'coherentist'). Indeed, in EN and subsequent work, Quine gives a privileged position to the stimulation of neural receptors (and observation sentences). E.g., 1969, pp. 84–89; 1990, pp. 40–42; Quine and Ullian 1970/1978, chapter 3 & 104. Quine sees the move from subjective sense experience to neural input as moving the starting point of epistemology within the province of science. 'The old tendency to associate observation sentences with a subjective sensory subject matter is rather an irony when we reflect that observation sentences are also meant to be the intersubjective tribunal of scientific hypotheses. The old tendency was due to the drive to base science on something firmer and prior in the subject's experience; but we dropped that project'. 1969, p. 87.

[19] Notice that, if we could provide a theoretical account of justification in science, philosophy could perhaps ask the further question to what extent science meets its own standards of justification. So there might be a way in which philosophy could validate science, though not from the outside or on the basis of armchair pronouncements of the relevant standards.

Figure 1.) In the next section, I consider which conclusion is the appropriate one.

B. *The Appropriate Reaction*

1. *Can We Have a Theory of the Nature of Justification in Science?*

We have just concluded that the lesson of the failure of the foundationalist program is the recognition that, although scientific theories can be warranted, it is misguided for philosophy to try to validate science from the outside. So that philosophical project should be abandoned or 'replaced'. The question now is whether a philosophical investigation of the nature of justification in science could be a fruitful endeavor. If not, then such an investigation is another philosophical project that should be abandoned. In this section, I argue that a naturalist should accept the possibility of a theoretical understanding of scientific justification. I consider and reject three suggestions that Leiter offers on behalf of the opposite conclusion.

There is certainly a plausible reading of Quine on which he thinks that a theoretical investigation of the nature of scientific justification cannot be fruitful. He talks broadly of 'settling' for psychology.[20] Once again, I am not primarily interested in Quine exegesis here. I argue that naturalism, properly understood, not only does not commit Quine to the conclusion that nothing can be learned about scientific justification, but cuts in the opposite direction. At any rate, when I turn to the legal case, I will argue that, even if the failure of Cartesian foundationalism did rule out a fruitful account of justification in science, the claim that law was indeterminate would not support a parallel conclusion with respect to law; that claim in fact presupposes a philosophical account of the relation between the grounds of law and the content of the law.

The conclusion that science needs, and can have, no validation from outside does not by itself imply that philosophers cannot fruitfully explore the nature of justification in science. Suppose that

[20] Quine 1969, p. 75. Quine need not be read in that way. His more precise remarks suggest that epistemology should not be *a priori*, but should avail itself of the resources of science and look at how scientific justification actually works. He says, for example, that epistemology should make 'free use of empirical psychology' (1969, p. 83) and that we should allow 'epistemology the resources of natural science', (1969, p. 90), including not only psychology, but also 'the very science whose link with observation we are seeking to understand' (1969, p. 76). See 1969, pp. 83–84, 90.

we grant, for the sake of argument, the general Quinean (1953; 1960) claim that all knowledge must be empirically based. (In fact, a naturalist should not rule out in advance the possibility of *a priori* knowledge. It is not as if science has explained all our knowledge without the need to appeal to anything non-empirical. As many have pointed out, we have no satisfactory account of our knowledge of, for example, mathematics and modality. Similarly, we have no adequate account of our understanding of what counts as a better or worse explanation. And science itself relies on such understanding, as well as on mathematics, logic, and so on.) It hardly follows that there can be no understanding of epistemic justification. On the face of it, it would seem that philosophy could take into account the practice and history of science in order to provide an empirically informed theory of the nature of scientific justification. This would not depend on the possibility of *a priori* knowledge, nor would it involve dictating standards of justification from the armchair.

A naturalist should accept the possibility of a theory of justification in science. In the first place, since (belief in) scientific theories can be justified, there is a real phenomenon to be understood. And one lesson of naturalism is that phenomena that seem impenetrable may turn out to be explicable; armchair decrees as to what cannot be explained have often been wrong. Why should we assume that the thin suggestion that all our information about the world comes through our senses (Leiter 1998, p. 90 quoting Quine 1990, p. 19) exhausts what there is to be learned from a philosophical study of natural scientific justification? It is not as if the suggestion gives us anything like a satisfactory account of scientific justification. Think, for example, of the theoretical virtues of simplicity, modesty, generality, and so on, which, on Quine and Ullian's (1970/1978) view, play an important role in the confirmation of theories. It would go against the core of naturalism to decree from the armchair that there is nothing theoretically interesting to be said about these virtues and their poorly understood role in natural science.

Before I turn to Leiter's objections to the possibility of an account of scientific justification, let me set aside two preliminary objections. First, an objector might appeal to Quine's claim that knowledge must derive from empirical evidence. It is not plausible, the objector might suggest, that we will learn anything about justification simply

by empirical observation. This objection is easily seen to be mistaken. Even if it were true that all knowledge must have some empirical basis, the derivation can be extremely indirect. Scientific knowledge itself is often highly theoretical, linked to observation only remotely. Similarly, an investigation of justification need not be tightly linked to observation.

Second, it might be objected that causal/nomological accounts, useful as they are, are not going to tell us anything interesting about justification. But such accounts are what science has to offer. So, the objection continues, if we must look to science for illumination about justification, we can be sure that there will be little to say. This line of reasoning is flawed. The fact that we look to science to understand justification does not imply that the only useful account of justification is a causal/nomological account. As I pointed out above, causal/nomological theories are not the only alternative to pure *a priori* knowledge. Philosophical accounts regularly take into account empirical input.

Leiter offers 'three intuitions' to support his version of Quine's conclusion: 'Once we give up on the foundational project of justification, nothing we have to say about justification will be of much theoretical interest; theorizing about justification will collapse, as it were, into a banal descriptive sociology of our justificatory practices' (Leiter 1998, p. 87). The first intuition is that pointing out logical mistakes will be banal and 'given the underdetermination of theory by evidence' will not provide 'an account of which of our theoretical beliefs are warranted and which are not' (Leiter 1998, p. 88). The second intuition is that, without a foundationalist starting point 'outside our epistemic practices', 'systematizing our mundane normative intuitions will simply collapse into the descriptive sociology of knowledge' (Leiter 1998, p. 88). 'From within [Neurath's] boat, there is nothing *to do* but description' (Leiter 1998, p. 88). The third intuition is that a descriptive sociology of our epistemic practices cannot make a difference to those practices, and is therefore pointless (Leiter 1998, p. 88).

It is not clear whether Leiter endorses the three intuitions, or, for that matter, the conclusion he attributes to Quine. He may offer the intuitions merely as an attempt to flesh out what he takes to lie

behind Quine's conclusion, which, as he points out, Quine did not do enough to justify.[21]

As to the first intuition, we should grant that pointing out logical mistakes is not going to give us a practical test for determining which scientific theories are warranted. But, as a reason that there can be no fruitful account of justification, the suggestion seems to rely on three mistaken assumptions. First, we should not assume that philosophy is limited to pointing out logical mistakes (or to other wholly *a priori* activities). Second, the banal fact that scientific theories cannot be derived from indubitable evidence by logic and set theory does not rule out an account of justification. We have rejected the bad foundationalist assumption that epistemic justification is a matter of logical deducibility from evidence. Since scientific theories are, sometimes, warranted, it is difficult to see why the impossibility of deducing theories from evidence should prevent us from understanding the nature of justification. Third, philosophy's goal need not be a practical test for which of our theoretical beliefs are warranted. Rather, we want an understanding, which may be difficult to apply in practice, of what makes them warranted.

Leiter's second intuition amounts to the assumption that once there is no outside starting point, all we can do is systematize and describe the practices of scientists. Once we have set aside the assumption that science needs outside foundations, the lack of such foundations casts no doubt on the reality of justification in science. Thus, the heart of the matter is whether a theoretical account of justification in science that is based on a consideration of scientific practice can be no more than a description of what scientists treat as justified.

I find it difficult to see why we should think this, and Leiter gives no argument. In general, it badly underestimates the power of theory to think that it can do no more than catalogue or systematize data. It is a familiar fact that scientific and philosophical theorizing provide explanations that are not only not logically deducible from the data but are inconsistent with the data; some of the data can be explained as the result of factors other than the phenomenon being studied. Quantum mechanics, molecular biology, and the theory of evolution by natural selection are not mere systematizations of sense

[21] See Leiter 1998, pp. 86–88.

experience or observations. Linguists form theories of speakers' competence by studying their performance, but the resulting accounts of competence imply that some aspects of performance are errors. The use of the method of reflective equilibrium to study justice does not merely offer a banal catalogue of what people call 'justice'. Philosophical theories of personal identity, the status of morality, and the content of thought are not systematizations of our practices or uses of words.

Scientists are not simply engaged in arbitrary practices of calling theories justified or unjustified. They have a not-fully-explicit understanding of what justification is. Leiter offers no reason to think that we cannot make that understanding explicit. And there is no reason to think that such a theory will simply be a description of what scientists call 'justified'. After all, part of scientists' understanding of justification is that what it is for a theory to be justified is not for all, or most, or even any, scientists to take it to be justified. Moreover, if the scientists have latched on to a real phenomenon, we should not rule out the possibility that the best theory of that phenomenon may reject some aspects of the scientists' understanding of it. In general, unless we assume that justification in science is a sham, it is difficult to see why it cannot be understood.[22]

The third of Leiter's intuitions – that a descriptive sociology of our practices is pointless – presupposes the correctness of the first two. Moreover, it is wrong to think that an account of practices cannot affect them. For example, an understanding of human tendencies to irrationality with respect to probabilistic reasoning has affected the practice of medicine and science. In any case, affecting practice need not be the goal of understanding.

More generally, the three intuitions seem to rely on a distinction between 'normative' and 'descriptive' accounts that is roughly as follows. Normative accounts are ones that offer practical tests for determining which theories are justified or provide advice or

[22] In a footnote, Leiter (1998, p. 87, fn. 35) glosses his interpretation of Quine: since we cannot tell the foundationalist story about justification, 'justification just drops out of the picture as a topic for fruitful theoretical inquiry'. '[T]here's nothing to ''understand [about] knowledge'' at all, if ''understanding knowledge'' means understanding justification' (Leiter 1998, p. 87, fn. 35). If this is not the claim that there is no such thing as epistemic justification, which we set aside above, it is hard to see what it comes to, other than an anti-naturalistic, armchair-drawn limit on what can be explained. I am grateful to Ram Neta for discussion of the points in the last couple of paragraphs.

guidance to scientists.[23] Descriptive accounts are either causal/nomological explanations or banal summaries of practices. But this distinction – between practical tests and causal explanations or summaries of practices – is not exhaustive. *Understanding* a normative phenomenon or notion such as justification need not be a matter of offering a practical test, or guidance of any kind. We can call a theoretical account of justification that offers no practical guidance 'descriptive', but it greatly underestimates the resources of theory to assume that such a descriptive account must be either a catalogue of situations in which people apply the word 'justification' or a causal explanation of how beliefs about justification are formed.

IV. THE PARALLEL WITH LAW

A. *The Failure: Indeterminacy*

Let us turn to the legal case. Leiter's suggestion is that the parallel to the failure of the project of validating science is the proposition that the law is indeterminate in some substantial class of cases. In the writings of the American Legal Realists, Leiter finds arguments for that proposition.[24] I will for the most part simply grant, for the sake of argument, the assumption that the law is indeterminate in some substantial class of litigated cases. If the law is indeterminate, then the grounds of law[25] cannot justify the judicial decisions. This failure of justification is supposed to be parallel to the failure of epistemology to validate science.

We need to begin by clarifying Leiter's way of setting up the parallel and setting aside several closely related sources of distraction. First, the notion of justification of judicial decisions that Leiter employs is not all-things-considered justification but justification only with respect to the content of the law. Simply put, as Leiter uses the term, for a judicial decision to be justified is for it to be required by the applicable legal standards.

[23] Leiter (2007, pp. 41–42 & 122) is fairly explicit that, in his view, the point of normative theories is to provide practical guidance – in the domains in question, to judges or scientists. See note 5, above.

[24] In other work, Leiter (2001) endorses the arguments he attributes to the Legal Realists. He thinks that they have identified an important source of indeterminacy in addition to that of the 'open texture' of language identified by H.L.A. Hart. 'The combination of sources of indeterminacy… seems sufficient to move indeterminacy from the margins to the center of cases actually litigated' (Leiter 2001, pp. 296–297).

[25] Leiter's term for the grounds of law is 'legal reasons'. I think it is less confusing to talk of the 'grounds of law' because 'legal reasons' are naturally taken to include propositions of law.

Second – and this point is implicit in the characterization of justification in the previous sentence – Leiter ignores any gap between what the law is and what judges are justified in believing it to be. That is, he is not concerned with the epistemic justification of judges' decisions, but simply with what the law is.

Third, the grounds of law – statutes, cases, administrative regulations, and the like – are not mere evidence of what the law is; they make it the case that legal propositions are true. In other words, the relation between the grounds of law and the content of the law is a constitutive one. By contrast, the evidence for scientific theories is not constitutive of the truth about the natural world.

Given these three points, it is misleading for Leiter to characterize the analogy as between, on the one hand, the justificatory relation between the grounds of law and judicial decisions and, on the other, the justificatory relation between evidence and scientific theories. Less misleadingly put, his comparison is between, on the one hand, the constitutive relation between the grounds of law and the content of the law and, on the other, the justificatory relation between evidence and scientific theories. For convenience, I will sometimes follow Leiter in talking of the 'justificatory' relation between the grounds of law and judicial decisions, but it should be clear that the relation in question is really the constitutive relation between the grounds of law and the content of the law.

Finally, on a natural way of drawing an analogy between law and science, true propositions of law are analogous to the truth about the natural world. Correspondingly, legally required judicial decisions are parallel to *true* scientific theories (and epistemically justified decisions to epistemically justified theories). On this way of drawing an analogy between the domains, the thesis that the law is indeterminate would be the analogue of the thesis that there is no truth for science to discover. This way of setting up the parallel is straightforward because it compares a metaphysical element – the truth about the natural world – to a metaphysical element – the true legal propositions. It is therefore important to emphasize that it is not the parallel that Leiter wants.

As we have seen, on Leiter's way of drawing the analogy, a legally required decision is parallel not to a true scientific theory, but to an epistemically justified scientific theory. (One consequence is that the

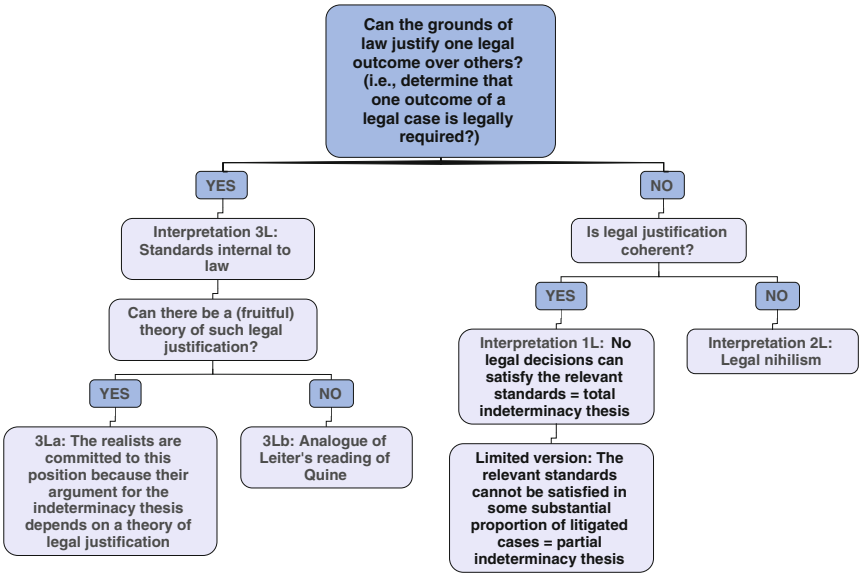

Figure 2. The legal analogues of the positions in Figure 1 (given Leiter's way of drawing the parallel).

law and the most 'justified' judicial decision necessarily coincide in a way that the truth and the most epistemically warranted scientific theory do not. I will set aside this disanalogy.) Therefore, the thesis that the law is indeterminate is analogous to the thesis that it is not justified to believe one scientific theory over others. Figure 2 diagrams the legal positions that, given Leiter's way of setting up the analogy, parallel the positions shown in Figure 1.

Having made these clarifications, I will now argue that the indeterminacy of law is not appropriately parallel to the failure of the Cartesian foundationalist project. A preliminary point is that it is not clear that there has ever been an important project in the philosophy of law parallel to the project of trying to validate science from the outside. Philosophers of law do not see themselves as being in the business of trying to provide judges' decisions with external philosophical validation of a kind that is more secure than anything internal to the law could be. Rather, they try to understand the relation between the grounds of law and the content of the law – the very same relation the judges rely on in justifying their decisions. So

there is no legal philosophical project parallel to Cartesian foundationalism in epistemology.

Suppose, however, that there were a project of trying to show that the law satisfies extremely demanding conditions for determinacy, parallel to the demanding standards of the Cartesian foundationalist project in epistemology. As I argue in section IV.B., if it were recognized that these standards for legal determinacy could not be satisfied, the reaction parallel to Quine's rejection of the foundationalist project would not involve accepting the conclusion that the law is indeterminate. For that would be the analogue of accepting that belief in scientific theories is not justified because such theories cannot be logically deduced from sense experience. Rather, the parallel reaction would be to reject the project involving the extremely demanding standards of determinacy and to turn instead to the standards internal to legal reasoning.

On Leiter's (1998, pp. 93–94) view, however, the philosophical project that is supposed to parallel Cartesian foundationalism is a project of trying to show that the grounds of law justify one legal outcome. One philosopher of law, Ronald Dworkin, is known for defending the thesis that the law is determinate in all cases, or nearly all.[26] That thesis would not show that actual legal decisions are justified, but it would at least make it possible that they are. There are many problems with the proposed analogy. First, Dworkin does not impose conditions for determinacy more demanding than those internal to legal reasoning. Second, for the Legal Realists' indeterminacy thesis to parallel the recognition that scientific theories cannot be logically deduced from sense experience, the Legal Realists would have to show that *Dworkin's* conditions for legal determinacy cannot be satisfied. (The recognition that scientific theories cannot be deduced from sense experience is a recognition that the foundationalists' own standards cannot be satisfied.) Instead, they argue for indeterminacy based on their own standards, which in effect are much more demanding than Dworkin's. For example, some Legal Realists think that any conflict between grounds of law with respect to a given issue is sufficient to prevent there from being a unique legally correct answer with respect to that issue. By contrast, Dworkin believes that it is sufficient for there to be a right answer on

[26] In *Naturalism II*, I argue that showing that the law is determinate in all cases is not in fact a central project of Dworkin or any legal philosopher.

a legal issue that the arguments on one side are stronger than the arguments on the other, though there may be no way to demonstrate this to the satisfaction of all reasonable people.

Most importantly, if the American Legal Realists have shown that law is indeterminate in some substantial proportion of litigated cases, then the project of showing that the law is determinate in all cases is a failure. But – and this is the crux – what kind of failure is it? It is the victory of one philosophical position over another. Philosophy has established what the relevant standards of justification are – has succeeded in understanding the relation between the grounds of law and the content of the law – and has shown that, at least in the relevant range of cases, the standards cannot be met.[27] (As can be seen by comparing Figures 1 and 2, the epistemological analogue of the indeterminacy thesis would be a variant of Interpretation 1 whose scope was more limited than all scientific theories.)

Leiter suggests that, in light of the indeterminacy thesis, we should replace 'the ''sterile'' foundational program of justifying some one legal outcome on the basis of the applicable legal reasons with a descriptive/explanatory account of what input… produces what output' (Leiter 1998, p. 93). But the 'program of justifying some one legal outcome on the basis of the applicable legal reasons' is the 'program' in which judges are engaged. The analogue in the case of epistemology is the ordinary activity of scientists in testing and confirming theories. No naturalist would claim that scientists are engaged in a sterile foundational program. In the case of epistemology, Quine (on my preferred, naturalistic reading) took the inability of philosophers to validate science to be a *reductio* of the philosophical preconceptions about scientific justification. If he had instead embraced the anti-naturalistic conclusion that scientific theories fail the applicable standards of justification, he would have had no basis for abandoning epistemology in favor of natural science.

With respect to Quine's naturalization of epistemology, we rejected the epistemic nihilism reading of Quine. But, even on that reading, the parallel fares no better. The legal parallel to epistemic nihilism would be the thesis that there is no genuine property of

[27] Leiter himself makes clear that the arguments for the indeterminacy of law that he favors depend on a controversial philosophical position about 'the criteria of legal validity' (Leiter 1998, pp. 99–100; 2001, pp. 292–299). And the arguments are themselves philosophical arguments. See above note 24; Leiter 2001.

legal justification – of being legally required – and therefore that the question whether a legal decision is justified (or unjustified) is confused. Indeed, legal nihilism implies that it cannot even be the case that one decision is *more* justified than another. Such a position is not worth taking seriously.

The indeterminacy thesis is emphatically not the thesis of legal nihilism, and in fact presupposes that legal nihilism is false. Far from maintaining that any question about whether a legal decision is justified or unjustified is confused, the indeterminacy thesis affirmatively holds that, in certain cases, the grounds of law do not justify a unique decision. The contrast between legal nihilism and the Legal Realists' indeterminacy thesis is underscored by the fact that the indeterminacy thesis is partial: it holds that the law is indeterminate only in some substantial class of cases, not in all cases (1998, p. 94). And even in the instances in which the law is indeterminate, some decisions will be more justified than others; it is just that no decision is uniquely most justified.[28]

In sum, if we grant for the sake of argument that the Legal Realists have established the indeterminacy thesis, what follows is not that there is no such thing as justification (which would entail that there could be no fruitful account of it). Rather, philosophy has so well elucidated the relation between the grounds of law and the content of law that it can show that law is determinate in some cases and indeterminate in others. Thus, the legal situation does not parallel even the epistemic nihilist reading of Quine.

The closest parallel in epistemology to the (partial) indeterminacy of law would be the thesis that, in some substantial class of cases, there is no uniquely most warranted theory. The bare thesis that, sometimes, there is no uniquely most warranted theory is a platitude: no one thinks that, however thin the currently available evidence, there is always a single most warranted theory. But suppose, more interestingly, that a philosopher produced an argument that, in large areas of science, contrary to what scientists claimed, the state of the evidence was such that no single theory was more warranted than all others. In other words, with respect to any question (in the relevant areas), although some theories were more justified than others, and although further evidence could uniquely justify one

[28] Leiter seems to concede this point (1998, p. 95).

theory, no single theory currently ranks higher than all others on the applicable standards of justification.[29] If the philosopher's argument were sound, the implication would not be that some class of philosophical questions should be abandoned or replaced, but that philosophy had undermined an important class of substantive claims within the domain.

If, as we are granting for the sake of argument, the law is indeterminate, it follows that philosophical attempts to show that it is determinate have failed. The reason is not any inadequacy on the part of philosophy: it is not that philosophy has been confusedly trying to validate a domain that needs no help from philosophy, nor that it is inappropriate for philosophy to dictate standards from the armchair, nor that philosophy cannot fruitfully investigate the nature of the relation between the grounds of law and legal content. On the contrary, the assumption is that philosophy has successfully ascertained the relevant standards and determined that the relevant substantive claims cannot meet those standards. (Returning to Figures 1 and 2, because the legal indeterminacy thesis depends on a successful account of the relation between the grounds of law and the content of the law, it requires rejection of 3Lb – the legal analogue of Leiter's reading of Quine (Interpretation 3b) – in favor of 3La. And that successful account of the relation between the grounds of law and the content of the law has the consequence that the content of the law is indeterminate in some cases – the analogue of the limited version of Interpretation 1. Notice that neither 3Lb nor 2L is a viable option, though these are the analogues of Leiter's preferred reading of Quine and of the epistemic nihilism reading of Quine, respectively).

In sum, there seems to be a deep disanalogy between the failure of Cartesian foundationalism to validate science and the demonstration that the law is indeterminate. In the first case, philosophy was engaged in a misguided enterprise. In the second, philosophy

[29] Note that the Legal Realists' indeterminacy thesis, as Leiter characterizes it, is not that there are certain issues or kinds of issues with respect to which, necessarily, the law is indeterminate. Presumably, with respect to any given issue on which the law happens to be indeterminate, if the grounds of law were appropriately different, for example if there were an explicit statutory provision, the law would be determinate. So the thesis seems to be that, as a contingent matter, the outcome of some cases is indeterminate. (Perhaps Leiter would claim that, though there are no particular issues with respect to which the law is necessarily indeterminate, it is necessary that the law is indeterminate with respect to some issues or other.) We need not be concerned with the details because no analogous claim is a plausible moral of the failure of Cartesian foundationalism.

has been engaged in answering a question that is within the scope of philosophy, and, by hypothesis, has succeeded in undermining the justification of substantive claims within a domain.

B. The Appropriate Reaction

Let us turn to the appropriate reaction to the indeterminacy of law. In the case of epistemology, my reading of the appropriate reaction to the failure of the project of validating science differs from Leiter's reading. On neither of our readings, however, does the parallel hold up.

On Leiter's reading, the conclusion is that we cannot understand the justificatory relation between evidence and theory, so we react by seeking a causal/nomological explanation of how we move from the evidence to our theories. Since, in the legal case, we have, by hypothesis, a successful understanding of the relation between the grounds of law and judicial decisions, there is no reason to substitute a different project.

It is true that if the law is indeterminate in some cases, we will not be able to predict how judges will decide those cases simply by figuring out what the law is. For predictive purposes, we will have to resort to something else, perhaps to empirical science. But, once more, that is not because we cannot understand the relation between the grounds of law and judicial decisions, but because an understanding of that relation is not sufficient for prediction (not that anyone should have expected it to be).[30] (I would wager, however, that even in appellate cases, a competent lawyer would do better in predicting outcomes on the basis of legal reasons than would a sociologist with no understanding of the relation between the grounds of law and the content of law.) So even if Leiter is right that the proper Quinean conclusion in the case of epistemology is that we must turn to causal/nomological explanation because there can be no fruitful account of scientific justification, no parallel conclusion is warranted in the case of law.

My version of the naturalization of epistemology is different in two ways from Leiter's. First, the empirical psychological project of explaining how our theoretical beliefs are formed is not a

[30] Contrary to what Leiter seems to assume, it is not the case that legal determinacy guarantees successful prediction of judicial decisions, nor is it the case that philosophy of law is much concerned with prediction. See *Naturalism II*, section III, especially note 25 and surrounding text.

replacement for a theory of justification, but a replacement for the misguided project of trying to validate science. Second, and this is the important difference, we can drop our armchair conceptions about justification and seek an understanding of what counts as justification in science. Let us consider each of these points in the legal case.

As to the first point, what is the misguided project that needs to be replaced? To the extent that the law is indeterminate and that there is a philosophical project of showing that the law requires unique outcomes in all cases, that project could be replaced with an empirical explanation of how judges reach their decisions. But that would *not* be a replacement for the philosophical project of understanding how legal reasons can justify legal decisions – that is, how the grounds of law are related to the content of the law. As I have argued, no replacement for that project – arguably the central project of philosophy of law – is needed. Since Leiter's claim of legal indeterminacy is based on substantive philosophical arguments about the relation between the grounds of law and the content of the law, it presupposes that the question of that relation is within the appropriate scope of philosophy. If we thought that philosophy had established the indeterminacy of law, we would have to think that philosophy had arrived at an understanding of the relation between the grounds of law and the content of law. This success would obviously be no reason to think that philosophy could not improve its understanding of legal justification. Nor would it be a reason for thinking that we should turn to empirical disciplines and causal/nomological explanation to enrich that understanding.[31] More to the point, a proposal that relies on philosophical arguments to support the claim that law is indeterminate must accept that it is an appropriate (though perhaps substantively wrong) philosophical project to

[31] Consider Leiter's generalization that 'if no normative account of [a putative justificatory] relation is possible, then the only theoretically fruitful account is the descriptive/explanatory account given by the relevant science of that domain' (1998, pp. 86–87). We have seen that the relation between the grounds of law and the content of the law would standardly be regarded as constitutive, not justificatory. But let us go along with Leiter's way of talking according to which a 'normative account' of the relation between the grounds of law and judicial decisions means a demonstration that the grounds of law make the law determinate. In that case, a showing that no 'normative account' is possible for a particular case or class of cases will have to be based on a theoretical account of the way in which the grounds of law determine the content of the law.

argue that the law is determinate, or more determinate than the Legal Realists thought.[32]

As to the second point, the parallel reaction would be to give up our preconceptions about what it would be for the law to be determinate, and to look instead at what judges implicitly count as constituting determinacy in law. This would be to give up the conclusion that law is indeterminate, and to turn not to empirical science but to an internal appreciation of legal reasoning. In fact, there is something to be said for this reaction. The recognition that science could not be logically deduced from sense experience led Quine to reconsider philosophy's appropriate role. Analogously, the conclusion that judges are engaged in a '"sterile" foundational program' should make philosophers worry about the philosophical preconceptions that seem to support that conclusion. (In my view, though I cannot argue for it here, this reaction is correct: the conditions that the Legal Realists believed had to be satisfied in order for the law to be determinate are too demanding.) To be sure, the idea that philosophy should not lay down armchair standards for law has less force than the corresponding idea in the case of science. So the abandonment of the philosophical views that seem to imply the indeterminacy of law is not as strongly motivated as the parallel reaction with respect to science.

C. Other Aspects of Philosophy of Law

Much of contemporary epistemology is not concerned with providing a justification for scientific theories, or, for that matter, for our everyday beliefs about the physical world. Consider some typical epistemological questions: whether conceivability is a source of knowledge of possibility; whether the 'KK principle' is true; whether the standards for knowledge vary with context; whether valid arguments are closed with respect to knowledge; how disagreement with one's epistemic peers should affect one's beliefs. These projects are not an attempt to justify anything, and they need not be misguided attempts to lay down guidance to scientists from the

[32] In the end, it is unclear to me what Leiter thinks should be replaced and what he takes the motivation to be. He presupposes that it is within the scope of philosophy of law to defend the indeterminacy thesis (Leiter 1995, pp. 99–100). By the same token, he can hardly deny that it is an appropriate philosophical project to dispute that thesis. A claim that a particular philosophical position is substantively wrong is not a proposal for the replacement of philosophy in the relevant sense.

armchair. It may weigh against an account of an epistemological phenomenon or notion that that account would have the consequence that all or most of our beliefs are unwarranted. It does not follow, however, that in trying to understand the notion, we are trying to justify our beliefs.

Epistemologists are trying to understand phenomena such as knowledge, belief, and entitlement. Many such phenomena have justificatory or normative aspects or implications. So, in an extended sense, trying to understand these phenomena is trying to understand justification. But even if a theory of justification in science could be no more than a description of scientific practice, it would not follow that none of these different projects can be fruitful.

On the face of it, Quine does not attempt to show that everything that contemporary philosophers do under the name of 'epistemology' must fail. He is explicitly using the term 'epistemology' for the Cartesian foundationalist project of providing a philosophical justification or legitimization for science (1969, p. 69, *passim*). Even if explaining how we reach our theories is the best substitute for justifying them, it is no substitute at all for other epistemological projects. Thus, the failure of foundationalism by itself would seem to leave other broadly epistemological projects, those not concerned with validating science, untouched.

Apart from the Cartesian foundationalist project, the epistemological projects of Quine's time tended to conceive of themselves as traditional analyses. Quine would have rejected such projects on grounds broader than his rejection of foundationalism in epistemology. But contemporary epistemology need not, and generally does not, see itself as engaged in a purely *a priori* project of discovering analytic truths.[33]

Just as much of epistemology is not concerned with validating science as certain, so much of philosophy of law is not concerned with establishing that law is fully determinate or with understanding the relation between the grounds of law and judicial decisions. Philosophers of law try, for example, to understand the nature of legal rights, reasons, authority, and so on. They ask about the point of law, and whether there is an obligation to obey the law.

[33] In my view, we can and should reject some of the traditional concomitants of analyticity, such as infallibility, without rejecting *a priori* knowledge. But even those who reject *a priori* knowledge need not reject the possibility of substantive philosophical accounts of concepts.

I have argued that the failure of the project of justifying science leaves open the possibility that philosophers can fruitfully investigate epistemological notions. In the case of epistemology, however, the misguided nature of Cartesian foundationalism's armchair standards of justification – logical deduction from an indubitable starting point – was perhaps *some* reason to be concerned that philosophy might not be a fruitful way to explore any notion with justificatory or normative implications. And, on Leiter's interpretation, the conclusion is that philosophy cannot illuminate the nature of scientific justification. In the legal case, by contrast, those who accept the indeterminacy thesis do not claim that philosophy is inappropriately laying down standards of determinacy for law. And, as I have emphasized, there can be no suggestion that philosophy cannot illuminate the nature of the relation between the grounds of law and its content. To the contrary, the starting point is that philosophy has successfully elucidated the relevant standards – or at least successfully enough to show that judicial decisions fail them. *A fortiori*, there is no reason to think that philosophy cannot fruitfully investigate other legally relevant concepts or phenomena.[34]

V. CONCLUSION

This paper began by clarifying the motivation for Quine's proposed naturalization of epistemology. Quine took the failure of Carnap's foundationalist program in epistemology to show that philosophy had been engaged in a misconceived enterprise. In particular, it was confused to think that science needed to be logically deducible from sense experience, or otherwise given an indubitable foundation outside science. If, instead, Quine had taken the impossibility of logically deducing science from sense experience to undermine *science*, he would have had no basis for proposing a replacement of philosophy. And of course, his position would hardly have been naturalistic.

In the legal case, the parallel to the conclusion that epistemology had been engaged in a misconceived enterprise would be the conclusion that the philosophical arguments leading to the indetermi-

[34] There may be no dispute with Leiter here. He suggests that, outside 'the theory of adjudication' there is 'conventionally philosophical work to be done in the broader field of jurisprudence' (1998, p. 100).

nacy thesis were part of a misconceived enterprise. Just as Quine recognized that logical deducibility from sense experience was an inappropriate, armchair-based understanding of scientific justification, the legal theorist would conclude that the putative arguments for legal indeterminacy were based on an inappropriate, armchair-based understanding of the grounds of law or of the way in which the content of the law is determined.

Leiter's indeterminacy thesis is supposed to be a substantive philosophical conclusion that judicial decisions in a substantial class of cases fail the (appropriate) standards of legal justification. It therefore does not parallel Quine's recognition that Carnap's foundationalist project in epistemology relied on an inappropriate understanding of scientific justification – on a philosophical mistake.

On Leiter's reading of Quine, there can be no fruitful account of justification in science. Consequently, we abandon not only the attempt to give science an outside foundation, but any attempt to understand the nature of scientific justification. I argued that it is more faithful to the spirit of naturalism to think that there is no barrier to a theoretical understanding of scientific justification.

Ultimately, however, it does not matter which understanding of the Quinean proposal we adopt. On the legal side of the parallel, the claim that there can be no theoretical account of justification is a non-starter. Since the proposed parallel is supposed to begin with a philosophical demonstration that the law is indeterminate in a substantial class of cases, the parallel presupposes that the relation between the grounds of law and the content of law is an appropriate subject for philosophical investigation. Indeed, the claim that indeterminacy has been demonstrated presupposes a *successful* account of that relation.

It is reasonable to think that, if we want empirical predictions of what judges will do, empirical science could be helpful – especially to the extent that the law is indeterminate. Similarly, it should be uncontroversial that, if we want to know what advice will cause judges to reach particular results, we need to take into account empirical results. But a proposal to replace an area of philosophy with natural science needs to be motivated by more than the effectiveness of natural science at answering empirical questions. There has to be a reason for thinking that the relevant philosophical

questions or projects cannot be fruitfully pursued. In this regard, Quine's naturalization of epistemology provides no rationale for the naturalization of philosophy of law.

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