Chapter Eight

Is There a Priori Knowledge?

For advocates of a priori knowledge, the chief task is to explain how such knowledge comes about. According to Laurence BonJour, we acquire a priori knowledge of a proposition *p* when we grasp that *p* is necessarily true. For opponents, the task is twofold. They must give an account of how empirical knowledge of putative a priori propositions is possible, and they must explain why such propositions cannot be known in the way BonJour claims, namely through rational insight or the recognition of necessity. To do the former, Michael Devitt appeals to the thesis of holism, according to which beliefs face the tribunal of experience not individually but only as a system. Putative a priori propositions are part of our belief system and thus, like everything else we believe, are subject to revision in the light of experience. To accomplish the second task, Devitt argues that, unlike the empirical justification provided by experiences, rational insight as a source of knowledge is utterly obscure. In response, BonJour claims that the appeal to holism begs the question because it leaves unanswered the question of which aspects of a holistic system are indicative of truth, and that empirical justification, at least when it comes to indirect empirical knowledge, is no less problematic than a priori justification. In the final round of their exchange, Devitt denies and BonJour asserts (i) that justification through holistic evidence requires knowing that such evidence is truth indicative, (ii) that holistic naturalism is inflicted with circularity, and (iii) that BonJour's rational insight account of a priori knowledge avoids circularity.

In Defense of the a Priori

Laurence BonJour

The official subject of this debate is the existence of a priori knowledge. But the main focus of my discussion will in fact be not a priori *knowledge*, but a priori

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justification – or rather, more specifically, a priori *reasons* for believing something to be true. In approaching the issue in this way, I am assuming both (i) that justification is one of the requirements for knowledge (the only one to which the issue of a priori status is relevant) and (ii) that justification in the relevant sense consists in having a good reason for thinking that the belief in question is true. But having stated these two background assumptions, I will say nothing further in support of them here.

The view I will defend is that a priori reasons, in a sense yet to be clarified, do exist (and in consequence that a version of epistemological rationalism is true). But the idea of an a priori reason (and also the associated rationalist view) has been understood in a number of different ways, and I will not be defending all of the specific claims that have been associated with this sort of position. My aim is to defend what I take to be a relatively minimal version of the idea of an a priori reason (and of rationalism): more or less the most minimal version that is both philosophically interesting and reasonably faithful to the historical dialectic. All this will take some explanation.

The Nature of a Priori Reasons

As I will understand it here, the concept of an a priori reason has two basic elements, one negative and one positive, the negative one initially more obvious, but both in the end equally essential. Negatively, an a priori reason for thinking that a claim is true is one whose rational force or cogency does not derive from *experience*, either directly (as in sense perception) or indirectly (as by inference of any sort – deductive, inductive, or explanatory – whose premises derive their acceptability from experience). That such a reason is in this way independent of experience does *not* mean that someone who has undergone no experience of any sort could be in possession of it, since the possession of an a priori reason requires understanding the claim for which it is a reason, and experience, even experience of some fairly specific sort, might be required for that. Nor does the idea of an a priori reason, when understood in this way, imply either: (i) that experiences of some sort could not also count for or against the claim in question; or (ii) that such experiences could not override, perhaps even more or less conclusively, the a priori reason in question; or still less (iii) that an a priori reason renders the claim certain or infallible. All of these further claims *might* be true in some cases (though not, I believe, in all or even most), but they in no way follow from or are essential to the basic idea of an a priori reason itself.

What then counts, for these purposes, as *experience*? Obviously the paradigm cases are the various sorts of sense experience, including such things as kinesthetic experiences of bodily orientation in addition to those deriving from the five standard senses. But, in opposition to a number of recent discussions, I would argue that *introspective* awareness of one's thoughts, sensations, and other mental states should also count as a variety of experience, and the reasons for belief that such experience provides as empirical rather than a priori. Introspective experience may not depend on clearly identifiable sense organs, but it is still pretty clearly an awareness of temporally located contingent facts that depends on causal relations between those specific facts and the correlative state of awareness; it is thus far more analogous to sense experience than it is to the sort of experiential process, if it should even be called that, that is involved

in the most paradigmatic cases of allegedly a priori reasons. And basically the same thing is true of even the reason for belief in one's own existence that is supplied by the Cartesian *cogito*, since this is based on introspective awareness of the occurrence of specific thoughts and sensations.

Turning to the positive aspect of the concept of an a priori reason, the traditional view, which I believe to be essentially correct, is that in the most basic cases such reasons result from direct or immediate insight into the truth, indeed the necessary truth, of the relevant claim. (A derivative class of a priori reasons, about which little will be said here, results from similar insights into the derivability of a claim from one or more premises for which such a priori reasons exist or from a chain of such derivations. And a *partially* a priori reason may result from an a priori insight into the derivability of a claim from others established on broadly empirical grounds.) Though the term "intuition" has often been used to refer to such insights, I will refer to them simply as "a priori insights," thus, I hope, avoiding any confusion with the other uses of the rather slippery term "intuition."

Here it is important to be clear at the outset that insights of this sort are not supposed to be merely brute convictions of truth, on a par with the hunches and fears that may simply strike someone in a psychologically compelling way. On the contrary, a priori insights at least purport to reveal not just *that* the claim is or must be true but also, at some level, *why* this is and indeed must be so. They are thus putative insights into the essential nature of things or situations of the relevant kind, into the way that reality in the respect in question *must* be.

One other point about the nature of a priori insights should also be briefly mentioned. For a variety of reasons, but most fundamentally because of the role that such insights are supposed to play in deductive inference, it is often and quite possibly always a mistake to construe them as *propositional* in form. The problem here is essentially the one pointed out long ago by Lewis Carroll: at least in the most fundamental sorts of cases (think here of *modus ponens*), the application of a propositional insight concerning the cogency of such an inference would require either a further inference of the very sort in question or one equally fundamental, thereby leading to a vicious regress. Instead, I suggest, the relevant logical insight must be construed as non-propositional in character, as a direct grasping of the way in which the conclusion is related to the premises and validly flows from them. And once the need for this non-propositional conception of a priori insight is appreciated in the context of deductive inference, it seems to me in fact plausible to extend it to many other cases as well; in particular, it seems plausible to regard the most fundamental insights pertaining to each of the examples listed in the following section as non-propositional in character.[1]

The Argument from Examples for the Existence of a Priori Reasons

Why then should it be thought that reasons having this a priori character genuinely exist? One reason is that there seem to be many, many examples of propositions for which there are clear and obvious reasons of this sort. Here the most obvious examples come from mathematics and logic, but there are others of many widely varying kinds.

For present purposes, a misleadingly short list, reflecting some of the main types, will have to do:

(1) $2 + 3 = 5$.
(2) All cubes have 12 edges.
(3) For any propositions P and Q, if it is true that P or Q and it is false that P, then it is true that Q.
(4) If object A is larger in a specified dimension (length, area, volume, etc.) than object B and B is in turn larger in that same dimension than object C, then A is larger in that dimension than C.
(5) No surface can be uniformly red and uniformly blue at the same time.

My basic claim is that anyone who understands and thinks carefully about each of these propositions will be able to see or grasp immediately that it must be true, that it is true in any possible world or situation – and that the same thing is also true of indefinitely many further examples of these sorts and others. The central rationalist thesis I am defending is that this sort of seeing or grasping constitutes, other things being equal, a good, indeed overwhelmingly compelling, reason for thinking that the claim in question is true, albeit not a reason that is capable of being stated as a separate proposition. Moreover, while independent experiential reasons might also be found for some or all of these propositions, insights of this basic sort do not depend on experience in any discernible way.

Examples like these, which could be multiplied more or less without limit, provide, I claim, compelling evidence for the existence of a priori reasons (and, given the assumptions enunciated earlier, for a priori justification and knowledge). One who wishes to reject this conclusion (and who does not adopt the quixotic stance of denying that we have good reasons for thinking that any of these propositions are true) is obligated to offer some alternative account of those reasons, one that makes them dependent on experience after all, initial appearances to the contrary. My view is that there is no such specific and detailed account of examples like these that has any real plausibility.

One other point is worth adding, before turning to other arguments in favor of the existence of a priori reasons. What is perhaps most misleading about the list of examples given here is that, being chosen for their obviousness, they are far from being the most philosophically interesting cases of a priori reasons. I believe in fact that there are many more interesting albeit less obvious examples as well: claims about the unlikelihood of complex coincidences of various kinds;[2] certain moral claims; metaphysical claims about matters such as the structure of time and space; and many, many others.

Dialectical Arguments for the Existence of a Priori Reasons

While the foregoing argument from examples for the existence of a priori reasons strikes me as pretty compelling, it is, from a dialectical standpoint, still capable of being resisted. An opponent might deny that we have good reasons for at least some of the propositions in question, dismissing the intuitive impression to the contrary as an illusion of some sort, and might also appeal to some account of how and why our reasons for the rest of them are really at bottom empirical. I find such views extremely implausible, but there is no doubt that they are dialectically tenable as long as it is

only such apparent examples of a priori reasons that are in question. But there are also other arguments of a more dialectical character for the rationalist view, which I want now to consider. These still do not make the rejection of a priori reasons completely impossible to maintain, but they make clear the intolerably high skeptical price of rejecting the existence of such reasons.

I will consider two closely related arguments of this dialectical sort. The first is concerned with the relation between experience and certain of the beliefs which it intuitively seems to justify. On any account of the justificatory force of experience, there will be some beliefs whose justification derives from a direct relation to experience and others whose relation to experience is less direct. The most straightforward version of this picture would be a broadly foundationalist view in which the more directly justified beliefs are justified by the content of experience alone, without the need for any reasoning or any further premises. Despite much recent criticism, I myself do not see how to avoid a view of this general kind, while retaining the view that experience does indeed in some way justify beliefs. But even if this is mistaken and there is some more complicated story to be told concerning the directly justified beliefs, the problem to be described here will still arise about the justification of beliefs for which experience provides justification but *not* in a direct or immediate way.

Where exactly the line between the beliefs that are directly justified by experience and those that are not actually falls is a difficult issue, which need not be resolved here. All that matters for present purposes is that the class of beliefs that are broadly empirical but clearly *not* justified by a direct relation to experience is extremely large and important, something that is so for any conception of the scope of direct experiential justification that has ever been seriously advocated. On any such view, this indirectly justified class of beliefs will include at least: (i) beliefs about the unobserved past; (ii) beliefs about unobserved situations in the present; (iii) beliefs about the future; (iv) beliefs in laws of nature and similar sorts of generalizations; and (v) beliefs about unobservable entities and processes, such as those described by theoretical science. Taken together, beliefs of these various kinds are obviously fundamental to our picture of the world and our place in it.

But how can experience provide justification for beliefs of these kinds, if not directly? The only possible answer to this question, I submit, is that experience can provide a good reason for thinking that a belief in this category is true only if we have a logically prior good reason for believing some conditional proposition having a conjunction of beliefs for which there are direct experiential reasons as antecedent and the further belief we are focusing on as consequent – for only this can establish the connection between experience and something that it does not justify in the more direct way. Here it will make the issue clearer to suppose that the antecedent of our conditional is in fact a conjunction of *all* the propositions for which there are direct experiential reasons, even though most of these will be irrelevant to any particular consequent.

What sort of reason could we have for thinking that a conditional proposition of the indicated sort is true? If all of the things for which there are direct experiential reasons are already contained in the antecedent and if the consequent genuinely goes beyond the content of the antecedent (as only some highly implausible reductionist view could deny for the sorts of claims in question), then experience can offer no direct reason (and no indirect reason without assuming some other conditional of the same sort) for

thinking that such a conditional proposition is true. It follows at once that the justification for a conditional proposition of this sort, if there is any, can only be wholly or partially (via some other such conditional) a priori in character. In this way, the blanket rejection of the very existence of a priori reasons leads to a deep and pervasive version of skepticism, one in which we have no reason for thinking that any of the various seemingly empirical claims that are not directly justified by experience are true. And this is a result that seems far too extreme to be acceptable.

Note that I have couched the entire argument in terms of reasons for thinking that the various beliefs are true and not in terms of knowledge. Thus it would be possible for a defender of a view that does not appeal to such reasons in its account of knowledge – such as a version of externalism – to hold that we may have knowledge of such matters, while still denying the existence of a priori reasons. But the admission that we have no reasons of any sort for thinking that such beliefs are true, even while insisting that we still have knowledge in a sense that does not involve such reasons, still constitutes in itself a very deep and implausible version of skepticism – especially when it is added, as it should be, that we also have in the same way no reasons to think that the requisite conditions for knowledge, whatever they may be, are *themselves* satisfied (since there are no plausible views in which these conditions are ones whose satisfaction could be directly established by experience).

The second dialectical argument, which I have space here only to indicate briefly, is in effect a generalization of the first. It questions whether any view that denies the existence of a priori reasons can account in any satisfactory way for *reasoning* itself. Here the fundamental point is that a reasoned or argumentative transition from a claim or group of claims to some further conclusion relies again on there being a good reason for thinking that a conditional claim is true, in this case one having the conjunction of the premises as its antecedent and the conclusion in question as its consequent. That such a conditional is true (or probably true) is in general not the sort of thing that could be directly established by experience, while to say that it is itself arrived at via some further process of reasoning is only to raise the identical issue about that previous step. My suggestion is that if we *never* have a priori reasons for thinking that if one claim or set of claims is true, some further claim must be true as well, then there is simply nothing that genuinely cogent reasoning could consist in. In this way, I suggest, the rejection of a priori reasons is tantamount to intellectual suicide.

A Priori Reasons without a Priori Insight: Moderate Empiricism

In the space remaining, I will look briefly at two opposing positions. While virtually all serious epistemologists up to the time of Hume and Kant were rationalists in essentially the sense advocated here, the dominant position since that time and especially in the past century has been a version of empiricism, one that concedes the existence of a priori reasons of a sort, but claims that when properly understood, such reasons do not have the epistemological and metaphysical significance that is attributed to them by the rationalist. Instead, according to this *moderate empiricist* view, a priori reasons, rather than constituting insights into reality, reflect only linguistic or conceptual conventions or are merely matters of definition.

The basic idea of moderate empiricism is to explain a priori reasons in a way that drastically undercuts their significance. For this purpose, the most standard version of moderate empiricism appeals to the concept of *analyticity*, holding both (i) that all propositions for which there are genuine a priori reasons are analytic, and (ii) that an a priori reason for an analytic proposition does not require the sort of insight into the character of reality advocated by the rationalist. The problem for a would-be moderate empiricist is to find a univocal conception of analyticity in relation to which *both* of these two claims can be plausibly defended. In fact, moderate empiricists have put forth not one, but many different and not obviously equivalent conceptions of analyticity, and have tended to shift illegitimately among them depending on which of these two theses they are defending at any particular moment.

When the various conceptions of analyticity have been sorted out, they fall, I suggest, into two main groups. Some conceptions are *reductive* conceptions: they explain some cases of a priori reasons by appeal to other cases, while providing in principle no way to account for the latter cases. Here the most obvious example is the Fregean conception of an analytic proposition as one that is reducible via definitions or synonyms to a proposition of logic (where it is the propositions of logic that remain unaccounted for). Other conceptions of analyticity in effect lose sight of the main epistemological issue altogether by equating analyticity with one of the features that a proposition for which there is an immediate a priori reason undeniably has according to the rationalist account, without realizing that this fails to yield an independent account of the a priori reason. The plainest example of this mistake is the view that identifies an analytic proposition with one that is "true by virtue of meaning": once reductive accounts are set aside, this turns out to amount to nothing more than the view that one who understands such a proposition can see directly or intuitively that it is true, where this is really just a misleading restatement of the rationalist view, not an alternative to it. In this way, I suggest, the moderate empiricist view turns out under scrutiny to be epistemologically bankrupt.[3]

The Rejection of a Priori Reasons: Radical Empiricism

A more radical alternative is to reject the very existence of any sort of a priori reasons, a view that has been advocated by Quine. There are two main questions that need to be asked about this more radical empiricist view. One is what the arguments for it, and against the existence of a priori reasons, are supposed to be. A second is whether, especially in light of the dialectical reasons in favor of a priori reasons offered above, it is possible for radical empiricism to offer a non-skeptical epistemology.

Quine himself tends to assume that anyone who defends the idea of an a priori reason must be a moderate empiricist, and some of his arguments (in particular the famous "circle of terms" argument in Quine, 1961) really apply only to that view and are thus irrelevant here. When these are set aside, the only very clear argument that remains is one that appeals to the Duhemian thesis that claims about the world cannot be experimentally tested in isolation from each other but only in larger groups. Quine's extreme version of this thesis is the holistic claim that nothing less than "the whole of science" can be meaningfully confronted with experience. From this he infers that any claim in the total "web of belief," including those for which there are allegedly a priori reasons, might be "given up" in order to accommodate "recalcitrant experience," and so, apparently, that such a

priori reasons do not exist after all (see Quine, 1961). But this conclusion simply does not follow, even if the holistic view is accepted. Quine is in effect assuming that the *only* reasons relevant to retaining or giving up a claim in the "web of belief" have to do with accommodating experience, but this is just to beg the question against the existence of independent, a priori reasons for or against such claims. And if this assumption is not made, then the rationalist can freely admit that holistic empirical reasons of this sort may count against a claim for which there is an a priori reason (or the reverse), with the ultimate outcome depending on their relative weight in a particular case – though he will also insist (see below) that the very connections among beliefs that result in the holistic web can only be understood as a priori in character.

The other main issue concerning Quine's radical empiricism is whether it can offer a genuinely non-skeptical epistemology. While the details of Quine's view are quite obscure, it is clear that a claim is supposed to be justified in virtue of being an element of a system of beliefs, some of whose members are appropriately related to experience and which as a whole satisfies certain further criteria, such as simplicity, scope, explanatory adequacy, fecundity, and conservatism. Consider then the conditional proposition that if a claim satisfies all of the conditions thus specified, then it is likely to be true, and ask what reason there is for thinking that this conditional proposition is itself true. Clearly such a proposition is not directly justified by experience, and to appeal to its inclusion in such a system of belief would be plainly circular. Thus either there is an a priori reason (whether immediate or resulting from a more extended a priori argument) for thinking that this conditional proposition is true or there is no reason at all. If the latter is the case, then Quine's view fails to yield genuine justification, while if the former is the case, then his rejection of a priori reasons is mistaken. In this way it can be seen that the idea of an a priori reason is both indispensable for any justification beyond that yielded by direct experience and at least as well understood as the idea of holistic empirical justification, which turns out in fact to depend upon it. (It is worth adding that similar points could also be made about the claim that the various Quinean criteria are themselves satisfied.)

Notes

1 This point did not emerge clearly in my fuller discussion of the a priori in BonJour (1998); for further discussion, see Boghossian (2001), together with my reply to Boghossian in BonJour (2001).
2 Which are the basis, in my view, for the justification of induction (see BonJour, 1998, chapter 7).
3 See BonJour (1998, chapter 2), for a much fuller discussion of this view and its problems.

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There Is No a Priori

Michael Devitt

1 Introduction

It is overwhelmingly plausible that *some* knowledge is empirical, "justified by experience." The attractive thesis of naturalism is that *all* knowledge is; there is only one way of knowing.[1] But this naturalism seems to be refuted by intuitions about a range of troublesome examples drawn from mathematics, logic, and philosophy. Thus, how could experience have anything to do with justifying the belief that 5 + 7 = 12? Furthermore, it does not seem *possible* that such knowledge could be revised in the same sort of way that "All swans are white" was by the sighting of black swans in Australia. It seems that the troublesome knowledge *must* be justified in some other way, justified a priori.

So we have a motivation for abandoning naturalism and accepting the thesis that some knowledge is a priori. Yet there is a consideration against this thesis: the whole idea of the a priori seems deeply obscure. *What is it* for a belief to be justified a priori? What is the nature of this non-empirical method of justification? Without satisfactory answers the a priori is left mysterious.

In light of this, a naturalistic critic of the a priori faces two tasks: to undermine the motivation by showing that the troublesome knowledge could be empirical after all; and to demonstrate the obscurity of the a priori. Success in the second task would show that an a priori explanation of the troublesome knowledge, indeed of anything, was very unpromising. Success in the first task would show that an empirical explanation was available. So we would have a nice abduction for naturalism: the *best* explanation of that knowledge is that it is empirical.

But, first, a preliminary point. Our concern is with the *justification* of beliefs, not with their *source*. Experience is clearly not the source of many mental states: they are innate. Perhaps some of these are justified beliefs (although I doubt it). If so, the naturalist insists, beliefs of that sort were somehow justified by the experiences (broadly construed) of our distant ancestors and we have inherited that justification via natural selection.

Drawing on earlier works (Devitt, 1996, 1997, 1998, 2002), I shall attempt the two tasks. I shall conclude by considering Laurence BonJour's (1998, 2001a, 2001b) thorough and vigorous defense of the a priori.

2 Motivation

The naturalistic alternative. Our aim is to provide an alternative naturalistic account of the troublesome examples of allegedly a priori knowledge. With the help of Quine (1961, 1966, 1969, 1975), and before him Duhem (1954), I think that we can do this.

The key to the naturalistic alternative is breaking free of the naive picture of justification suggested by the swan example. We must view justification in a more holistic way: beliefs, even whole theories, face the tribunal of experience not alone, but in the company of auxiliary theories, background assumptions, and the like. Much evidence for this "Duhem–Quine thesis" has been produced by the movement in philosophy of science inspired by Kuhn (1962). In light of this, we have no reason to believe that whereas scientific laws, which are uncontroversially empirical, are confirmed in the holistic empirical way, the laws of logic and mathematics are not; no reason to believe that there is a principled basis for drawing a line between what can be known this way and what cannot; no reason to believe that there is, in Quine's vivid metaphor, a seam in the web of belief.

Quine is fond of an image taken from Otto Neurath. He likens our web of belief to a boat that we continually rebuild while staying afloat on it. We can rebuild any part of the boat – by replacement or addition – but in so doing we must take a stand on the rest of the boat for the moment. So we cannot rebuild it all at once. Similarly, we can revise any part of our knowledge – by replacement or addition – but in so doing we must accept the rest for the time being. So we cannot revise it all at once. And just as we should start rebuilding the boat by standing on the firmest parts, so also should we start rebuilding our web. So we normally take the propositions of logic and mathematics for granted. Still, each of these propositions is in principle revisable in the face of experience: taking a stand on other such propositions, and much else besides, we might contemplate dropping the proposition.

Given this naturalistic alternative, we have no need to turn to an a priori explanation of our knowledge of mathematics, logic, and the like. The original intuitions were really that this knowledge is not justified in some *direct* empirical way. Those intuitions are preserved. Yet we can still see the knowledge as empirical: it is justified empirically in an *indirect* holistic way.

I shall develop this account by answering objections.

> **Objection 1**: "You are surely not suggesting that these few hand-waving remarks about the empirical nature of mathematics come close to solving the epistemological problem of mathematics."

No, I am not. But there are two reasons why this is beside the point. First, as Georges Rey (1998) is fond of pointing out, we are not close to solving the epistemological problem of *anything*. Since we do not have a serious theory that covers even the easiest examples of empirical knowledge – examples where experience plays its most direct role – the fact that we do not have one that covers the really difficult examples from mathematics hardly reflects on the claim that these are empirical too. We all agree that there *is* an empirical way of knowing. Beyond that, the present aim needs only the claim that the empirical way is holistic. *We have no reason to believe that a serious theory would show that, whereas empirical scientific laws are confirmed in the holistic empirical way, the laws of mathematics are not.*

Second, there is a special reason for not expecting the epistemological problem of mathematics to be anywhere near solved: the *metaphysical* problem of mathematics – what mathematics is *about* – remains so intractable. How could we solve the epistemological problem when we remain in such darkness about the metaphysical one? *We no*

longer have any reason to think that, if we solved the metaphysical problem, the epistemological problem would not be open to an empirical solution.

> **Objection 2**: "We need to explain our knowledge of *necessities*; for example, that *necessarily* 5 + 7 = 12, that *necessarily* all bachelors are unmarried. Yet all we can know from experience is how things are – how they are in the actual world – not how they *must* be – how they are in all possible worlds."

But why should we accept that necessities can only be known a priori? Prima facie, *some* necessities are known empirically; for example, that water is necessarily H_2O and that Hesperus is necessarily Phosphorus. Indeed, science seems to be discovering necessities all the time. Now, one might respond that what science discovered was only that water *is* H_2O, not that it *necessarily* is; the necessity is not an empirical discovery. But, again, why should we accept this? Certainly, we do not simply *observe* the necessity of water being H_2O. But we do not simply observe most scientific facts: we discover them with the help of a lot of theory. And that, according to the naturalist, is how we discover necessities. More needs to be said of course, but to say it we would need to take a stand on the *metaphysical* problem of necessity. That problem is another difficult one. There is no reason to believe, however, that if we solved it we would not be able to explain our knowledge of necessities empirically. The situation for that knowledge is analogous to that for our knowledge of mathematics.

> **Objection 3**: This objection concerns logic. It arises out of the dominant theme of BonJour's defense of the a priori: that "the rejection of any sort of *a priori* justification leads inexorably to a severe skepticism" and to the undermining of "reasoning or argument in general" (BonJour, 2001a, pp. 625–626). BonJour's discussion suggests the following objection. "On your Quinean alternative, experience justifies beliefs in the interior of the web via links with beliefs at the periphery, via links with beliefs 'close to experience.' But these justifications depend on the links themselves being justified: clearly a belief is not justified by other beliefs unless those others give it *genuine support*. The objection to your alternative is then: the justification of these links has to be *a priori*; it could not come from experience." Indeed, BonJour (2001b, p. 679) claims, "if there is no *a priori* insight ... no prediction will follow any more than any other ... any ... sort of connection between the parts of the system will become essentially arbitrary." "[T]he rejection of all *a priori* justification is tantamount to intellectual suicide" (BonJour, 2001a, p. 626). In brief, the objection is that logic must be seen as a priori because we need logic to get evidence for or against anything.

Many would agree with this objection. I have three responses. But first I will give what I hope is some fairly uncontroversial background.

The links that hold the web of belief together reflect a set of rules that are part of "an evidential system" (Field, 1996, 1998). As a result of nature and nurture each person embodies such a system which governs the way she arrives at her beliefs about the world. A system must include dispositions to respond selectively to perceptual experiences and to infer according to certain rules. A likely example of a rule is *modus ponens*. So, a person embodying an evidential system *S* containing this rule is disposed to infer according to the pattern:

If *p* then *q*,
p,
So, *q*.

Now, the objection is surely right in claiming that for a person using *S* to have justified beliefs, its rules have to be good ones. This is not to say that she must know the epistemological theory,

T: *S* is a good evidential system,

for her beliefs to be justified. So it is not to say that she must know

MP: *Modus ponens* is a valid inference

for her beliefs to be justified by *modus ponens* arguments. Indeed, as Lewis Carroll made clear a century ago, the demand for this sort of extra premise in an argument leads to a regress (see Boghossian, 2001, for a discussion). And it is just as well that our person is not required to have this epistemological knowledge for, if she is an ordinary member of the folk, she is unlikely to have given such matters much thought. Still, it is certainly appropriate *to* give them thought. So it is appropriate for the person to stand back from her arguments and ask some epistemological questions. What are the rules of *S*? This is a question in *descriptive* epistemology. Are the rules of *S* good? How do we know *T* and *MP*? These are questions in *normative* epistemology. Any answers to such questions will be further beliefs, additions to her web. I take the point of the objection to be that normative answers must be obtained by a priori insight.

Because *modus ponens* is a deductive rule, it is a rather misleading example of a system's rules. Given any theory and a body of evidence that it entails, we can easily construct rival theories that entail the same evidence. So we need more than deductive rules to choose between these theories and avoid skepticism: we need non-deductive "ampliative" rules. And these are rules that we don't have much insight into, whether a priori or not. It is largely because of this ignorance that, as already noted, we lack a serious epistemological theory. We can, of course, wave our hands and talk of enumerative induction, abduction, simplicity, and the like, but we are unable to characterize these in the sort of detail that would come close to capturing the rules that must constitute our actual evidential systems; for example, we are unable to specify when an explanation is good, let alone the best, or when we should take the belief that all observed *F*s have been *G* to justify the belief that all *F*s are *G*. Aside from that, some of these vague rules are controversial; for example, scientific realists love abduction, Bas van Fraassen does not. In sum, when we move beyond deduction, we have few if any specific and uncontroversial rules to be insightful about. The non-skeptics among us will share the very general insight that, *whatever the rules of our evidential system may be*, those rules are for the most part pretty good. So, if *S* is that largely unknown system, we believe *T*.

Response 1. Is the objection claiming that *T* is known a priori? If so, the claim hardly seems tempting. It seems more plausible to view our general insight that *T* is true as supported by the empirical success of *S*, whatever *S* may be. Similarly, someone afloat on a boat may not know the methods by which it was built but, noting its seaworthiness, infers that the methods, whatever they were, are good. In sum, when we focus on the

largely unknown ampliative parts of *S*, our confidence in *S* seems as empirical as anything. To that extent, *T* does not even appear to be supported by a priori insight.

"But what about the specific deductive rules that we do have insight into, rules like *modus ponens*? Even if our overall confidence in *S* is empirical, our confidence in these deductive parts is a priori. We know *MP* a priori at least."

Response 2. But why must we see the support for the deductive rules as different in principle from that for the ampliative rules? They are all rules of *S*, they are all needed to avoid skepticism, and we can see them all as supported by the overall empirical success of *S*. Then the justification of the deductive parts of *S* is no different in principle from that of the ampliative parts. Similarly, all parts of *S* are empirically *revisable*. Thus, suppose that experience leads us to abandon *T* in favor of *T′*, a theory that recommends an evidential system *S′* built around a non-classical logic. Then clearly we should use *S′* instead of *S*. In this way our logical practices are themselves open to rational revision in the light of experience. These practices are far from "arbitrary": they are recommended by an experience-based epistemology.

Still, many will feel that I have not yet got to the heart of the objection. "On the one hand, you talk of *T* being supported by the empirical success of *S*. Yet that alleged support must come via *S* itself. So, the attempt to support *T* is circular. On the other hand, you talk of the possibility of experience leading us to abandon *T* in favor of *T′*. Yet experience must be brought to bear on *T* by using *S* and so could not show that *T* is false and hence that we ought not to use *S*. The attempt to refute *T* is self-defeating."

Response 3. In considering the circularity charge we need to follow Braithwaite (1953, pp. 274–278) in distinguishing "premise-circularity" from "rule-circularity." An argument is premise-circular if it aims to establish a conclusion that *is assumed as a premise in that very argument*. Premise-circularity is clearly reprehensible. But my argument for *T* is not guilty of it because it does not use *T* as a premise. An argument is rule-circular if it aims to establish a conclusion that *asserts the goodness of the rules used in that very argument*. My argument tries to establish *T* which asserts the goodness of *S*, the system used in that argument to establish *T*. So the argument is certainly rule-circular. This is worrying initially but is there a good reason to think that it is in fact reprehensible? I agree with those who have argued that there is not (Van Cleve, 1984; Papineau, 1993; Psillos, 1998). Guided by the Neurath image, we accept the non-epistemological part of our web for the moment and seek to justify the epistemological part, *T*. And that justification is governed by just the same rules that govern the justification of anything, the rules of *S*.

The self-defeat charge is also worrying initially. Yet there are reasons for thinking that we can indeed show an evidential system to be defective using that very system.

First, it seems undeniable that our evidential systems have changed. (i) A good deal of the impressive scientific progress over the past three centuries has been in improved methodologies: we have learnt a vast amount not only about the world but also about how to learn about the world. As a result, much education of the young scientist is in these methodologies: think of physics and psychology, for example. (ii) Educated folk have tried to adjust their thinking in light of evidence that we normally tend toward certain sorts of irrationality; for example, counter-induction, and ignoring base rates in thinking about probabilities. (iii) Even our deductive practices have been affected by the rise of modern logic.

Next, the process of making any of these system changes must have been governed by some evidential system, the one that was then current. So, that system was used to

establish an epistemological thesis that led to the system's replacement. These examples give us good reason to think that an evidential system could be used rationally to undermine itself. Accepting the non-epistemological part of our web and governed by *S* as usual, we find *T* wanting and so replace it and the system *S* that it recommends.

Despite this response, worries about circularity and self-defeat may persist. It helps to remove them to note that if the worries were appropriate, analogous ones would be just as appropriate *if T were justified by a priori insight*. For, if *T* were thus justified, a priori insights would be part of our evidential system *S*. We could then generate a circularity worry. The argument for *T*, which asserts the goodness of *S*, uses part of *S* to establish *T*. And we could generate a self-defeat worry. The apriorist must allow that we could abandon *T* in favor of *T′* on the basis of *a priori* insight, part of *S*. So *S* is used to establish *T′*, which leads to its own replacement. If these circularity and self-defeat charges are unworrying for the apriorist, the analogous ones are surely so for the naturalist.

Faced with the circularity and self-defeat charges we could conclude that our evidential system *is* unjustified. But this throws the baby out with the bathwater. Although the charges are worrying in the beginning, I have argued that they should not be in the end. In any case naturalism and apriorism are on an equal footing in dealing with them.

Objection 4. "Suppose that it really is the case that any belief can be confirmed or disconfirmed by experience in the Duhem–Quine way. This does not show that agreement with experience is the *only* consideration relevant to the belief's rational acceptance and rejection. Hence it does not show that there is no a priori justification. By supposing that it does show this you beg the question."

The objection misses the main point of the naturalistic alternative. That point is not to show that there is no a priori knowledge but to remove the motivation for thinking that there must be. Everyone agrees that there is an empirical way of knowing. The Duhem–Quine thesis, supported by the history of science, is that this way of knowing is holistic. I have argued that our troublesome knowledge of mathematics, logic, and the like can be accommodated within this holistic empirical picture. We are far short of a detailed epistemology for this knowledge, of course, but we are far short of a detailed epistemology for any knowledge. Now, if I am right about all this, we have clearly removed the theoretical need to seek another, a priori, way of knowing. This is certainly *part* of the case against the a priori, but it cannot stand alone. The rest of the case is that the whole idea of the a priori is deeply obscure.

BonJour and many others will think that this empirical justification of the troublesome knowledge is inadequate. They will demand a justification that is stronger and that can only be met by appeal to the a priori. I think that this demand might be rational if there were any grounds for optimism about the a priori. But, I shall now argue, there are no such grounds, only grounds for pessimism. If this is right, the demand is not rational.

3 Obscurity

The aim in this section is to show that the whole idea of the a priori is too obscure for it to feature in a good explanation of our knowledge of anything. If this is right, we have a nice abduction: the *best* explanation of all knowledge is an empirical one.

We are presented with a range of examples of alleged a priori knowledge. But what are we to make of the allegation? What is the nature of a priori knowledge? We have the characterization: it is knowledge "*not* derived from experience" and so *not* justified in the empirical way. But what we need if we are to take the a priori way seriously is a *positive* characterization, not just a negative one. We need to describe a process for justifying a belief that is different from the empirical way and that we have some reason for thinking is actual. We need some idea of what a priori knowledge *is* not just what it *isn't*.

Why? After all, I have been emphasizing how little we know about *empirical* justification. So why pick on the a priori? The answer is that there are two crucial differences in the epistemic status of the two alleged methods of justification. First, the existence of the empirical method is not in question: everyone believes in it. In contrast, the existence of the a priori way is very much in question. Second, even though we do not have a serious theory of the empirical way, we do have an intuitively clear and appealing general idea of this way, of "learning from experience." It starts from the metaphysical assumption that the worldly fact that *p* would make the belief that *p* true. The empirical idea then is that experiences of the sort that would be produced by that fact are essentially involved in the justification of the belief. In contrast, we do not have the beginnings of an idea of what the a priori way might be; we lack not just a serious theory but *any idea at all*.

The difficulty in giving a positive characterization of a priori knowledge is well demonstrated by the failure of traditional attempts based on analyticity. Let the example of alleged a priori knowledge be our belief that all bachelors are unmarried. According to the tradition, the content of the concept <bachelor> "includes" that of <unmarried>, thus making the belief analytic. This seemed promising for an account of a priori knowledge because it was thought that, simply in virtue of *having* a concept, a person was in possession of a "tacit theory" *about* the concept; in virtue of having <bachelor>, a person tacitly knew that its content included that of <bachelor> So a person's conceptual competence gave her privileged "Cartesian" access to facts about concepts. The required non-empirical process of justification was thought to be one that exploited this access, a reflective process of inspecting the contents of concepts to yield knowledge of the relations between them, which in turn yielded such knowledge as that all bachelors are unmarried. This alleged process is that of "conceptual analysis."

Even if we grant that we have this Cartesian access to conceptual facts, the account fails. These facts would not justify the proposition that all bachelors are unmarried *unless the proposition that all unmarrieds are unmarried were justified*. But where does the justification for this proposition come from? It does no good to say, rightly, that the proposition is a *logical* truth, for what justifies logical truths? No satisfactory non-empirical account has ever been given of how they can be justified. Without such an account we have not described a non-empirical way of knowing.

In any case, we should not grant the Cartesian view that competence gives privileged access to contents, despite its great popularity. I urge a much more modest view of competence according to which it is an *ability or skill* that need not involve any tacit theory, any semantic propositional knowledge; it is knowledge-how not knowledge-that (Devitt, 1996). Why then should we believe the immodest Cartesian view, particularly since it is almost entirely unargued?

The content of a person's thought is constituted by relational properties of some sort: "internal" ones involving inferential relations among thoughts and "external" ones involving certain direct causal relations to the world. Take one of those relations. Why suppose that, simply in virtue of her thought having that relation, reflection must lead her to *believe that* it does? Even if reflection does, why suppose that, simply in virtue of that relation partly constituting the content of her thought, reflection must lead her to *believe that* it does? Most important of all, even if reflection did lead to these beliefs, why suppose that, simply in virtue of her competence, this process of belief formation *justifies* the beliefs and thus turns them into *knowledge*? The supposition seems to be gratuitous. We need a plausible explanation of this allegedly non-empirical process of justification.

4 BonJour's Rationalism

I turn finally to BonJour's wonderfully forthright approach to the a priori. First, he has no more faith in attempted explanations in terms of analyticity than I have and gives an excellent critique of their failings (BonJour, 1998, chapter 2). Indeed, he is rather contemptuous of these attempts to make the a priori palatable to the modern mind. BonJour is an unabashed old-fashioned rationalist (apart from embracing the fallibility of a priori claims). He rests a priori justification on "rational insight": "*a priori* justification occurs when the mind directly or intuitively sees or grasps or apprehends … a necessary fact about the nature or structure of reality" (BonJour, 1998, pp. 15–16). So, our problem of explaining the a priori becomes that of explaining rational insight. Where is the *justification* to be found in this quasi-perceptual process of apprehending a necessary fact?

BonJour (1998, p. 107) is only too well aware that most philosophers find this rationalism extremely mysterious. In response, he offers the beginnings of an explanation based on the unpopular thesis that a thought's content is an intrinsic property of the thought (1998, pp. 180–186). In my view (Devitt, 1990, 1996, 2001), this thesis thoroughly deserves its unpopularity. Aside from that, the explanation based on it is very obscure, as commentators have pointed out (Boghossian, 2001; Rey, 2001). But we need not dwell on this explanation because BonJour himself does not claim much for it. Indeed, he accepts that "we do not presently have anything close" to an adequate explanation of rational insight (BonJour, 2001b, p. 674). That seems to leave rationalism in trouble. Not according to BonJour (1998, p. 31): "the supposed mystery pertaining to rationalism ... has been ... greatly exaggerated"; allegations that rationalism is "objectionably mysterious, perhaps even somehow occult ... are very hard to take seriously" (1998, pp. 107–108); "the capacity for rational insight, though fundamental and irreducible, is in no way puzzling or especially in need of further explanation" (1998, p. 16).

What is the source of this extraordinary confidence in an unexplained and apparently mysterious capacity? It comes partly, of course, from the earlier-noted view that to deny the a priori is to commit "intellectual suicide." But it comes also from "the intuitive or phenomenological appearances" of rational insight (1998, p. 107): BonJour thinks that these appearances, when examining examples of alleged a priori knowledge, provide a prima facie case for rationalism that is "extremely obvious and compelling" (1998, p. 99).

So, BonJour thinks that there just *has* to be rational insight even if we can't explain it. In contrast, I think, for the reasons set out in section 2, that there does not have to

be, and the apparent hopelessness of explaining rational insight shows that there isn't any. I shall end with a few more remarks about that hopelessness.

First, a word on the phenomenology. BonJour denies that there is any mystery in "our cognitive experience" (1998, p. 108) when we have "direct insight into the necessary character of reality" (1998, p. 107). He may be right. But the mystery lies in the claim that *this experience is an a priori insight*. Nothing in the phenomenology supports *that* or, indeed, *any* view of what justifies the insight. In particular, it does not show that the insight is not justified in a holistic empirical way. This theoretical issue is way beyond anything in the phenomenology.

Turn next to that theoretical issue. A human mind/brain forms beliefs about the external world. In virtue of what is any belief justified and hence likely to be true? We have a rough idea of where to find an empirical answer. We look at the way in which the beliefs are related to the experiences that the world causes. Justified beliefs are appropriately sensitive, via experience, to the way the world is. Many instruments – thermometers, voltmeters, and so on – are similarly sensitive to the world. Of course, the mind/brain differs from these instruments: beliefs are much more complex than the "information states" of instruments and their sensitivity to the world is mediated, in a holistic way, by many others. Still, the mind/brain is similar enough to the instruments to make empirical justification quite unmysterious, despite the sad lack of details.

The contrast with a priori justification is stark. What sort of link *could* there be between the mind/brain and the external world, other than via experience, that would make states of the mind/brain likely to be true about the world? What non-experiential link to reality could support insights into its necessary character? There is a high correlation between the logical facts of the world and our beliefs about those facts which can only be explained by supposing that there are connections between those beliefs and facts. If those connections are not via experience, they do indeed seem occult.

At this point, it remains a mystery what it would be for something to be known a priori. Any attempt to remove this mystery must find a path between the Scylla of describing something that is not a priori knowledge because its justification is empirical and the Charybdis of describing something that is not knowledge at all because it has no justification.[3] The evidence suggests that there is no such path. Hankering after a priori knowledge is hankering after the unattainable.

The nice abduction is established: our knowledge of mathematics, logic, and the like cannot be explained a priori; an empirical explanation of it is the best.

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Notes

1 BonJour (1998) calls this *epistemological* naturalism "radical empiricism." It should not be confused with *metaphysical* naturalism, a reductive doctrine like physicalism.

2 Although Quine's influence on the views I will present is large and obvious, I am not concerned to argue that these views are precisely his nor to defend everything he has to say on the a priori and related topics.
3 I argue (1998), in effect, that Rey's attempt (1998) to give a reliablist account of the a priori falls victim to Charybdis.

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Reply to Devitt

Laurence BonJour

Professor Devitt's case against the a priori involves two main points: (i) that all genuine knowledge, including "troublesome examples" like the ones cited in my initial essay, can be accounted for entirely in empirical terms, at least mainly via an appeal to what he refers to as the "holistic empirical way" of knowing, so that an appeal to the a priori is unnecessary and unmotivated; and (ii) that the idea of a priori knowledge or justification or reasons is "deeply obscure," too obscure to provide a satisfactory explanation of anything, even if there were anything further that needed to be explained. I will respond to these in turn.

(i) Devitt asserts in several places that the existence of empirical knowledge is not in question. This is indeed obviously true if by "empirical knowledge" is meant knowledge whose justification depends at least *partially* on experience. But if it means knowledge whose justification derives *entirely* from experience, with no need for any a priori element, then it is far from clear that there is very much such knowledge and not entirely beyond question that there is any at all. In particular, the justification of scientific laws is *not* "uncontroversially empirical" in this latter sense, since inductive reasoning or something like it is also required. Thus, contrary to what Devitt sometimes seems to suggest, the central issue as regards his point (i) is not just whether the "holistic empirical" view can account for the "troublesome examples", but whether it can account for the justification of at the very least large portions of our apparent knowledge in an *entirely* empirical way.

Here the fundamental question is what holds together the various elements of the holistic system to which he appeals (including "auxiliary theories, background assumptions, and the like") so that the whole system (and not just its "edges") connects with experience in such a way as to yield a good reason for thinking that some particular belief or theory embedded in it is true (where these connections, as Devitt notes, will involve much more than logic in the narrow sense). The connections that are relevant to any particular issue of justification may be thought of piecemeal in terms of various logical and quasi-logical relations between them or they may be summed up into one overall conditional as at the end of my initial essay, but either way some reason is seemingly needed for thinking both that various specific connections hold and that when taken together they are of the right sort for the overall system to confer justification on those of its elements that are not matters of direct experience. And it is hard to see how such reasons can be anything but a priori, since they are surely not a matter of direct experience (and cannot without circularity be based on any appeal to the holistic picture itself).

Devitt offers two main responses to this sort of objection, neither of which seems to me to be satisfactory. (His other response, the second in his list, is a response to an intermediate rejoinder and does not bear directly on the main issue.) The first response is that we are unable to characterize in detail the specific rules, over and above formal logic in the narrow sense, that we follow in arriving at our "web of belief," and so cannot plausibly be said to have a priori insight into their correctness; and it is most implausible that we have any such insight into the general claim (Devitt's *T*) that our

overall system of rules is a good one. I agree that we have no insight of the latter sort; indeed any claim of this sort could, as far as I can see, be justified only indirectly by appeal to more specific claims about the particular rules involved. But is it really so clear that we have no insight into the correctness of the specific rules that we use, even if we are unable to formulate those rules in precise detail? That when a scientist reasons inductively or abductively, he has no insight into the cogency of his reasoning, but is simply flying blind, doing what (for whatever reason) comes naturally, but with no reason to think that it is likely to take him in the direction of the truth? I myself find this picture most implausible. But the further thing to be said is that if it is right, then the result is simply skepticism, since this lack cannot be remedied in the way that Devitt suggests: by reasoning that the empirical success of our system of rules is best explained by the supposition that it is generally a good one. For that sort of abductive argument – like the one that Devitt uses at the end to arrive at his main conclusion – is equally one that on his view we have no reason to think is cogent.

Devitt's second main response attempts to answer the charge that it is circular to appeal to the very set of holistic rules whose correctness is at issue in establishing that correctness. (Note that, contrary to what he suggests, the abductive argument for *T* just discussed does not in fact do this in any very clear way.) Devitt follows Braithwaite in distinguishing "premise-circularity" from "rule-circularity," with the point being that while premise-circularity is clearly objectionable, this is not so clearly true of rule-circularity. Though I have no space for an extended discussion, this point seems to me to be clearly and indeed obviously mistaken. If the issue is whether following that set of rules, operating in the way that the "holistic empirical" approach sanctions, gives us any reason to think that our results are true, it is obviously no help at all to be told that the claim that those results are likely to be true (or that the rules are good ones) can be arrived at by employing the very rules whose truth-conduciveness is in doubt. Such an argument may not beg the question in quite the sense that a premise-circular one does, but it is just as unsatisfactory in relation to the question at issue. (Much of this also applies to the issue of self-defeat, though I again have no space to go into that issue in any detail. I think that changes in our system of rules obviously occur, but that such change is less holistic than Devitt would have it and so does not raise issues of circularity: the rule or alleged insight being rejected does not contribute to the reason for its rejection.)

Devitt adds the further remark that the same issue about circularity would apply to the appeal to a priori insight, but this also seems to me mistaken. He has in mind a view according to which the overall claim *T* is justified by a priori insight, and I have already rejected that. Beyond that, the basic point is that a priori insight is atomistic rather than holistic in character, so that neither the issue of circularity nor that of self-defeat applies in any clear way. Alleged a priori claims can be defeated by a combination of other such insights (plus, sometimes, empirical premises), but the main positive case for such a claim rests only on the immediate insight itself.

Thus the basic point of the objection to the holistic empirical view seems to me to remain unscathed: such a view can give no satisfactory account of how the fact that a belief satisfies its requirements constitutes a reason to think that it is true – or indeed of how we can have reason to think that its requirements are indeed satisfied. In this way, such a view leads only to a deep and pervasive skepticism.

(ii) Devitt's second main point is that the idea of a priori justification – that is, of an a priori reason – is "deeply obscure," where the obscurity in question seems to be at

least primarily that the source of justification has not been adequately explained. Granting that empirical justification is also not very well understood, Devitt nonetheless claims that there are "two crucial differences" between empirical and allegedly a priori justification that make the lack of understanding more telling in the latter case. The first is that "the existence of the empirical method is not in question." But given the argument of my initial contribution and of part (i) of this reply, the existence of *purely* empirical justification for any claim that is not a matter of direct observation is very much in question – indeed seems to be clearly ruled out. And the existence of *partially* empirical justification, I have argued, must depend on a priori justification and so can hardly be taken as a reason for skepticism about it. This conclusion is reinforced by Devitt's second "crucial difference": that we have "an intuitively clear and appealing general idea" of how empirical knowledge and justification are possible, namely that experiences produced by the fact that would make the belief true are what justifies it. Plainly this applies only to the (relatively rare) cases in which experiential justification is direct and does nothing to illuminate the more indirect cases. Thus Devitt's "two crucial differences" do very little to show that there is any special problem with the a priori.

Beyond that, what does the alleged "mystery" really amount to? Devitt seems to me to be simply rejecting the idea that merely finding something to be intuitively necessary can ever constitute in itself a reason for thinking that it is true – albeit one that is defeasible by further considerations (which would themselves ultimately depend on further such insights). My contrary suggestion would be that apart from the limited class of claims that are directly justified by experience, there is in the end simply no other form that a reason for thinking that something is true, whether atomistic or holistic in character, could possibly take. To be sure, such insights can be combined in complicated ways to yield more elaborate arguments of various sorts, but in the end the various steps in such arguments, together with any premises or principles that they invoke, can only be justified by appeal to the very same sort of a priori insight – if, that is, they are to be justified at all. No doubt it would be nice to have a fuller, richer account of a priori insight and how it works. But given both intuitively compelling examples and an argument showing such insight to be essential to any but the most minimal cognitive functioning, the absence of such an account does not yield in any clear way a reason for denying its existence.

Reply to BonJour

Michael Devitt

"There Is no *a Priori*" is, in effect, partly a response to the main arguments in Laurence BonJour's "In Defense of *a Priori* Reasons." So this reply is largely to his "Reply to Devitt."

My essay has two criticisms of the a priori: (i) we don't need it because all justification could be empirical; (ii) the whole idea of the a priori is deeply obscure.

The central issue over (i) concerns rule-circularity and self-defeat. I shall focus on rule-circularity, as does BonJour. An argument is rule-circular if it aims to establish a

conclusion that asserts the goodness of the rules used in that very argument. I claimed (Response 3) that although rule-circularity is initially worrying it is not in fact reprehensible. I cited some arguments for this claim but did not give any myself (although I did give one for self-defeat, for the view that rules could govern a procedure that supplies a rational basis for their own revision). BonJour rejects my claim as "clearly and indeed obviously mistaken" but also gives no argument. What hangs on this unargued matter?

First, if naturalism needs to rely on a rule-circular argument, my claim had better be right. Now, taking *S* to be the set of rules constituting our actual evidential system, I did accept that my naturalistic argument for the epistemological thesis

T: *S* is a good evidential system

was rule-circular. But, interestingly, BonJour's discussion raises the possibility that this acceptance was too hasty. After all, the metaphor of Neurath's boat suggests that the epistemological claim that *a certain one* of *S*'s rules, say *R*, is good could be justified by an argument that uses *other* rules of *S* but not *R* itself; thus perhaps one could use inductive and deductive rules to justify abduction. There would be nothing circular about that. So if we could do that for claims about *each* rule of *S* in turn, we could justify *T* without rule-circularity. And the justification would be naturalistically kosher. Still, accomplishing this does seem a very tall order, particularly when one remembers that *S* must contain rules governing the choice between *T* and a rival *T′* that recommends a different system *S′*. Given our ignorance of *S* we cannot be certain that the naturalist must accept rule-circularity but I think it very likely that she must.

Second, if rationalism *also* needs to rely on a rule-circular argument then BonJour had better hope that I am right about them! I argued that rationalism does indeed rely on rule-circularity. BonJour disagrees. His "basic point is that a priori insight is atomistic rather than holistic in character." So, we justify the overall claim *T* only indirectly by justifying particular claims about the rules that make up *S* with the result "that neither the issue of circularity nor that of self-defeat apply in any clear way." BonJour is wrong about this.

S is a system of rules for belief-formation. We all agree that *S* includes rules governing responses to perceptual experiences, ampliative rules, and deductive rules. According to the rationalist, *S* also includes a rule yielding a priori insights. Now the challenge posed by the skeptic is to say why any rule, *R*, is good. BonJour responds to this challenge by appealing largely, if not entirely, to a priori insight; the mind directly or intuitively grasps the necessary fact that *R* is good. Whatever its other problems, there need be no circularity about this *provided R is not the rule for a priori insight itself.* Where *R* is that rule, the rule-circularity is obvious. So BonJour's move to atomism does not avoid rule-circularity.

Criticism (i) aimed to show that all beliefs could be justified empirically, thus removing the motivation for the a priori. Among these beliefs are epistemological ones about the goodness of rules for belief formation. I doubt that all these epistemological beliefs could be justified empirically if rule-circularity is disallowed but there is no reason to think that they could not if rule-circularity is allowed. BonJour is in no position to disallow rule-circularity because his own rationalism depends on it. For, if he had a justification for believing that a priori insight was a good method of belief formation, the justification would be an a priori insight.

In response to (ii), BonJour continues to minimize the obscurity of the a priori, wondering what its "alleged 'mystery'" really amounts to. It is important to note something he *does not* do: he does not attempt an explanation that might reduce the mystery. We should not be surprised at this failure if I am right that nothing *can* reduce the mystery.

In charging that the a priori is deeply obscure I am, according to BonJour, simply rejecting the idea that merely finding something to be intuitively necessary can ever constitute in itself a reason for thinking that it is true." But I am not simply rejecting this: I am *demanding an explanation of how it could be so*. How could this intuitive process *justify* something unless the process is empirical? The a priori is mysterious because we do not have even a hint of a satisfactory answer. It seems like magic that a process in someone's mind can justify her belief in an external worldly fact without that justification arising from some sort of experiential link to that fact.

Those are my main points, but I have one more.

In (i) I took BonJour to be rightly claiming that for a conclusion to be justified by an inference, the inference must be good, but I argued that he was wrongly claiming that our justification of its goodness must be a priori. This disagreement concerned that justification *whoever* provided it. However, BonJour's (1998) actual requirement for a justified conclusion was that *the very person making the inference* accompany it with an a priori insight into its goodness. Paul Boghossian (2001), following Lewis Carroll, pointed out that this requirement that a proposition *about* the inference accompany the inference leads to an unstoppable regress. BonJour has responded to this point with a very curious move: "it is often and quite possibly always a mistake to construe [a priori insights] as *propositional* in form"; "the relevant logical insight must be construed as non-propositional in character, as a direct grasping of the way in which the conclusion is related to the premises and validly flows from them." BonJour's requirement, thus construed, has a role in his responses to both (i) and (ii).

This construal seems to commit BonJour to an "a priori knowing-how," something that surely makes no sense. The relations between propositions in an inference are not propositions, of course, but any insights *about* those relations are *essentially* propositional, having contents specified by "that"-clauses (e.g., "that *p* follows from *q*") like any other propositions.

BonJour's requirement was mistaken from the beginning. For an inference to justify a person's conclusion it simply has to *be* good. In an epistemological moment the person may indeed have the insight that the inference *is* good. Still, the justification of her conclusion does not depend on her having this insight. And, as I argued in (i), we should see such insights as empirical anyway.

Conclusion: BonJour's response to (i) does not undermine my argument that belief in the a priori is unmotivated. And his response to (ii) leaves the a priori as obscure as ever.

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Last Rejoinder

Laurence BonJour

I have space only for three very quick points and two slightly more extended ones.

First, Devitt claims that I give no argument against the acceptability of rule-circular justification. But the passage that follows the phrase that he quotes was intended as such an argument and still seems to me to constitute a compelling one.

Second, Devitt tentatively suggests that a view of the sort he is defending might avoid rule-circularity by justifying each rule in terms of others. But if I understand what he is suggesting, such a justification would still be circular in the objectionable way: the justifications of at least some of the rules would ultimately depend, via a sequence of rules, on themselves.

Third, Devitt fails to understand the point about the atomistic character of a priori justification. As the rationalist conceives it, each individual instance of a priori justification depends only on the specific insight that is relevant to it, so that there is simply no need (and no use) for a general rule "yielding a priori insights."[1]

Fourth, Devitt asks how finding something to be intuitively necessary can constitute a reason for thinking that it is true. If the insight is genuine, then the answer is obvious. There is (obviously) no non-circular way to establish that such insights are genuine, but there is equally no cogent way to argue that they are not or that we could not have such a capacity which does not tacitly appeal to such insights.[2] To reject all such insights is to reject the capacity of human intelligence to have good reasons for believing anything beyond the narrow deliverances of direct experience. Appeal to "rules" into whose truth-conduciveness one has no such insight does nothing to address this issue. And to simply insist, as Devitt does, that any reason for thinking that any non-tautological claim about the world is true must be empirical is to back oneself into a corner from which there is no escape: to repeat, most of the claims that we think we have reasons to accept are not matters of direct experience, and experience alone cannot establish that they are connected to experience in a way that makes them likely to be true.

Fifth, Devitt denies that a person making an inference must have an insight into its correctness for his conclusion to be justified, claiming that all that is required is that the inference "be good." Perhaps there is some sense of the multifarious term "justification" for which this is correct. But a person who lacks such an insight has no *reason* for thinking that the resulting conclusion is true, and a person who infers in this way generally has no reason for thinking that any of his conclusions are true. (It seems to me obvious that there is a kind of insight into the cogency of such an inference that underlies and justifies the propositional claim that it is cogent: one sees how and why the conclusion follows, not simply that it follows. But I did not intend that this was a form of "knowing how" as that notion has ordinarily been understood.)

Notes

1 For more discussion, see BonJour (1998, pp. 142–147).

2 For some elaboration of this point, see BonJour (1998, pp. 153–156).

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Further Reading

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