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A PRIORI KNOWLEDGE

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As it has been standardly understood, a priori knowledge is knowledge whose *justification* (or warrant) is a priori rather than empirical in character. This assumes that justification is at least a necessary condition for knowledge and that it is the only such condition to which the idea of being a priori meaningfully applies. Thus the focus of this chapter will be a priori justification—which I will take to be the same thing as having an a priori *reason* in support of the proposition or claim in question.

I will begin by explaining and clarifying the distinction between justifications or reasons that are a priori and those that are empirical (a posteriori), also contrasting this distinction with some others with which it is sometimes conflated or confused. Next we will consider some of the main reasons for thinking that a priori justification, so understood, genuinely exists. The rest of the chapter will be concerned with the three main philosophical views that have been held of a priori justification: the *rationalist* view, which defends both the existence of a priori justification and its central significance for the cognitive enterprise; and two versions of *empiricism*, one of which attempts to minimize the importance of a priori justification and the other of which denies its existence altogether.

The Concept of A Priori Justification

As reflected in the historical discussion of this issue, the concept of a priori justification involves two basic elements or aspects, one negative and one positive. Negatively, an instance of a priori justification involves a reason for thinking that a proposition is true whose rational force or cogency does not derive from *experience*, either directly (as in immediate sense perception) or indirectly (as by inference of any sort—deductive, inductive, or explanatory—whose premises, in turn, derive their justification from experience). Here it is important to realize that the sort of independence from experience that is relevant does *not* mean that someone who has undergone no experience of any sort could have such a reason. After all, being justified in accepting any proposition at least requires understanding that proposition, and experience, even experience of some fairly specific sort, might be required for such understanding.

Nor does the idea of an a priori reason, when understood in this way, imply either: (i) that experience-based reasons of some sort could not also count for or against the proposition in question; or (ii) that such experiential reasons could not sometimes override the a priori justification in question; or still less (iii) that an a priori justification renders the proposition certain or infallible, immune to mistake. All of these further claims *might* be true in some cases (though it is doubtful that they are true in all or even

most), but they in no way follow from, or are essential to, the basic idea of a priori justification itself.

The obvious question is what counts, for these purposes, as *experience*? The paradigm examples of experience are various kinds of sense experience, including such things as kinesthetic experiences of bodily orientation in addition to those deriving from the five standard senses. But, though this has sometimes been denied in recent discussions, it seems quite clear 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 might 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 mental process that is involved in the most paradigmatic cases of allegedly a priori justification (see below). 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. (For essentially the same reason, such things as clairvoyant or telepathic awarenesses, should they exist, should also count as species of experience.)

But merely ruling out these kinds of experience as relevant to a priori justification obviously does not explain fully how the propositions in question are justified. If their justification does not derive from experience, where then does it come from? What is the nature of the *positive* reason for thinking that such a proposition is true which justification seems to require? Here the traditional view is that such justification results from pure thought or reason or rational reflection: from a direct or immediate insight into the truth, indeed the necessary truth, of the relevant proposition. (A derivative class of a priori reasons, about which little will be said here, would result from similar insights into the derivability of a proposition from one or more premises for which such a priori reasons exist or from a chain of such derivations.) As we will see, while both rationalists and those empiricists who do not simply reject the existence of a priori justification would accept this characterization, they give very different accounts of what such insight involves and, accordingly, of its ultimate cognitive significance.

Thus, summing up, a priori justification is justification that results from rational insight, with no appeal to any sort of experience; while empirical or a posteriori justification is justification that results, at least in part, from experience. (Thus justification that depends on *both* experience *and* insight or reasoning that is in itself a priori in character would count, for the purposes of this classification, as empirical; but this merely taxonomic point should not obscure the fact that such justification is still *partially* a priori.)

There are two other distinctions that are often invoked in the context of discussions of a priori justification. First, there is the *metaphysical* distinction between propositions that are *necessary*, true in all possible worlds, and those that are *contingent*, true in only some possible worlds. (A third category is necessarily false propositions, those that are true in no possible worlds.) Second, there is the logical or structural distinction between propositions that are *analytic* and those that are *synthetic*. Here, as discussed further below in the section on moderate empiricism, there is no one standardly accepted definition of "analytic," but the characterization (due to Frege) of an analytic proposition as one that is either a truth of formal logic or transformable into such a truth of logic by replacing

terms with exact synonyms will do as an initial approximation. For the moment, the important point is that each of these distinctions is quite distinct from that between a priori and a posteriori justification, so that none of these concepts should be confused or conflated with each other—as is in fact very frequently done in discussions of the a priori (see, for example, Ayer 1946: 78, where the concept of a synthetic proposition is simply equated with that of an a posteriori or empirical one).

Arguments for the Existence of A Priori Justification

Does a priori justification, as so far characterized, genuinely exist? The rationalist answers this question affirmatively, while one version of empiricism (moderate empiricism), though acknowledging the existence of a priori justification, understands it in a way that drastically limits its scope and significance, and a second (radical empiricism) gives an entirely negative answer to this question. These views will be considered below, but it will be easier to appreciate what is at stake if we first consider the main reasons that have been offered for thinking either that a priori justification does, in fact, exist or, alternatively, that it must exist if severe versions of skepticism are to be avoided.

The Argument from Examples

The most widely discussed reason for thinking that a priori justification exists 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 straightforward examples come from mathematics and logic, but there are others of many widely varying kinds. Here is a misleadingly short list, reflecting some of the main types:

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.

It is initially very plausible to think 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 the same thing also seems to be true of indefinitely many further examples of these sorts and others. From an intuitive standpoint, this sort of seeing or grasping seems to constitute, at least in the absence of further relevant considerations, a good, indeed compelling, justification or reason for thinking that the proposition in question is true, albeit not one 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 seem to depend on experience in any discernible way.

Both rationalists and moderate empiricists claim that examples like these, which could be multiplied more or less without limit, provide compelling evidence for the existence of a priori justification and a priori knowledge. Radical empiricists reject this

conclusion and so are obliged to offer some alternative account of our reasons for thinking that such propositions are true, one that makes them dependent on experience after all, or else to simply deny that we have any such reasons. Neither of these alternatives seems initially very plausible.

One other point is worth adding. What is perhaps most misleading about the list of examples just given is that having been chosen for their obviousness, they are far from the most philosophically interesting cases of alleged a priori justification. Rationalists will argue that there are many more interesting, albeit somewhat less obvious, examples as well: propositions about the unlikelihood of complex coincidences of various kinds; certain moral propositions; metaphysical propositions about matters such as the structure of time and space; and many, many others.

Dialectical Arguments for the Existence of A Priori *Justification*

It is possible to reject such examples as genuine, no matter how intuitively unappealing this may at first seem. But there are also other arguments of a more dialectical character for the existence of a priori justification, arguments that make clear the high skeptical price of rejecting the existence of such justification. (As will be seen later, these arguments also make the moderate empiricist view of the nature of a priori justification more difficult to defend.)

The first such argument 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, requiring something like an inference from directly experiential premises to further conclusions. 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. But on any view that has ever been seriously advocated, the class of beliefs that are broadly empirical but *not* justified by a direct relation to experience is extremely large, including 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? For an inference from directly experiential premises to these further conclusions to be justified seems to require a logically prior justification of some sort for conditional propositions 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 needed 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 such a 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 propositions in question), then experience can offer no direct reason for thinking that such a conditional proposition is true—and no indirect reason without assuming some other conditional of the very same sort. It apparently follows that the justification for a conditional proposition of this sort, if there is any, can only be a priori in character. In this way, a blanket rejection of the very existence of a priori justification 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 propositions that are not directly justified by experience are true. And this is a result that is difficult to accept.

A further dialectical argument is, in effect, a generalization of the first. It questions whether a view that denies the existence of a priori justification can satisfactorily account for *reasoning* itself. Any reasoned or argumentative transition from a proposition or group of propositions to some further conclusion seems also to rely on there being a good reason for thinking that a conditional proposition 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. The suggestion is that if we *never* have a priori justification for thinking that if one proposition or set of propositions is true, some further proposition must be true as well, then there is simply nothing that genuinely cogent reasoning could consist in. In this way, the rejection of a priori justification seems tantamount to intellectual suicide.

Three Main Philosophical Views of A Priori Justification

Rationalism

The view most straightforwardly supported by these arguments is rationalism. According to the rationalist, human beings possess, in addition to the cognitive faculties involved in the various sorts of experience, a fundamental faculty of a priori insight (or a priori intuition) that yields direct and justified apprehensions of necessary truths. Such apprehensions or insights are not regarded by the rationalist as merely brute convictions of truth, on a par with the hunches and fears that might simply strike someone in a psychologically compelling way. On the contrary, these insights at least purport to reveal not just *that* the proposition in question must be true but also, at some level, *why* this is and, indeed, must be so. They are thus, the rationalist claims, 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. According to rationalism, it is insights or intuitions of this sort that account for the justification of propositions like those enumerated earlier and that also account for justified inferences from directly experiential claims to further broadly empirical conclusions and for successful reasoning in general.

Historical proponents of rationalism have tended to claim that a priori insight is infallible, incapable of being mistaken, though this view is often more taken for granted than explicitly argued for. But, as already mentioned above, such a claim is inessential to the central idea of a priori justification. It is also clear from a wide variety of examples (propositions involved in logical paradoxes, mathematical errors, competing philosophical propositions, etc.), that it could be defended only by insisting that many apparent a priori insights are not genuine, thereby raising the problem of how to

distinguish genuine a priori insights from merely apparent ones and thus undercutting the justificatory force of even what seem to be clear cases of such insight. Thus more recent rationalists have repudiated the claim of infallibility, arguing that such a claim is not required for such insights to have substantial justificatory force (see BonJour 1998; and Bealer 1998).

The more moderate sort of rationalist who rejects infallibility can also concede that specific a priori insights can be undermined or even refuted by experience, while insisting at the same time that the connection between experience and any plausible a priori proposition is almost never direct. It follows that the refutation of one a priori proposition by experience will still rely on other a priori insights in the way discussed above—thus providing no real basis for denying that a priori insight is a genuine source of justification.

The rationalist appeal to direct a priori insight as a source of justification has often been alleged to be objectionably "mysterious" or "obscure" (see, for example, Devitt 2005a, 2005b). The idea here seems to be that there is something objectionable, fundamentally irrational or at least a-rational, about a non-experiential source of justification that relies on direct insight and cannot be articulated further by appeal to steps or background principles of some sort. Rationalists will respond that apart from the limited class of propositions that are directly justified by experience, there is in the end simply no other form that a reason for thinking that something is true could possibly take. To be sure, a priori insights can be combined in complicated ways to yield more elaborate arguments, 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. A rationalist can grant that 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, he will argue that the absence of such an account does not yield a serious reason for denying its existence.

One other point about the nature of a priori insights should also be briefly mentioned, though this is one that has been less widely recognized. 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, it seems, 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 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. Thus in the red–blue example, the insight is most plausibly viewed as not merely the brute conviction that a certain proposition is true but rather as an insight into the nature and relations of the ingredients of that proposition, mainly the properties of redness and blueness and the relation of incompatibility between them (see further BonJour 2001 [a reply to Boghossian 2001]).

A Priori Justification Without A Priori Insight: Moderate Empiricism

If we set aside the relatively minor issues of infallibility and defeasibility by experience, virtually all serious epistemologists up to the time of Hume and Kant were rationalists in essentially the sense just explained. But since that time, skepticism about a priori justification in general, and rationalism in particular, has become increasingly pervasive. The most prominent position since that time and especially for much of the past century has been a relatively moderate version of empiricism, one that concedes the existence of a priori justification of a sort, but claims that when properly understood, such justification does not have the epistemological and metaphysical significance that is attributed to it by the rationalist. Instead, according to this *moderate empiricist* view, a priori justification, rather than reflecting genuine insights into reality, derives merely from definitions or from conceptual or linguistic conventions.

The basic idea of moderate empiricism is to explain a priori justification in a way that at the same time drastically undercuts its significance. For this purpose, the most standard versions of moderate empiricism appeal to the concept of *analyticity*, holding both (i) that all propositions for which there is genuine a priori justification are analytic, and (ii) that the a priori justification of an analytic proposition does not require the sort of insight into the character of reality advocated by the rationalist, but instead can be explained in a more modest way. It is important to see that each of these claims is equally essential to the view, and thus a successful version of moderate empiricism must advocate one univocal conception of analyticity in relation to which *both* of them 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 often 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 mostly into two main groups. Some conceptions are *reductive* conceptions: they explain some cases of a priori justification 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 already mentioned above. To say that all propositions for which there is genuine a priori justification are, or are transformable into, truths of formal logic obviously does nothing at all to explain how these propositions of formal logic are themselves justified a priori (which they must be if a priori justification is to result from the overall account). And something similar is true of the familiar Kantian conception of an analytic proposition as one whose predicate is included in its subject: this amounts to reducing a priori justified propositions to propositions of approximately the form "all FGH are F," but again without accounting for the a priori justification of those propositions. In addition, there are many propositions that appear to be justified a priori, but which do not seem to fit these reductive accounts—including, in fact, all of the examples cited earlier except (3), which is one of the logical claims whose justification remains unexplained.

Most at least of the moderate empiricist views that are not in this way reductive seem to lose sight of the main epistemological issue altogether by simply equating analyticity with one of the features that a proposition for which there is an immediate a priori justification undeniably has (or at least seems to have) on the rationalist account, not realizing that this fails to yield an independent account of a priori justification itself. The plainest example of this mistake is the view that identifies an analytic proposition

with one that is "true by virtue of meaning" or "true by definition" (where these formulations are not further explained in some reductive way). This apparently amounts to nothing more than the view that one who understands such a proposition can see directly or intuitively that it is true—and this is really just a misleading restatement of the rationalist view, not an alternative to it. Obviously a rationalist does not think that one can have rational insight into the truth of a proposition without understanding its meaning; the question is whether such an insight can be entirely reduced to, or accounted for by reference to, that meaning, something that this version of analyticity does nothing to establish. Other would-be versions of moderate empiricism equate analyticity with necessity, again failing to realize that this metaphysical feature fails to account for a priori justification unless supplemented by just the sort of a priori insight into necessity that the rationalist advocates (e.g., Lewis 1946: 57 and Salmon 1967: 30; both seem guilty of this mistake).

Is there any version of moderate empiricism that avoids both of the pitfalls just described? One possibility is a view that holds that a priori justification results from *linguistic convention*. Another, closely related view holds that sentences that express a priori justified propositions (or more plausibly some subset of such sentences) should be viewed as *implicit definitions* of the pivotal terms that they contain, with the suggestion that it is this status as implicitly definitional that accounts for the a priori justification of the propositions in question (see, for example, Boghossian 1996). Unfortunately, however, it is far from clear what these views amount to or how they are supposed to work, and a full consideration of them is impossible here. Both views seem, however, to rely essentially on the idea that a priori justification somehow derives from facts about *language*, and the central problem for such views is that this last claim is very dubious. To say that the justification (or perhaps even the truth) of a priori justified propositions depends on facts about language would apparently mean that alterations in language could make these propositions no longer justified (or perhaps even no longer true)—as opposed to merely changing how they can properly be expressed. In relation to examples of apparent a priori justification like those offered above, such a claim seems fairly obviously mistaken.

One other point worth noticing is that no version of moderate empiricism seems at all likely to be able to account for all of the instances of a priori justification needed to satisfy the dialectical arguments discussed above. In particular, it seems clear that the inferences from directly experiential premises to conclusions that go beyond direct experience cannot plausibly be regarded as merely matters of definition (implicit or otherwise) or linguistic convention or as justified on purely logical or conceptual grounds—at least not if reductive views such as phenomenalism and the even more implausible analogs of phenomenalism that would apply to historical propositions or propositions about seemingly unobservable entities are rejected.

The Rejection of A Priori Justification: Radical Empiricism

A more extreme alternative is to reject the very existence of any sort of a priori justification, a view that has been most prominently advocated by W. V. O. Quine (see Quine 1961). There are two main questions that need to be asked about this more radical version of empiricism. The more obvious one is what the arguments for it, and against the existence of a priori justification, are supposed to be. A second, less obvious question is whether, especially in light of the dialectical reasons in favor of a priori justification

discussed above, it is possible for this radical version of empiricism to yield a non-skeptical epistemology.

Quine himself tends to assume that anyone who defends the idea of a priori justification 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 ineffective against rationalism. (This argument also makes the mistake, already discussed, of conflating the three main distinctions in the area.)

When these ineffective arguments are set aside, the only very clear Quinean 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 (see Quine 1961). 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 belief in the total "web of belief," including those for which there is allegedly a priori justification, might be "given up" in order to accommodate "recalcitrant experience," and so, apparently, that such a priori justification does not exist after all. But this conclusion does not follow in any clear way, even if the extreme holistic view is accepted. Quine is, in effect, assuming that the *only* reasons relevant to retaining or giving up a belief 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 justification for or against such beliefs by assuming that all justification is empirical. And if this assumption is not made, then a proponent of a priori justification can freely admit that holistic empirical reasons of this sort might count against a proposition for which there is a priori justification, while insisting that the reverse is true as well. Thus the ultimate outcome would depend on the relative weight of these two sorts of reasons in a particular case, with there being no reason to think that a priori justification will always or even very often be overridden—or, still less, that it does not exist at all. And a proponent of a priori justification will also insist (see below) that the very connections among beliefs that result in the holistic web can, in the end, only be understood as a priori in character. (Followers of Quine also sometimes appeal to the alleged "mysteriousness" or "obscurity" of the idea of a priori justification, already discussed above.)

The other main issue concerning radical empiricism is whether it can offer a genuinely non-skeptical epistemology. While the details of Quine's view are themselves quite obscure, it is clear that a belief is supposed to be justified in virtue of being an element of a holistic 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. Presumably he would say this about beliefs whose content is the apparently a priori justified propositions listed above, and others like them.

While such a claim is very implausible in these cases and many others, the deepest objection to it is more dialectical in character and is, in fact, an application of one of the arguments discussed above. Consider then the conditional proposition (call this Q) that if a proposition is included in a system that satisfies all of the Quinean conditions, whatever exactly they amount to, then it is likely to be true, and ask what reason there is for thinking that this conditional proposition is itself true. Clearly Q cannot be directly justified by experience, and to appeal to *its* inclusion in a holistic system of beliefs satisfying these very conditions seems plainly circular. Thus either there is an a priori reason (whether immediate or resulting from a more extended a priori argument of some sort) for thinking that Q is true, or there is apparently 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 justification must be mistaken. In addition to reiterating the point that a priori justification is indispensable for any justification beyond that yielded by direct experience, this argument also seems to show that a priori justification is at least as well understood as the idea of holistic empirical justification, which turns out, in fact, to depend upon it. Moreover, similar points could be made about the more specific claims that Quine's various criteria are themselves satisfied by a particular holistic system, since none of these can be plausibly construed as being directly justified by experience.

Is there any response to this objection that is available within a broadly Quinean, radical empiricist position? One recent proponent of such a view, Michael Devitt, attempts to argue that circularity apparently involved in justifying Q by appeal to its inclusion in a system satisfying the Quinean conditions is not, in fact, viciously circular (Devitt 2005a, 2005b). Devitt follows R. B. Braithwaite (1953) in distinguishing "premise-circularity" from "rule-circularity," with the suggestion being that while premise-circularity is plainly objectionable, this is not so clearly true of rule-circularity. Thus if we think of Q as a Quinean epistemic rule, the idea is that Q could after all be justified by being included in a system satisfying the Quinean conditions and thus by appeal to Q itself. But this suggestion seems extremely dubious. If the issue is whether accepting beliefs or claims in accordance with Q (in the way that Quine's "holistic empirical" approach sanctions) gives us any reason to think that our results are true and so any justification for the propositions thus accepted, it is obviously no help at all to be told that the claim that those results are likely to be true (or that Q is a good rule) can be arrived at by employing Q itself—the very rule whose truth-conduciveness is in doubt. Such an argument might 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. Thus the basic objection to a Quinean view still stands: 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, radical empiricism, with its rejection of a priori justification, apparently leads only to a deep and pervasive skepticism.

A Summary of Some Main Outstanding Issues

It will be useful to conclude by summarizing the main issues that are reflected in the previous discussion, issues that are still under active debate, adding also some that have not so far been explicitly mentioned.

First, is the rationalist idea of a priori intuition or insight too obscure to be philosophically acceptable or otherwise objectionable on broadly scientific grounds? One issue here, as we have seen, is whether the standard of unacceptable obscurity or the alleged requirement for scientific explanation can themselves be established without an a priori appeal.

Second, a further, related issue is whether the sort of understanding of the content of a claim that the rationalist view seems to require as a basis for a priori intuition or insight or self-evidence can be explained in an acceptable way. Being able to see or grasp in a direct, intuitive way that a claim like "nothing can be red and green all over at the same time" must be true seems to require mental access to the content of this claim, and in particular to the properties of redness and greenness themselves. But many recent accounts

of mental content (externalist accounts and those that appeal to a language of thought) have no real room for this sort of direct awareness of content. Is this an objection to the idea of a priori intuition or insight, and so to rationalism (and perhaps also to moderate empiricism), or does it merely show that these accounts of mental content are inadequate (since such a grasp of content is a familiar and undeniable feature of experience)?

Third, is there a viable account of how the non-observational claims that seem from a common-sense standpoint to be justified can be accounted for on a purely empirical basis with no a priori appeal? Does the limitation to empirical sources of justification leave everything that goes beyond direct observation unjustified and arbitrary, as the rationalist argument claims, or is there some way in which a purely empirical epistemology can avoid this result?

Fourth, is there an account of analyticity that can genuinely account for all of the plausible cases of a priori justification? Such an account must avoid presupposing some cases of a priori justification and also must not merely amount to a restatement of the rationalist view in other terms. (See Boghossian 1996 for one effort in this direction.)

Fifth, what is the bearing on this issue of the recently popular idea of *naturalism*? While the idea of naturalism has been elaborated in many different ways, proponents of naturalized epistemology have almost always been hostile to the idea of a priori justification, and some have, in effect, made the rejection of the a priori the defining thesis of naturalized epistemology. But some recent philosophers (see Rey 1998 and Goldman 1999) have argued that when each is properly understood, naturalism and a priori justification can be reconciled.

Sixth, are there viable further alternatives to the three main views discussed above, perhaps alternatives involving a weaker conception of what a priori justification amounts to, but one that still has epistemological value? A number of recent discussions of the a priori (see Boghossian and Peacocke 2000) can be understood as attempts in this direction.

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