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Chapter 6

Toward a Realistic Rationalism

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6.1 *The Path Back to Rationalism*

6.1.1 *Frege and the Linguistic Turn*

The influence of the linguistic turn, like that of other significant intellectual revolutions, continues even though the linguistic turn is now history. However, the nature of its influence has not been fully understood, because the linguistic turn is generally seen in terms of the linguistic doctrines expressed in the slogans and manifestoes of its leading figures, and those linguistic doctrines are no longer taken seriously. But the influence that the linguistic turn exerts on philosophy is a matter of the continuing ascendancy of the positivist, empiricist, and naturalist views behind those doctrines rather than a matter of the temporary ascendancy of the doctrines themselves.

The linguistic turn is mistakenly thought of as a nonpartisan attempt to reframe philosophical questions in manageable linguistic terms, and, through linguistic analysis (of one form or another), to eliminate philosophical questions that make no sense (e.g., Heidegger's "Does the Nothing exist only because the Not, i.e., the Negation, exists?"). On the surface, it was often such a nonpartisan attempt, but, at a deeper level, it was another of the partisan attempts, which occur in the history of philosophy from time to time, to cleanse philosophy of metaphysical positions taken to be the cause of all its ills. The linguistic turn steered philosophy away from the traditional rationalist enterprise of explaining synthetic *a priori* knowledge and toward new forms of positivism, naturalism, and empiricism. The term "linguistic" had little to do with the deeper ends of the "revolution in philosophy." It expressed the means chosen for effecting change and reflected the perception that dictated the choice of means, the perception that the linguistic (especially, the semantic) foundation of the doctrine of synthetic *a priori* knowledge is the soft underbelly of traditional rationalism.

It is ironic that it was Frege, the greatest rationalist and realist metaphysician of nineteenth- and very early twentieth-century philosophy, who provided the first phase of the linguistic turn with the

linguistic and logical weapons for its assault on rationalist and realist metaphysics. In the first phase, the early Wittgenstein, Schlick, Carnap, and their Viennese followers took both their linguistic cue and their logico-semantic tools from Frege (and Russell), using them to criticize traditional philosophy—much of which Frege (and Russell) subscribed to—as cognitively meaningless, and, on the model of Frege's *Begriffsschrift*, to develop a conception of an ideal language and the novel thesis that, as Ayer (1946, 57) expressed it, "philosophy is a department of logic."

In the second phase of the linguistic turn, logical empiricism itself came under attack in large part for its Fregeanism. The late Wittgenstein and Quine directed their criticisms against the Fregean semantics underlying the forms of empiricism and positivism developed in the first phase. Both saw Fregean semantics as the basis for the metaphysician's claims about synthetic *a priori* knowledge, and both used those criticisms as a springboard for launching even more extreme forms of positivism and empiricism (see Kenny 1973, 113–14; Quine 1961c).

The late Wittgenstein continued to argue for a naturalistic and positivistic view of philosophy on which sentences about nature are the only meaningful sentences and metaphysical sentences transcend the limits of language. Quine, eschewing positivistic naturalism, argued for a scientific naturalism concerned with showing that much of traditional metaphysics is scientifically anachronistic speculation about the natural world. Quine's (1969a, 82) naturalism replaces the positivist idea of exposing metaphysical statements as nonsense with the idea that philosophy goes on within natural science, either as a form of metascientific analysis of the conceptual and linguistic side of the scientific enterprise or "as a chapter of psychology and hence of natural science."

In this section, we will examine both the role played by Fregean assumptions in the development of the philosophical positions in the first phase of the linguistic turn and the philosophical significance of the Fregean focus of Wittgenstein's and Quine's criticisms of those positions in the second phase. I will try to show that the preoccupation with Frege has made the linguistic underbelly of rationalism appear far softer than it is by linking rationalism to Fregean intensionalism, thus obscuring other, less vulnerable intensionalist ideas. As we shall see, an intensionalism that breaks radically with Fregean intensionalism can provide concepts of meaning and analyticity that are not open to criticisms directed against the semantics assumed in the first phase of the linguistic turn. These conceptions of meaning and analyticity are, moreover, too thin to be used for any positivistic purpose like those in the first phase. Thus, such an intensionalism has the potential to restore

explanation of synthetic *a priori* knowledge to its rightful place in philosophy.

6.1.2 *The Vicissitudes of the Synthetic A Priori*

Passmore (1957, 157) writes:

... in arguing that it is language that leads us astray or, again, in setting up the ideal of a perfect language which would not betray us because in it every expression would have a fixed and definite sense, Frege, more than any other nineteenth century philosopher, anticipates the preoccupations of twentieth century positivism and its diverse progeny.

To be sure, the metaphilosophical ideas with which Passmore credits Frege, together with the technical logical and linguistic machinery he invented and the important philosophical arguments he developed, provided the early Wittgenstein, Schlick, and other logical empiricists with the philosophical, logical, and semantic tools for their work. But Passmore's epitome of Frege as farsightedly anticipating twentieth-century philosophy puts the wrong slant on Frege's relation to the revolution, missing his ambiguous role as the intellectual benefactor of the positivist, naturalist, and empiricist views that came to replace the traditional rationalist/realist view of philosophy as an autonomous *a priori* study of the most general facts about reality. It was Frege, the rationalist and realist, who made it all possible.

Frege's logico-mathematical innovations and his criticisms of Kant's doctrines of analyticity and mathematical truth were the entering wedge for the early logical positivists' attack on metaphysics, especially Kantian, neo-Kantian, Husserlian, and other forms of then current metaphysics. Before Frege, Kant's criticism of Hume had stood as the bulwark against empiricistically and naturalistically inspired positivism. The vagueness of Hume's notion of relations of ideas allowed Kant to explicate that notion as analyticity in his concept-containment sense. This linked mathematics with metaphysics as synthetic *a priori* knowledge. Since the former as well as the latter is outside both Hume's categories of relations of ideas and matters of empirical fact, they share a common fate. If, as Hume advocates, metaphysics is "consigned to the flames," then mathematics is too. This enabled Kant to argue that, since mathematics cannot be abandoned, metaphysics cannot be abandoned either. The task of philosophy must thus be the metaphysical one of explaining how synthetic *a priori* knowledge in mathematics, science, and philosophy is possible.

Kant's argument assumes that there is no other explication of the notion of relations of ideas that is preferable to his own notion of

analyticity. If there were another, one broad enough to bring mathematics under analyticity, it could cut the link between mathematics and metaphysics, thereby stripping metaphysics of the protection it receives from our unwillingness to abandon mathematics. This is precisely what Frege's explication of analyticity as truth based on laws of logic and definitions purports to do. Coupled with Frege's criticism of the Kantian notion of analyticity, Frege's logical explication of analyticity creates an entirely new situation for naturalists and empiricists generally. Rejecting Kant's account of mathematics as synthetic *a priori* knowledge in favor of Frege's account of it as analytic *a priori* knowledge, the logical empiricists could reject Kant's *reductio* of Hume's positivism, his explanation of mathematical knowledge, and his rehabilitation of metaphysics.

Dummett (1991, 111–24) also casts Frege—specifically, the Frege of the *Grundlagen*—as the initiator of the linguistic turn. Dummett (1991, 111) claims that Frege's significant philosophical move in initiating the linguistic turn was invoking the context principle to transform Kant's question about our knowledge of numbers into the linguistic question about "how the senses of sentences containing numbers are to be fixed." Dummett exaggerates the importance to the linguistic turn of this relatively obscure use of the context principle in the philosophy of mathematics. It was of significantly less importance than Frege's general metaphilosophical ideas about the imperfections of language, his notion of an ideal language as a means for overcoming them, his criticism of the Kantian concept of analyticity as "unfruitful," and his replacement of it with his own logical concept of analyticity.

The logical empiricists seized on Frege's concept of analyticity as showing that the Kantian concept of analyticity, due to its extreme narrowness, created the illusion of synthetic *a priori* knowledge which neo-Kantians, assorted rationalists, and Husserlian phenomenologists exploited to justify introducing special faculties such as intuition. Dubious appeals to intuition might have to be swallowed if Kantian analyticity were the only explication of the notion of relations of ideas, but, after Frege, there was no longer a necessity to swallow them. The early Wittgenstein and the logical positivists saw metaphysical explanations of alleged synthetic *a priori* knowledge as both misguided and unnecessary—misguided because they falsely claim to provide *a priori* insights into the nature of things, and unnecessary because Frege had provided the means for an alternative, analytic, explanation of *a priori* knowledge.

Frege's broadening of the category of the analytic opened up the prospect of accounting for all allegedly synthetic *a priori* knowledge as

analytic *a priori* knowledge and thereby resuscitating Hume's empiricism. Ayer (1946, 85), who popularized the new empiricism, wrote:

Our knowledge that no observation can ever confute the proposition " $7 + 5 = 12$ " depends simply on the fact that the symbolic expression " $7 + 5$ " is synonymous with " 12 ," just as our knowledge that every oculist is an eye-doctor depends on the fact that the symbol "eye-doctor" is synonymous with "oculist." And the same holds good of every *a priori* truth.

To the early positivists, the view that mathematical truths are analytic in the sense of holding in all possible cases meant that those truths do not have factual content. Carnap (1963, 47) commented on this:

... What was important in this conception from our point of view was the fact that it became possible for the first time to combine the basic tenets of empiricism with a satisfactory explanation of the nature of logic and mathematics. Previously, philosophers had only seen two alternative positions: either a non-empiricist conception, according to which knowledge in mathematics is based on pure intuition or pure reason, or the view held, e.g., by John Stuart Mill, that the theorems of logic and mathematics are just as much of an empirical nature as knowledge about observed events, a view which, although it preserved empiricism, was certainly unsatisfactory.

Mathematics no longer falls between the two Humean stools of relations of ideas and matters of empirical fact, and hence the empiricist is no longer in the embarrassing position of consigning mathematics to the flames along with metaphysics.

Wittgenstein and Quine, at first sympathetic to the program of accounting for allegedly synthetic *a priori* knowledge as analytic *a priori* knowledge along the lines of Fregean analyticity, came, for different reasons, to see the program not as the solution for the ills of philosophy but as part of the problem. Both saw Frege's theory of meaning as the principal culprit—in Quine's case, as presented in Carnap's semantics. Their criticisms were largely directed at it. For Wittgenstein, disenchantment resulted, as Allaire (1966) and Kenny (1973, 103–19) have pointed out, from his losing faith in Frege's theory of meaning largely due to the difficulty about color incompatibility that Wittgenstein ([1922] 1961, secs. 6.375 and 6.3751) described in the *Tractatus*. Subscribing both to Frege's conception of logical form and his view that logical necessity is the only necessity there is, Wittgenstein could not explain how sentences like "This spot is (entirely) red and (entirely) green,"

which conjoin atomic (and therefore logically compatible [[1922] 1961, sec. 4.211]) propositions, could be necessary falsehoods.

Wittgenstein (1953, e.g., sec. 92) came to think that this problem revealed a basic inadequacy of Frege's account of meaning in natural language. Since there is no basis for logical necessity in the atomic form of such sentences, the idea that the logical powers of sentences derive from their logical forms, which are hidden beneath their surface syntactic forms, is wrong. Abandoning Frege's semantics together with much of his own early philosophy, Wittgenstein developed a new account of meaning on which the logical powers of sentences do not have the force of necessity because they derive from the use of words. Nonetheless, he maintained his basic positivism on which all of traditional philosophy is to be rejected as nonsense. In the new account of meaning, however, the nonsense derives from the misuse of words. Wittgenstein thus continued to press his attack on metaphysics, though now on the basis of other, as he came to see them, more adequate linguistic means.

Quine saw Frege's theory of meaning as the principal obstacle to an uncompromising empiricism. Quine's (1961c, 23) characterization of the notion of analyticity that he attacks in "Two Dogmas of Empiricism"—what a logical truth turns into when we put synonyms for synonyms—is Frege's notion of a truth that rests on logical truths and definitions. Quine's focus was on Carnap, who used his formalization of Fregean analyticity as a basis for developing a compromising empiricism that rejects Mill's view that "the theorems of logic and mathematics are just as much of an empirical nature as knowledge about observed events" as "unsatisfactory". Quine, however, saw Mill's empiricism as essential to an uncompromising empiricism and Fregean analyticity as the last refuge for the rationalist doctrine that logical and mathematical knowledge is *a priori* knowledge.

In his attempt to restore what he saw as the only true empiricism, Quine targeted the Fregean theory of meaning as updated in Carnap's semantics, in particular on the notion of synonymy on which Frege's extension of the class of logical truths to the class of analytic truths depends. Carnap (1956a, 222–29) had updated Frege's semantics with the introduction of meaning postulates. This promised to provide Fregeans with a way to get around Wittgenstein's problem about ascribing modal properties to sentences like "This spot is (entirely) red and (entirely) green". On the meaning postulate approach, the logical powers of sentences arising from their extralogical vocabulary are handled in the same way as the logical powers of sentences arising from their logical vocabulary. Given a set of logical postulates that state the contribution of the logical vocabulary to the extensional structure

of L , the analytic sentences of L can be characterized as sentences of L that follow just from the logical and meaning postulates of L . Since meaning postulates can be formulated so that mathematical truths come out as analytic sentences of the language, the formal side of the logical empiricist's resuscitation of Humean empiricism is complete.

In "Two Dogmas of Empiricism," Quine (1961c) tried to show that there is nothing in the areas of definition, linguistics, and logic—the areas to which, respectively, the notions of meaning, synonymy, and analyticity most naturally belong—that can be used to make objective sense of those notions. The story is familiar. Semantic definitions rest on prior synonymy. Abbreviation is irrelevant. An objective notion of linguistic synonymy requires a substitution test that distinguishes between synonymous and nonsynonymous pairs of expressions, but all such tests are circular. Meaning postulates are neither general enough nor explanatory enough to explicate analyticity.

Quine's solution to Wittgenstein's problem about the logical powers of elementary sentences was simply to deny that such sentences have logical powers. Since the extralogical vocabulary of a language contributes nothing to the logical powers of sentences, there is no need for intensions or the apparatus to represent them. This nihilistic solution fits perfectly with Quine's epistemological outlook. From the perspective of his Millian instincts, Quine saw the introduction of intensions as compromising both the extensionality of logic and the purity of empiricism. Carnap's (1963, 64) logical empiricism, as we saw in chapter 3, explicitly recognized that "the rationalists had been right in rejecting the old empiricist view that the truth of ' $2 + 2 = 4$ ' is contingent upon the observation of facts." On Carnap's Humean empiricism, only nonformal knowledge depends on experience, while, on Quine's Millian empiricism, *all* knowledge depends on experience with the natural world.

One side of the Quinean coin was to eliminate the logical empiricist's restriction of empiricism to nonformal knowledge; the other side was to provide an epistemology for knowledge generally on which the allegedly *a priori* truths of logic and mathematics are at bottom empirical. The sticking point for Carnap (1963, 64) was Millian empiricism's "unacceptable consequence that an arithmetical statement might possibly be refuted tomorrow by new experiences." Quine (1961c, 44) takes care of this with his account of logical and mathematical statements as central components of our total fabric of scientific beliefs. Even though logical and mathematical statements are revisable in principle in the light of new experiences, their centrality in the total fabric of our scientific beliefs makes their revision something that can occur only as a last resort.

Despite their clear differences, the Wittgensteinian and Quinean positions that displaced logical empiricism have much in common. Both adopt a form of naturalism, both are anti-intensionalist in the extreme, both reject absolute necessity, both deny the existence of synthetic *a priori* knowledge, and, as a consequence, both are implacably opposed to the traditional metaphysical conception of philosophy. As Quine (1960, 76–77) himself notes, their common target was theories of meaning based on the concept of linguistically neutral meaning. Once those theories are removed and replaced with a conception of meaning based on holism à la Wittgenstein or holism à la Quine, the broad notion of analyticity, which served as the logical empiricists' basis for *a priori* knowledge, disappears, and with it the traditional rationalist enterprise. Thus, the only issue left unresolved by the linguistic turn, the issue that today divides Anglo-American philosophy, is whether it is Wittgenstein's ontological naturalism with its positivistic and therapeutic emphasis or Quine's epistemic naturalism with its scientific and pragmatic emphasis that goes in its place.

I said at the outset that the path back to rationalism is through a critical examination of Frege's role in the arguments of the philosophers who brought about the two phases of the linguistic turn. As we have seen, Schlick, Ayer, Carnap, and other logical empiricists used Frege's broadened conception of analyticity as a basis for their unmetaphysical conception of the *a priori*. And, as we also saw, Wittgenstein and Quine accordingly took Frege's conception of analyticity and his theory of meaning as their target. Now I concede that Wittgenstein's and Quine's arguments were entirely successful in refuting that conception of analyticity and that theory of meaning. What I do not concede is that, in successfully refuting them, Wittgenstein's and Quine's arguments do what they have to do to refute all of the theories of meaning on which the *a priori* and rationalism can be based. Here we return to the problem concerning the apparent logical powers of extralogical words. If Carnap's, Wittgenstein's, and Quine's solutions exhaust the approaches to this problem, then the arguments of Wittgenstein and Quine have done all they have to do to refute them, but if their solutions do not exhaust all of the approaches, the entire second phase of the linguistic turn is in question.

An alternative approach has to be intensionalist, so it has to retain the idea that meanings are senses of linguistic expressions, analyticity is a property of senses, and synonymy is a relation among them. Further, since Wittgenstein's problem arises in connection with logically elementary sentences, the sense structure of sentences cannot always be—and in the case of logically elementary sentences such as “Bachelors are single” isn't—reflected in their logical syntax. Finally, the Frege

principle, which Wittgenstein ([1922] 1961, secs. 6.37 and 6.375) embraces in the *Tractatus*, that logic is the only source of necessity, has to be dropped. In opposition to Frege, we have to say that linguistic meaning is an independent source of necessity. We have to say that logically elementary sentences can have richly structured senses. This move is the key to solving Wittgenstein's problem concerning the logical powers of logically elementary sentences (see Katz [to appear]).

The appearance that the powers are logical is misleading. The powers are not logical but semantic. Semantically rich nonlogical senses make it possible to overcome the logically elementary character of sentences such as “Bachelors are single.” To make this approach work, we require a non-Fregean definition of sense, one that characterizes the semantically rich senses of syntactically simple expressions nonlogically. I provided such a definition in *Semantic Theory* and subsequent publications. I (1972, 1–10) defined sense as the aspect of the grammatical structure of expressions and sentences that determines their meaningfulness, synonymy, antonymy, ambiguity, redundancy, analyticity, and other sense properties and relations. Frege's arguments that senses are necessary to explain the informativeness of identity statements, substitution into oblique contexts, and meaningfulness in the absence of reference motivate the introduction of *a* concept of sense, but they do not motivate the introduction of just Frege's concept. Our concept of sense does just as well for these purposes. And it does better against attacks on intensionalism first by Wittgenstein and Quine and later by Donnellan, Kripke, and Putnam. As I (1986, 1990b, 1994a, 1997) have argued, the success of these attacks reveals, not a weakness of intensionalism, but a weakness of Fregean intensionalism.

What makes my definition of sense radically different from Frege's definition is that it uses no concepts from the theory of reference. In defining sense as the determiner of referential properties and relations such as denotation, truth, and logical equivalence, Frege defines the concept of sense in terms of the vocabulary of the theory of reference, thereby reducing the theory of sense to the theory of reference. On our definition, the theory of sense is fully independent of the theory of reference. It has nothing to do with the relation of language to the world. It is an autonomous theory about one aspect of the internal grammatical structure of sentences.

With this new definition of sense, the Fregean grip on the notion of analyticity can be broken. Frege (1953, 4) had defined an analytic proposition as a consequence of logical laws plus definitions without any assumptions from a special science. Frege's (1953, 99–104) rationale for this definition was that it is more “fruitful” than the Lockean-Kantian definition. To be sure, fruitfulness is a virtue if analyticity is

to serve as the basis for explaining logical truths as analytic truths in a logicist program to reduce mathematics to logic. Independently of such an ulterior motive, fruitfulness might well be a vice. If we are looking for a definition to explain analyticity in natural language, a Lockean-Kantian definition, just because of its unfruitfulness, might be preferable.

I (1972, 171–200, 1986, 1988, 1990b, 1994a, 1995, 1997, and in preparation) have argued that a reconstruction of the Lockean-Kantian definition of analyticity fits the facts about sense structure in natural language better than Frege's and further that, since Wittgenstein's and Quine's criticisms were very largely tailored to refute Fregean intensionalism, their criticisms do not refute intensionalism per se, and that the differences between our intensionalism and Frege's enable the former to meet their criticisms. The principle consequence of this argument, for our present concerns, is that the problem of explaining synthetic *a priori* knowledge for nearly the same broad range of propositions that Locke and Kant considered to be synthetic *a priori* is reintroduced. On our narrow concept of analyticity, a sentence is analytic in case it has a referring term with a sense that contains the sense of the entire sentence. Containment means literal, "beams in the house," containment, not the figurative, "plant in the seed," containment of Fregean analyticity. Analyticity is not a species of logical truth where, for example, every proposition contains the disjunction of itself with every other proposition. (See Katz [1986, 62–3, in preparation].)

Since the breadth of a notion of analyticity and the breadth of the range of propositions that are synthetic *a priori* on that notion are inversely related—the wider the notion of analyticity, the narrower the range of synthetic *a priori* propositions—Frege's wide notion leaves little room for synthetic *a priori* propositions and Carnap's far wider notion left (as he of course intended) no room for them at all. In contrast, the narrowness of our concept of analyticity entails a wide range of such propositions. Essentially the same class of *a priori* mathematical and other formal truths are synthetic propositions on our analytic/synthetic distinction as on Kant's. Thus, as I (1990b, 297) argued at the end of *The Metaphysics of Meaning*, the reinstatement of the traditional analytic/synthetic distinction brings "twentieth century philosophy full circle round to the situation just prior to the Logical Positivist, Wittgensteinian, and Quinean attacks on metaphysics." After nearly a century devoted to looking for ways to avoid Kant's problem of explaining how synthetic *a priori* knowledge is possible, we have come face to face with it again.

The problem reemerges in even more aggravated form because Kantian explanation is no longer an option. Attempts to ground synthetic *a priori* knowledge on our own nature are inadequate for various

reasons, the most salient of which being that logical and mathematical truths tell us not merely that something is so but that it must be so. Human nature, however transcendentalized, cannot explain their necessity.

The argument in *The Metaphysics of Meaning* thus seemed to me to leave us with but one approach to explaining synthetic *a priori* knowledge in the formal sciences. Such knowledge has to be grounded in the nature of the logical and mathematical facts. Further, since the epistemology of formal knowledge piggybacks on the ontology of the formal sciences, a rationalist epistemology must be based on features of logical and mathematical facts that explain why they couldn't be otherwise. Finally, since the only conception of logical and mathematical facts that explains why they couldn't be otherwise is realism, realism had to be available for the construction of a rationalist epistemology for logic and mathematics.

The situation in the philosophy of mathematics was the other way around. Since causal contact with abstract objects is impossible, a rationalist epistemology had to be available for the construction of a realist position to answer Benacerraf's charge that realism cannot explain mathematical knowledge. The upshot was clear: not only does a realist ontology have to be available for the construction of a rationalist epistemology, but a rationalist epistemology has to be available for the construction of a realist ontology. These reciprocal demands dictated an approach to the explanation of synthetic *a priori* knowledge on which rationalist epistemology and realist ontology are combined into a single, unified metaphysical position.

This position is partly developed in the earlier chapters of this book. In chapters 2 and 3, I showed how it solves the epistemic puzzle for realism induced by the causal inaccessibility of mathematical objects by explaining the *a priori* character of mathematical knowledge on the basis of a realist account of the necessity of mathematical truths. This explanation of how we can have knowledge of abstract objects without causal access and how it can be synthetic *a priori* knowledge without resorting to Kantian idealism—on which it becomes knowledge of our own sensibility and understanding—is only a partial solution to the general problem of synthetic *a priori* knowledge. The remaining question is whether this explanation can be generalized to other kinds of synthetic *a priori* knowledge. How much of the overall problem of explaining synthetic *a priori* knowledge can be handled within the conception of a rationalist epistemology that has been sketched in the previous chapters?

The rationalist epistemology developed thus far is incomplete along two dimensions. Horizontally, it needs to be spelled out more fully for the case of synthetic *a priori* knowledge in other formal sciences and in

the natural sciences. The extension to logic seems straightforward, while the extension to linguistics, at least in its present state, is not. The extension to the natural sciences is trivial if the only synthetic *a priori* knowledge in them is the principles from the formal sciences they employ, but not otherwise. Vertically, our sketch of a rationalist epistemology has to be extended to synthetic *a priori* knowledge in philosophy. We cannot deal with all of these questions here, but, as the issue of philosophical knowledge has been at the center of the arguments in the linguistic turn which ushered in the present naturalist/empiricist hegemony, I will address the question of synthetic *a priori* philosophical knowledge.¹

6.2 From Philosophy of Mathematics to Philosophy

Two related factors have undermined the twentieth-century philosopher's belief in the existence of *a priori* philosophical knowledge. One is the dissatisfaction that derives from the positivist's invidious comparison of progress in metaphysics with progress in natural science. Carnap (1963, 44–45) once put the comparison in these terms:

Even in the pre-Vienna period, most of the controversies in traditional metaphysics appeared to me sterile and useless. When I compared this kind of argumentation with investigations and discussions in empirical science or in the logical analysis of language, I was often struck by the vagueness of the concepts used and by the inconclusive nature of the arguments. . . . I came to hold the view that many theses of traditional metaphysics are not only useless, but even devoid of cognitive content.

This comparison continued to be influential even after philosophers stopped taking the view that traditional metaphysics is senseless seriously.

But as a consideration against synthetic *a priori* philosophical knowledge, it is a straightforward *petitio*, because it assumes, contrary to traditional metaphysics, that metaphysics and science are enough alike to be put on the same scale. The positivist cannot simply assume that

1. Strictly speaking, we do not require an account of natural knowledge on which it is uniformly *a posteriori*, since most philosophers who believe that there is synthetic *a priori* knowledge in natural science think that it consists in principles of systematization such as simplicity and principles of inference, which are, as it were, borrowed principles. Moreover, the Quinean holistic picture of knowledge, restricted to natural knowledge, would seem to support the claim that there are synthetic *a priori* truths native to natural science. This might be challenged, say on the basis of Koslow (1992), but this raises issues beyond the scope of this study.

scientific progress is an appropriate yardstick for judging progress in metaphysics, and, seeing that the latter does not measure up to the former, conclude that something is wrong with metaphysics. In *The Metaphysics of Meaning*, I (1990b, 313–17) took some initial steps in arguing further that they are not enough alike for such a comparison. This chapter will continue the argument. Even the brief account of synthetic *a priori* philosophical knowledge that I will present here will explain why philosophy is not sufficiently sciencelike for it to be judged by scientific progress.

The other factor is the apparent failure of metaphysics in the face of philosophical skepticism. This is a far more serious threat to our confidence in the existence of *a priori* philosophical knowledge. Unlike the interpretation that the positivist puts on the facts about progress in metaphysics and science, the apparent failure of metaphysics to handle skepticism does not have to be argued for. Most philosophers would probably say that the failure is more real than apparent.

The curious thing is that the threat of skepticism has been an impetus in converting many philosophers to naturalized epistemology. Stroud (1984, 209–54) shows that Quine's naturalized epistemology offers no advantage of all over traditional metaphysics in dealing with skepticism. Goodman's (1955) naturalized inductive epistemology, which is an attempt to escape Humean skepticism about induction, is equally unsuccessful. As I (1962, 48–49) once argued, the Humean problem resurfaces as a problem of what right we have to think that the inductive practices to be explicated are better than other conceivable (counterinductive) practices, that is, what right we have to think they are reliable in the long run. Goodman (1955, 64–66) confidently assumes that Hume dissolved the problem, but this is not the case. Hume didn't show that there is no rational justification of induction, but only that there is none on the empiricist assumption that conclusions about unobserved events are either based on inferences from matters of fact in the past or on relations of ideas. Given the dependency of Hume's argument on the empiricist theory of knowledge, Goodman's naturalization is no more protection against the skeptic than Quine's.

In the remainder of this section, I will try to show that an extension of the rationalist epistemology set out in the previous chapters to philosophical knowledge provides us with a way in which skepticism can be isolated from a large class of issues about the nature of our scientific and philosophical knowledge. Nagel (1986, 67–71) rightly says that the problem of skepticism is an unavoidable consequence of the realist's objective conception of the world, but I think that we can make living with the problem considerably easier. In the next section, I will try to show that Carnap's critique of synthetic *a priori*