This is a splendid book. With a skilled hand, Roger Gibson has traced the wandering course of each main thread in the complicated snarl of theses that is W. V. O. Quine's multi-stranded epistemology. For thesis after thesis from the tangle, Gibson delineates it plainly and makes precise, unambiguous sense of its relation to the whole. He achieves this not only in cases where such an explication has previously, if seldom so enlighteningly, been furnished us, but also in several where it has not been so much as properly attempted—not even by Quine himself. His presentation is filled with nice interpretive insights into the import of Quinean points, insights that are practically without exception too convincingly documented, too sharply reasoned, and above all too illuminating of the doctrines they concern to be anything but fundamentally accurate. Throughout his treatment, Gibson reveals an understanding of Quine's many difficult doctrines and their tricky interrelations that is mature, penetrating, fascinating, and rich.

The work that has resulted is an elegant tour de force, a well-structured and compact précis that rises to the exegetical heights and succeeds in integrating, perhaps as never before, the whole of Quine's theory of knowledge (thus encompassing, if we can set aside certain formal contributions in set theory, logic, and the foundations of mathematics, roughly the whole of his philosophy). Anyone who has struggled with Quine's growing oeuvres over the years, and who knows their abstruseness and depth from personal effort with each new addition to the corpus, must marvel at the tidy effectiveness of Gibson's accomplishment.

My obviously high evaluation of this book contrasts a little with some rather lower-key remarks by the author and certain of his commentators (though, as it happens, it is mine that is much the more accurate assessment). The contents are not done justice by the book's subtitle; they far surpass the most one could be led to expect by the author's too modest self-appraisal in his preface; and they merit far more than the liberal but still too faint praise of the several scholars whose comments adorn its dust-jacket. For surely there is some suggestion of the merely descriptive presentation, the humdrum rehash or uninspired trot, harbored in the subtitular phrase, "an expository essay," a description that, however well-intended the modesty from which it may spring, is entirely out of place in characterizing what is to be found between these covers. When, in the same vein, Gibson remarks prefatorily that his "essay was written primarily with the audience of undergraduate and graduate students of philosophy in mind," as though he saw no more than a textbook in what may well rank as the most sensitive, deepest, and most creatively original scholarly study of Quine's philosophy yet to appear in print, he may be fairly describing what he undertook to write, but is scarcely doing justice to what he has actually...
achieved. And when Gilbert Harman says of Gibson's work that it is "useful to students who would like an overview of Quine's philosophy," when Paul Roth opines that it "can be read profitably by students of contemporary philosophy," and "should interest students . . . in psychology and linguistics who are concerned with Quine's views," and Jaakko Hintikka that "even if subsequent discussion should lead us beyond Gibson's book, he is to be congratulated," one must, I think, fault each of the three for—wittingly or unintentionally—undervaluing an extraordinarily fine piece of work to a serious degree. The impression conveyed is of scholars who, of course, have not themselves learned from Roger Gibson, or at least not much, but who are willing to reach down and pat him on the head for his little, student-oriented, pedagogical effort. One testimony to the inaccuracy of all this lies in some sentiments Quine himself expresses in his forward. Striking a different note from the Harmans, Roths, and Hintikkas, the philosopher whose work is its subject finds the book to be primarily an important scholarly contribution, at least as valuable to the Quine expert as to the neophyte student. He cites the "rare pleasure [of reading] someone who understands my position so fully, presents it so clearly, defends it so cogently, and relates it so illuminatingly to earlier doctrines and rival schools." Most strikingly he adds that in reading Gibson he gains "a proportionate overview of what he, Quine, is up to" that is not easily available from his own work. I take it that what can edify Quine as to what Quine is up to stands a fair chance of doing as much for the rest of us. And in fact there is evidence that something of the sort is actually transpiring, that it is not for Quine alone that Gibson's book is must reading. For the University Presses of Florida have recently published a new paperback edition of The Philosophy of W. V. Quine, furnishing what in an age when economic measures reign supreme is perhaps the most striking testimony possible that a scholarly book has made the grade and then some.

The structure of Gibson's work makes for pretty smooth sailing, even in some turbulent waters. He focuses in on Quine's doctrines in three progressively more elaborated stages, beginning with an attempt to identify Quine's place in the history of modern empiricism from Locke through Hume and Carnap to the present, a survey of the main ingredients of Quine's behavioristic theory of perception and learning, and an introduction to his grammatical analysis of English. This material is preparatory to more fully articulated development of Quine's language-based epistemological theory to follow, and constitutes a short first chapter appropriately entitled, "The Foundation." In the second stage, the basic thrust of Quine's conception of language is delineated. Here are included, among others, the considerations that lead to Quine's peculiar version of the "linguistic turn" in epistemology (that knowledge is embodied in theory, that theories are linguistic structures, etc.) and those that prompt his "naturalistic-behavioristic" approach to language (that language is a social activity, that it is learned entirely on the evidence of other people's overt behavior in publicly recognizable background circumstances, etc.). Here too is the appropriate detail about Quine's version of a verifiability theory of meaning and on his partially empirical, partially speculative account of language acquisition. This pithy elucidation of Quine's views on the nature of language occupies the second of Gibson's chapters, which he calls "The Framework." Finally, Quine's full-blown epistemological theory is explicated, complete with the requisite attention to the role of radical translation for understanding the behavioristic limitations of semantics, the inescapability of a limited semantic holism, the consequent failure of such traditional empiricistic standbys as the analytic-synthetic distinction and reductionism, the underdetermination of theory and the indeterminacy of translation, the inscrutability of absolute reference and hence the inescapability of relativity of reference, and the demise of phenomenalism, essentialism, propositions, and modalities, among the many. All of this, along with much discussion on the one hand of the
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ramifications of each point, and on the other of how everything hangs together as an integrated
epistemological theory, occupies Gibson's long central chapter 3, entitled "The Edifice," and
comprises rather more than half of the entire work. A brief fourth chapter, somewhat in the
nature and style of an appendix, closes out the work. It offers an outline of some of Noam
Chomsky's more celebrated Quine-directed criticisms, and undertakes the defense of Quine's
views in the face of these.

Given the tight interdependence of its components, there are many different theses that
might be cast in the role of centerpiece of Quine's epistemology. Gibson selects Quine's view of
the relation between what one must learn in order to learn a language, and the logical and other
evidential relations that tie the beliefs of a speaker of the language (however tightly or loosely)
to the sensory. This is the Quinean position according to which the study of how theory rests on
observation (the core problem for an empiricist epistemology) may itself be pursued empirically,
simply by investigating how it is that one learns the theoretical language. What one learns in
acquiring this language, so Quine's view has it, is just how and to what extent sensorily accessible
circumstances justify theoretical pronouncements. And hence in the structure of the learning
process are mirrored, or recapitulated, the theory-evidence interdependence relations, such as
they are.

This choice of centerpiece makes for a most perspicuous map of Quine's many famous
preoccupations, methodological precepts, and philosophical commitments. The study of the
anatomy of radical translation reveals itself as the means by which Quine determines the scope
and limits of what there is to be learned in learning a language, and hence in coming to know how
sensory evidence and theory interrelate. The scope and limits thus identified emerge as what
dictate the naturalistic-behavioristic approach, and this approach, in turn, as what prompts
Quine, in the footsteps of Hume, to commit to the flames essences, synonymies, analyticities,
meanings, propositions, modalities, minds, mental entities, and more. In the confutation of each
of these questionable notions, the notorious indeterminacy of translation is seen to serve as
intermediary, derivative of the naturalistic-behavioristic limitations on the one hand, and
yielding in its turn the vacuity of meanings and the rest on the other. These same
naturalistic-behavioristic limitations determine the loose, non-deductive fit between theory and evidence that
issues both in the underdetermination of the former by the latter, and in the logically holistic
character of the entire theoretical-cum-evidential aggregate. Translation of an other-than-
radical kind, translation as traditionally conceived, is seen to collapse when deprived of such
behaviorally inscrutable props as synonymy, meanings, and propositions. Thus radical
translation is left as the only translation and the naturalistic-behavioristic approach to language
as the only viable possibility for a consistent empiricist. Given even just the weak version of
verificationism to which Quine subscribes, the cases for underdetermination of theory and
semantical holism are thus made. Other familiar perspectives, posits, and points of Quine's, both
of the broadly fundamental sort I've been sketching here and of the more narrowly detailed,
specialized, and technical kind, are fitted in and together equally nicely.

Famously, Quine's writings have often generated negative criticism, much of it based on
misinterpretations of certain of his views. Gibson is particularly sensitive to the existence of
these, and without explicitly citing the critics and their errors—Chomsky is the one great
exception as noted above—he is at pains to underline the materials from Quine's writings that
may serve best as replies and rebuttals. Thus, for example, many have purported to find in
Quine's holistic emphases the outright rejection of his empiricist heritage, an altogether
coherence-theoretic commitment akin to the anti-empiricisms of Feyerabend and Kuhn, a
virtually idealistic turn. In this connection, Gibson does much to make clear that the over-
enthusiastic excesses of "Two Dogmas of Empiricism" belong to a special critical context. He highlights Quine's admissions, from *Word and Object* onwards, that he had earlier undervalued the stability of observation. And he emphasizes Quine's repeated insistence on the robust realism that is implicit in his commitment to taking contemporary physics at face value. Or for another such case, critics have often thought to find in the indeterminacy of translation—pace Quine's view to the contrary—just another instance of the underdetermination of theories. In warding this claim off, Gibson places stress on those Quinean passages in which it is most effectively argued that eliminating the effects of underdetermination, say by opting for a specific theory to the exclusion of all others, leaves indeterminacy intact.

In the face of so solid a piece of scholarship, one hesitates to carp at all. But because that is in part what reviews are for, I'll indulge myself to the limited extent that the text allows. Given Roger Gibson's talent for grasping Quinean intentions, making what is implicit in some of his more recondite discussions explicit, and supplementing Quine's sometimes-too-fragmentary accounts with expansive interpretation of his own, it is a bit disappointing that he has not engaged in these practices still more extensively than he has. Let me deal with one such lacuna.

Language learning, in Quine's view, involves both direct links between learned sentences and sensory stimuli (links whose acquisition belongs to the domain of "ostensive learning"), and indirect further links built up by what he calls analogic synthesis, in which new sentences are composed from—or understood in terms of—old ingredients via analogy. Putatively, it is the analogical—as opposed to logical—nature of the latter links that is responsible for the non-deductive character of theory-evidence relations and hence ultimately for both the compatatability of all possible sensory evidence with alternative theories (underdetermination), and the impossibility of our allotting to each theoretical sentence its own private fund of observational consequences (holism). Roughly speaking, that the evidence as a whole doesn't imply the theory is the cause of underdetermination, and that the components of the theory do not imply components of the evidence is what results in holism. Now when it comes to establishing underdetermination and holism, the only-analogical character of the linkages seems to work just fine. What Quine doesn't explicitly provide—though I think at least a good part of what is wanted is implicit in discussions of other matters in *The Roots of Reference*—is any assurance that his account leaves the rest of the structure intact, retaining such further logical and evidential relations as we should want retained. Might it be, for example, that if his account of the child's learning theoretical sentences by analogical leaps were correct, it would be at least partially destructive of the standard logical relations that presumably do hold, for example, among generalizations and their instances and the like? In a similar vein, does the loose analogical relation he provides for between evidence and theory threaten damage to the relations of confirmation in which the former must continue to stand to the latter? And are the weak linkages that deny each theoretical sentence its own evidential implications nevertheless strong enough for appropriate mixed sets of observational and theoretical sentences to continue to imply the wanted observable consequences? Could it be that Quine's case for underdetermination and holism, we may thus worry, has certain baby-with-the-bathwater features that make it grossly unacceptable? It would have added significantly to the notable contribution Gibson has already made to the articulation of Quine's account here if he had undertaken to build on the relevant discussions of Quine's, even if they are directed at other matters, and to sketch the missing demonstration that no such unpalatable consequences ensue. There are many philosophers who are suspicious of these particular doctrines of Quine's, most especially of his holism. It would set a whole host of their worries to rest, I believe, and do much to silence their objections, if it could
be convincingly shown that at least the limited holism of the mature Quine does nothing like the violence to traditional conceptions of logic and evidence that is often attributed to it.

With apologies to Roger Gibson, now that I've warmed up I can't resist some sniping on just one further score, over a matter of some centrality, as it happens, for evaluating Quine's approach to the theory of knowledge. At issue is the question of Quine's right to presuppose the truth of contemporary natural science as he does in the development of his epistemology. Trouble arises, of course, because it is supposed to be at least a part of the business of epistemology to accomplish the normative task of vindicating scientific knowledge in the face of the challenge from skepticism. And to do so with the aid of scientific knowledge itself may seem to be blatantly circular. Following Quine's lead in dubbing his defense of natural science by appeal to its own theories "enlightened empiricism," Gibson defends this honorific expression by noting that "the new epistemologist [i.e. Quine] ... recognizes that the skeptical challenge springs from within science itself and that in coping with it he is [thus] free to use whatever scientific knowledge is available." Gibson takes this defense of naturalized epistemology to be suggested by Quine himself in his observation that the familiar illusions to which skeptics appeal for discrediting the senses—the rainbows, sticks that look bent in water, and afterimages—are known to be illusions only through science. But the entire passage is a rare departure from Gibson's customary lucidity. For just what he intends as its thrust is far from evident. If its argument is supposed to be that whenever an attack on a body of doctrine is based on theses from the doctrine itself, then it is appropriate that the doctrine's defense be likewise based on its own theses, this is surely in error. It is a straightforward point of elementary logic that the attacker but not the defender may freely make use of the doctrine at issue. For where the former does so he is simply utilizing the classical strategy of reductio ad absurdum; but where the latter does, he is guilty of begging the question. That $S$ implies $\neg S$ really establishes that $\neg S$; but that $S$ implies $S$ (as indeed it so terribly often does) doesn't prove anything at all. Happily, alternative and more salutary readings of Gibson's argument are available. I'm inclined to think that the best one, and the one that probably most closely follows Quine's own bent, sees the skeptical attack as making erroneous use of science, and rightly insists on the legitimacy of correct use of science to reveal the skeptic's scientific blunders. Far from establishing the general unreliability of sensory evidence for scientific theory, the reasoning would go, the illusions the skeptic cites are actually known to be illusions in the first place only through the good offices of science, and in their turn both reinforce and extend it. Our understanding of these phenomena for what they are draws copiously on such resources of science as its optical laws, and the phenomena themselves both provide critical tests of the laws they draw on and help promote more sophisticated views on the nature of evidence than we might have—or need—in their absence. In a nutshell, they are not in the least incompatible with science, but an important part of its evidential basis. What we have here, then, is simply science defending itself against skeptical attack by setting the scientific record straight, a job it is uniquely and eminently qualified to do.

Needless to say, science cannot prove its own legitimacy; that would be question-begging. But it can expose scientific error—even in its own defense. And in a yet more general vein, it can play the same role in philosophical—including epistemological—contexts that it already plays in all reputable extra-philosophical inquiries, that of serving as the highest court of appeal at our disposal in assessing claims to knowledge about the world. Where naturalized (scientific) epistemology purports to issue in one such species of knowledge—namely knowledge about our knowledge of the world—and skepticism in another—namely knowledge that we cannot attain such knowledge—both are subject, like any other putatively cognitive results, to scientific evaluation. If the one is found to be scientifically impeccable, while the other turns out to have
misappropriated scientific results, then the verdict is decisive (subject, of course, given
fallibilism, to such further scientific developments as having a bearing). And if science's own
credentials are in turn queried, if its right to function in this supremely normative role is sought,
its warrant is ultimately pragmatic. No higher cognitive test is called for—or possible. This, I
think, is the argument Quine would have given in support of his defense of science from within, if
he had spelled one out at all. It is thus the argument Gibson ought to have offered. Or if, in spite
of the uncharacteristic unclarity of the relevant passage, it is the argument he intended, then I
think the lines I have sketched here are those along which he ought further to have made it
explicit.

But the book is an absolute gem, and it's time I stopped squinting through my jeweler's glass
looking desperately for minor flaws. If Quine's language-centered, epistemological theory is a
tightly structured though not always thoroughly scrutable map of our belief structures, their
sources, and their warrants, Gibson's redraft of the Quinean original reveals that tight structure
for what it is, snaps it out as the draftsmen say, and makes it apparent. It furnishes a faithful and
sympathetic yet at the same time highly inventive reconstruction that highlights what is already
there and provides on its own much of what needs adding for the integrity of the whole. With an
exception or two of the sort lately noted, it is perspicuous to a fault. For these reasons I see it as
very like the book-length summary of his work with which Quine himself would have
furnished us if he had set about authoring one, and am moved to suggest replacement of the too modest
subtitle, "an expository essay," of which I complained earlier, by the rather more arrogant but I
think altogether more accurate "Quine from the Quinean Vantagepoint" or more simply,
"Quine's Quine."