CRITICAL DISCUSSION:
ON MISSING NEURATH'S BOAT:
SOME REFLECTIONS ON RECENT QUINE LITERATURE*

"We are like sailors who must rebuild their ship on the open sea, never able to dismantle it in dry dock, and to reconstruct it there out of the best materials."

Otto Neurath

Given the voluminous secondary literature on Willard Van Orman Quine, the expectation might be that all the major aspects of his thought are well covered. Yet this is not the case. In particular, there is little in the literature which offers an account of Quine as a systematic philosopher; attempts to view Quine's much-discussed critical positions, e.g., his opposition to modalities and to the analytic-synthetic distinction, as a consequence of a well-rehearsed philosophic program have been few.¹ Two recent books, however, promise to fill this lacuna: *Quine and Analytic Philosophy* by George Romanos² and *The Philosophy of W. V. Quine* by Roger Gibson, Jr.³ And since both books boast a foreword by the master himself, the interpretation offered in each commands, or so it might seem, the attention of serious students of contemporary philosophy.

Yet the apparent similarities between the two books dissolve quickly upon inspection; the extent to which each fulfills the aforementioned promise is quite unequal as well. Indeed, a portent of these differences is Quine's foreward to each. Quine coyly avoids placing his *imprimatur* upon Romanos's interpretation of his arguments. Lest it be thought that understatement is just Quine's style, a glance into Gibson's book proves otherwise (Gxi). Moreover, differences deepen as one probes further.

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Most significantly, Romanos and Gibson differ dramatically in what each perceives as Quine's leading principle, his philosophical emphases, and the consequences of adopting a Quinean view of philosophizing.

Any serious discussion of Quine's philosophy requires reference to a number of different theses. In order to provide a touchstone for the discussion which follows, I offer a brief statement of five Quinean themes to which I refer now and again.

(a) The Duhem thesis: The claim that sentences (within either natural language or formal languages) have their evidence only as a related set (I refer to this as Quine's holism).

(b) Under-determination of theories: The claim that it is possible to formulate empirically equivalent but logically incompatible scientific theories.4

(c) The indeterminacy of translation of theoretical sentences: The claim that theories wherein we formulate hypotheses about what words or sentences mean lack a fact of the matter, i.e., fail to be objective in the way in which theories in natural science are. Despite acknowledging fundamental methodological parallels between theories of "translation" and theories in the natural sciences, Quine insists that the former are not objective in the way the latter are. There are no "facts of meaning" parallel to the "facts of nature." This failing distinguishes translation in kind from proper scientific inquiry.

(d) Inscrutability of reference: Whereas (c) asserts that there is no fact of the matter concerning the intension of terms, (d) asserts that there is likewise no one right answer concerning the extension of a term. "The only difference between rabbits, undetached rabbit parts, and rabbit stages is in their individuation . . . . The only difference is in how you slice it. And how you slice it is what ostension, or simple conditioning, however persistently repeated, cannot teach."5 "Reference, extension, has been the firm thing; meaning, intension, the infirm. The indeterminacy of translation . . . . cuts across extension and intension alike" (OR p. 35). Reference, too, is related in a museum myth, i.e., the view that there is one fixed or correct connection
between words and "ideas" or words and the world via ideas.

(e) Ontological relativity: "The relativistic thesis to which we have come is this, to repeat: it makes no sense to say that the objects of a theory are, beyond saying how to interpret or reinterpret that theory in another" (OR50). We cannot prove that what I refer to by "rabbit" is more determinate than the determinations achieved by my translation-understanding of what someone else is referring to. Reference, insofar as we can make sense of it, is a word-word, not a word-world, relation.

(These five theses constitute the core claims of Quine's philosophy. In addition, either all or some of the above should suffice to justify what Quine calls "epistemology naturalized," i.e., his vision of the analysis of knowledge as carried out as a part of ongoing scientific inquiry.)

The point of intellectual concern in the seemingly arcane exegetical disputes just mentioned is how to appreciate Quine's impact on contemporary philosophy. As has been so influentially and provocatively argued of late by Richard Rorty, Quine has reshaped the philosophical landscape by redefining the possibilities of philosophy. Central to comprehending and evaluating this redefinition, in turn, is an understanding of Quine's critique of positivism and his "holistic turn." Indeed, Quine's own writings are rife with allusions to his Duhemian/holistic outlook; he often employs Neurath's famous metaphor, moreover, to illustrate his Duhemian view. (The metaphor compares the limitations on our ability to examine our various beliefs with the limitations on a sailor who must attempt to rebuild his boat while afloat on the open sea. One point made by this image is that our current stock of accepted truths is all we have to use when seeking to correct and improve that stock.)

I believe that Rorty is quite correct to focus on Quine's espousal of Duhem when attempting to assess Quine's influence on intellectual life. My question with regard to Romanos and Gibson, then, is whether their chosen perspectives better advance our understanding of Quine. That is, I argue that if one stresses, as does Romanos, Quine's complaints against metaphysics or emphasizes, as does Gibson, Quine's naturalism the result is an inappropriately constricted perspective on Quine's significance. In Part 1, I claim that Romanos, despite an able presentation of many issues debated within analytic philosophy, nonetheless
misses the fundamental epistemological orientation of Quine's philosophy. Since he misreads the significance of the Quine-Carnap debates, the import of the Quinean arguments which he presents are not placed in their proper philosophical perspective. His account ultimately only serves to deflect needed attention from Quine's substantive philosophical assumptions.

In Part 2, I maintain that Gibson, although he provides the most impressively detailed and systematic reading of Quine now available, ultimately confuses what is presumed and what is derived in Quine's philosophizing. That is to say that Gibson, while evincing a deep appreciation of Quine's holism, incorrectly identifies the philosophical underpinnings of Quine's views. As a result, or so I argue, Gibson makes one of the most important consequences of the Quinean outlook, viz., Quine's proscriptions on meaning, appear more arbitrary than these proscriptions are. I conclude by sketching an argument, contra Romanos and Gibson, which takes as the organizing principle for Quine's philosophy his holism.

1.

Romanos develops an account of analytic philosophy wherein Quine's heroic achievement consists primarily of his spiking the positivists' metaphysical pretensions (what Romanos takes those pretensions to be I discuss at length below). How Quine succeeded at this deflationary project turns on Romanos's understanding of how analytic philosophy developed (an understanding, I should add, which relies heavily on Rorty's classic anthology and Rorty's own introduction therein).^8

With regard to his account of the development of analytic philosophy, Romanos insists that the positivists and other analytic philosophers replaced questions about what the world with questions about the language used to talk about the world.

For every statement about what there really is there could be substituted a statement (or statements) about what a certain language (or certain languages), or a portion of the same, really says there is. Inquiry into what we really say (or may say) about the world thus systematically replaced inquiry into the world as it really is. (R34)

Now I would agree with Romanos that a motive entertained by positivists and classical metaphysicians alike "is essentially the desire to explain science - scientific theory and scientific truth - in some
fundamental way that is prior to scientific explanation itself” (R105).
To this noncontroversial characterization Romanos adds another point
which he claims also applies to the efforts of all analytic philosophers.
The other core characteristic is that the results of such linguistically
oriented inquiry was understood by its practitioners to yield a fixed and
determined inventory either of the “furniture of the world,” (in the style
of classical metaphysicians) or of our concepts (terms), for talking about
the world (about a view Romanos names “linguistic Kantianism”).

The change from traditional metaphysics to positivism was, on this
reading, only a change in the style of assaying the nature of the ultimate
structure of reality or of thought about the world. Philosophers as
apparently diverse as Bergman and Austin, and texts as seemingly
disparate as the *Tractatus Logico-Philosophicus* and the *Philosophical
Investigations* are united in their unflagging allegiance to a doctrine
which Romanos dubs the “analytic conception of language.”

Underlying the philosophical outlooks of both groups is the analytic conception of
language – the idea that the structure or meaning of language (individual expressions or
linguistic systems as wholes) can be objectively examined and analyzed in some fun-
damental way in which extralinguistic reality, as such, cannot. (Rxv, emphasis mine)

The key here is that the analytic conception entails the imposition of a
determinant-objective-method of linguistic analysis (for example,
Russell’s celebrated analysis of denoting expression). Analytic
philosophers from Russell onward are said to be committed to the
belief,

that although there may be no way in which the world really is, there is still a way (or
ways) that we really say it is, or conceive it to be.

The idea that the individual words, statements, or linguistic systems we routinely
employ in the pursuit and accumulation of theoretical knowledge possess a determinate
meaning or content, or embody certain fixed structural or conceptual features, or treat (or
purport to treat) of a determinate and identifiable subject matter is hardly unique or
peculiar to positivism. This basic analytic conception of language is indeed common to all
classical approaches to philosophical analysis. (R32)

... the assumption remains intact that what language really says or is really about is a
genuinely significant issue, open to objective philosophical examination (that is, analysis).
(R88-89)

The analytic conception of language, in turn, brings certain metaphys-
cial assumptions in its train. Romanos terms this purported generic
metaphysical commitment “linguistic absolutism.”

To such absolute metaphysical questions as ‘What is the structure of reality?’...
correspond such absolute linguistic questions as 'What is the structure of our language?' The positivists, wary of absolute metaphysics altogether, embrace this linguistic absolutism wholeheartedly. (R34, see also R105)

In other words, "absolute" metaphysics pronounces on the ding-an-sich. For the absolutist, the world is as it is and is not anything else. Relatedly, the analytic conception of language entails that there is an objectively determinable structure to meaningful statements. Linguistic absolutism adds that the revealed structures correctly picture the structure of our talk about the world.

Interestingly, Romanos is alert to the fact that only logical atomism noncontroversially fits his characterization of the analytic conception of language (and the concomitant commitment to linguistic absolutism). Yet Romanos insists, contra appearances, that, e.g., Carnap's concern with objectively specifying the relation between observational and theoretical statements is still foursquare in this metaphysical tradition.

[Carnap's] version eventually just opts for a different theory of picturing altogether . . . . Language still presents a fixed and discoverable picture of things, and the philosopher still is concerned with the features of this basic picture rather than directly with features of the world itself; the point is now that this picture which represents the conceptual parameters of any acceptable science, is constituted only by a set of conventionally adopted and specifiable rules and not by some inexpressible relation with the world itself. (R38)

What is disconcerting is that rational reconstruction is self-consciously viewed by Carnap, Quine, and others as a fictitious history of concept formation; hence, it seems strange to impute to Carnap the view that such reconstruction captures even the way one "really" says the world is. Yet, Romanos insists that at the heart of it all is an inerradicable commitment to absolutist metaphysics.

Conceding that there is no way the world really is, they continue to adhere to the view that there is a way we really say it is or conceive it to be, and that this absolute or determinate conceptual content or meaning of language may properly be subjected to something of the piercing philosophical vision usually associated with the efforts of metaphysicians . . . . [Analytic philosophers] common acceptance of the analytic conception of language involves assumptions about the nature of linguistic inquiry that parallel the pretensions of speculative metaphysics regarding our access to extralinguistic reality. (R39–40)

In short, the course of analytic philosophy, as Romanos understands it, is described by a movement from the metaphysical pretensions of the Tractatus (with its unabashedly metaphysical account of the picturing relation) to a parallel metaphysical pretentiousness on the part of
linguistic philosophers as Carnap. Carnap fails to escape from the shadow of the *Tractatus* because all that Carnap does is to replace a "picture theory" of the world by a "picture theory" of our linguistic or conceptual schemes for talking about the world (R37ff.). Romanos's complaint is that to claim to be able to logically picture our way of talking about the world is no more legitimate an activity than the imputations of old style metaphysicians whom the positivists so gleefully disparaged.

Now while I agree that Romanos's characterization fits certain philosophers (e.g., Bergmann), I have two difficulties in crediting his general complaint. The first is that it takes very little to convict a thinker of maintaining the analytic conception of language. The second, and by far the more important point, is that it is very unclear why metaphysics, in this sense, becomes an issue in the debate between Quine and the positivists. I discuss these in turn.

How do metaphysical issues arise according to Romanos? Romanos observes correctly that many analytic philosophers hold the view that "the analysis of language is (epistemologically) prior to all empirical science, that it explores and determines the conceptual basis of all genuine empirical or theoretical investigations" (R39). Although vague, this characterization can be seen to fit the concerns of and the work done by a Carnap or a Hempel. Yet Romanos has no such innocuous point in mind. Rather, he insists, this method of analysis was employed by its practitioners to "seek corresponding absolute answers about the fixed structures or conceptual features of a language" (R39).

How are we carried from issues of logical form and explication to the swamp of absolutist metaphysics? *The key to the transition, so far as I can tell, is that Romanos assumes that to specify objective canons of inquiry is, ipso facto, to commit oneself to absolutist metaphysics as well.*

What has been shattered by Quine's relativistic thesis is the elementary assumption of most analytic philosophers, including both Carnap and Wittgenstein, that absolute (philosophical) talk about the *structure, meaning, or content* of linguistic expressions makes any objective sense to begin with, regardless of what one suppose the precise nature and origin of these linguistic features to be. (R96)

Romanos writes as if objective determination (say *via* formalized languages) of the structure of discourse is equivalent to asserting that this structure is "real," i.e., is necessarily the logical structure utterances must have. But unless one establishes a further premise indicating the alleged connection between the structural properties and
the relevant notion of metaphysics, Romanos's argument is obscure. We still need a clearer account of what makes this "metaphysical." Yet his only argument to the claim that analytic philosophers are committed to the "analytic conception of language" and linguistic absolutism turns on such a connection. Romanos notes what is indeed a common thread in the philosophers he discusses, viz., a central concern with the standards of rational discourse. He transmutes this into a concern with a commitment to absolutist metaphysics with no real explanation regarding how the transition occurs.

My suspicion is that Romanos makes the inference that he does in his imputation of a metaphysical emphasis to a reading of the philosophic emphases of analytic philosophy because of where he starts, viz., with early Russell and with Wittgenstein's *Tractatus* (R34ff). For the *Tractatus does* fit the metaphysical model which Romanos attacks. As Anscombe has remarked, “[I]t is fair to say that at the time when he wrote the *Tractatus*, Wittgenstein pretended that epistemology had nothing to do with the foundations of logic and the theory of meaning, with which he was concerned.”\(^\text{10}\) In a related vein, James Griffin observes that in "the *Tractatus* Wittgenstein was not so much an epistemologist as a logician with a strong bent towards the sciences... The *Tractatus* too aims at setting up principles for language, but they are the principles governing, not a particular kind of report, but any report about the world, and the reports in the *Tractatus* are about the world, not about experience, and not about sense-data."\(^\text{11}\) If the history of twentieth-century analytic philosophy consisted solely of efforts to extend or continue the project mapped out in this early work of Wittgenstein's, then we could better credit the emphasis Romanos places on Quine's repudiation of metaphysics. However, as I will indicate, Carnap and the others are best read as reacting against Wittgenstein's metaphysics without epistemology. The philosophical action shifts accordingly.

Quine figures in Romanos's story as the thinker whose work renders nugatory the metaphysical presumptions of linguistic analysis. “What I wish to accomplish here is to present and focus Quine's critical arguments and observations in such a way as to reveal clearly the implausibility and meaninglessness of the analytic conception of language itself, apart from any independent metaphysical assumptions” (Rxxvi). In fact, Romanos takes Quine’s running debates with Carnap to have centered on just this issue, i.e., Carnap’s metaphysical presup-
tions resulting from the analytic conception of language. And this raises my second point: Is this the appropriate emphasis to give to Quine's disputes with Carnap?

Romanos claims that Carnap's distinction between external and internal questions, i.e., between reasons for choosing one or another formal system and the commitments of a given system once chosen, is a distinction fraught with metaphysical import. For "basic ontology, according to this view, is determined by the rules of the framework.... Carnap's external questions are ultimately concerned with nothing more than the acceptance or rejection of such linguistic rules" (R51). Quine, we are told, through arguments in 'Ontological Relativity,' reveals as meaningless the claim that linguistic rules may fix or determine ontological commitments in the fashion imagined by Carnap.

Quine wants to show, however, that questions about what a language is really about – absolute linguistic questions – are just as insignificant [as absolute metaphysical questions]. Carnap's external questions, therefore, are those of traditional metaphysics which he and other positivists have come to deplore. (R50) Quine's relativistic thesis, therefore, represents a direct attack of the linguistic absolutism of the analytic conception of language, which is so fundamental to the various forms of philosophical analysis. (R50)

We cannot fix ontological commitments by appeal to linguistic conventions or rules, on this reading of Quine, because no set of conventions or rules is sufficiently complete and self-contained. That is to say, there can be rules which provide a translation function from one language to another (from English into physics, for example). But what Quine establishes, according to Romanos, is that we cannot specify the ontology of a theory apart from some previously accepted ontology and a prior decision on how to recast the ontology of one language in terms of the other (R43). This "double relativity" (to a prior ontology and to a manual of translation) then undercuts what Carnap assumes is possible in constructing various linguistic frameworks within which investigations may be pursued (R52).

Carnap thought that a choice of framework was a choice of ontology, an ontology which was completely determined and specified by the rules governing that framework. The Quinean point is to show that the ontology internal to the framework only makes sense relative to some theory from which it was initially translated (R61). Frameworks of the Carnapian sort were to determine their ontologies autonomously – without appeal to any resources other than those provided by the
conventions of the formal language. Quine is said by Romanos to have shown that the ontological commitments are not autonomous to the framework but parasitic, i.e., rely on translations from other theories. Hence, the objects of a theory "outrun" what can be specified by appeal to the linguistic conventions of the theory alone. Linguistic absolutism—saying what the language really commits us to—would require, at least, an autonomous specification of ontological commitments via conventions and rules. Since this necessary condition cannot be met, the Carnapian project fails.

But to construe the Quine-Carnap debate, and so the point of Quine's arguments, as determined by the metaphysical ghosts lurking in Carnap's frameworks is surely to miss the target at which Quine's fire was aimed. The metaphysical sin which Carnap et al. committed was to presume to be able to discover truth without recourse to science. Put another way, their major metaphysical pretension was present in their epistemological claims, in particular, in the analytic-synthetic distinction; and it was on this pretension that the internal/external distinction rested. This is why Quine's central concern is to rid epistemology of its dogmas.

The revolution wrought in philosophy by Carnap and his fellow workers concerned the canons of rationality. The polemics against other philosophers, the concern with the status of theoretical entities, the studied analyses of scientific method all underline the fundamental epistemological orientation of the movement. The natural sciences were presumed to embody key methodological insights. The task of the Vienna Circle was to formulate these core canons of rational inquiry and show, along the way, why scientific procedures were themselves justified. The foundations of knowledge, the setting of philosophy on "the sure and certain path of a science," was to be achieved by delineating the correct methodological standards. Carnap puts it this way: "The analysis of the linguistic expressions of science . . . is logic of science." The unity of method was, in Carnap's hands, an epistemological, not an ontological, thesis. The "given," while provoking controversy even among positivists with respect to its ontological status, is still a conceptual handmaiden in the larger epistemological project of excavating the foundations of the sciences.

My point is that positivists intended to legislate an account of scientific rationality. It is to this proposal that Quine reacted. The arguments of 'Ontological Relativity', as Romanos reads them, leave
untouched the epistemological dogmas with which Quine is concerned. The issue, in other words, is set by this question: Why does Quine reject Carnap's account of scientific rationality? Although Romanos is surely correct when he asserts that Quine rejects any latent metaphysical implications involved in Carnap's notions or artificial languages, that issue is by the way. The crux of the attack focuses on the dogmas of empiricism. The issue, in other words, is defined by the attempt of the positivists in general and Carnap in particular to clarify the logic of science. To emphasize the problems which Romanos does is to overlook what it was that made metaphysics in this style a problem for Quine in the first place.

Even worse, if Romanos's account of the conflict between Carnap and Quine is correct, then Quine appears to be a more proper object of ridicule than of veneration. For the position with which Romanos saddles him is inconsistent with a large portion of the Quinean corpus. Consider, in this regard, the following characterization of the conflict between Carnap and Quine.

Carnap's view that traditional ontological questions amount to practical questions of whether to adopt a certain form of language within which reference to basic kinds or systems of entities take place more or less automatically according to the rules of that language therefore collides head on with Quine's relativistic thesis. This occurs largely because implicit in Carnap's position is the assumption that it makes objective sense to speak of what a theory or framework is really about or what objects it really is committed to — that it is simply a matter of discovering the convention or rules which supposedly determine this . . . . However, Quine has shown that such specification of the subject matter of a theory or framework is a thoroughly relative matter, relative, again, to some translation of the theory into another theory which we ultimately accept "at face value." (R60–61, emphasis mine)

Romanos's assertions that a consequence of the Quinean argument is that it shows that the assumption that one can make "objective sense" of a theory's ontological commitment is wrongheaded. But we need to know how to reconcile this with Quine's own remarks on the use of frameworks in scientific theory. That is, Quine seems to hold to an assumption (see quote above) which Romanos believes he opposes. After all, it is Quine who celebrates (see WO, esp. sec. 47, "A framework for theory," and sec. 33, "Aims and claims of regimentation") regimenting theories by translating their statements into the language of first-order logic. Indeed, he asserts that "all traits of reality worthy of the name can be set down in an idiom of this austere form if in
any idiom” (WO228). And it is Quine, not Carnap, who declares that the “question of a simplest, clearest overall pattern of canonical notation is not to be distinguished from a question of ultimate categories, a limning of the most general traits of reality” (WO161). Scientific theories, so conceived, are termed “the last arbiter of truth” (WO23). This view is prevalent in Quine’s most recent work as well. Moreover, from essays such as ‘Grades of Theoreticity’ to books such as The Roots of Reference Quine explores the connections between observation sentences and sentences which are less directly connected to stimulations. It is impossible to ignore the strongly Carnapian flavor which permeates many of Quine’s later writings. In short, Quine seems committed to the “analytic conception of language,” and committed for precisely the same reasons Carnap is alleged to have been.

On my interpretation, we have an explanation of what divides Carnap and Quine which does not make Quine’s later writings appear patently inconsistent. Carnap believes that the logic of science is to be explicated and justified extra-scientifically. Quine, on the other hand, while he still believes that “epistemology is concerned with the foundations of science,” (OR69) also believes that the very best we can do is to try to use science to justify our scientific practice. “Epistemology, for me, or what comes nearest to it, is the study of how we animals can have contrived that very science, given just that sketchy input” (TT21, see also RR3). There is no justification to be found by some other, extra-scientific means; we simply have to go with the theoretical flow when it comes to attempting to determine if any statement – even statements of method – are true or false. “Truth is immanent, and there is no higher” (TT21). Put in other words, Quine advances empiricism by insisting that there is no justification of science apart from its successful practice. Just how are the canons of rational inquiry to be delineated? Carnap et al. thought that philosophers had something to tell scientists on this point. (If Carnap is to be condemned as a metaphysician, that is the reason why.) The positivists failure to clearly separate analytic statements from the rest, the conundrums which arose when attempting to specify the nature of mathematical truths, and the difficulties in formulating a workable version of the verifiability criterion all belied this belief. Quine’s position is that we can do no better in seeking to specify what is rationally justified than by seeing what conforms to ongoing scientific inquiry and the accepted canons, plastic though these may be.
The debate between Carnap and Quine, in other words, centers on the issue of whether the canons of rational inquiry (the "logic of science") allow of some extra-scientific validation. We do better, Quine urges, to view all methodological baggage, from logical truths to the most theoretical and speculative conjectures, as part and parcel of a general and revisable scheme for getting on in the world. The various statements accepted by us as true are mutually supporting; stimuli and statements are adjusted in order to yield a working scheme. Like the proverbial sailor adrift in Neurath’s boat, we adapt our beliefs as best we can to meet the exigencies of changing circumstances. Carnap’s image of a hierarchy of conceptual justification of scientific concepts is replaced by Quine with the image of a continuum wherein the language of the lay person grades off into the more refined discourse of the scientist. But there is no sharp break, no epistemologically privileged position, which the latter occupies.

The important consequence, for a Quinean, is the naturalization of epistemology. For, on this conception of justification, the only way to explicate the rationality of science is, ironically, to provide an appropriate scientific explanation of how this self-same science developed. We have no better way of explaining how the world works than what is afforded by current scientific theories, and no better justification for believing something true than that it is vouchsafed by such a theory. We come to opt, on the Quinean account, for a genetic account of knowledge. In short, the truly radical aspect of the Quinean enterprise is not some point concerning ontology, but involves rather Quine’s radical reconception of the task of epistemology. Justification of science is foresworn; justification of knowledge consists of an empirical psychological account of the growth and development of science within a community. Romanos’s suggestion that Quine’s views license something like a return to traditional metaphysics (Rxvi) is simply mystifying.

It is ironic, then, that Romanos chooses to condemn analytic philosophers for failing “to take Neurath’s figure of the ‘conceptual boat’ seriously,” insofar as such philosophers have “attempted to climb out of and stand free and clear of the boat... in order to take a long, hard look at the boat” (R105). It is Romanos, fixated by the logical atomist position, who overlooks what is genuinely radical about the debate he attempts to chronicle and evaluate and so simply misses the boat.
I have claimed that it is in Quine’s redefinition of epistemology, and, in particular, of the “logic of science” that we are to find the key to assessing Quine’s philosophy. The trick is, in light of Quine’s extensive criticisms of the positivists, to discern what is living and what is dead in the empirical tradition. With regard to situating Quine in this context, and concerning the issue of how the details of the Quinean system mesh, Gibson’s book is to be strongly commended. He provides an exposition of the Quinean system as, I suggest, Quine conceives it; this accounts, in part, for Quine’s enthusiastic Foreword. Yet while he makes plain how numerous features of Quine’s philosophy fit together, the very clarity of his exposition sometimes serves to aggravate doubts with regard to certain arguments, at least as Quine has cast them. In what follows, I examine what I take to be the most significant of the doubts, viz., the question of whether Quine provides a compelling argument for the thesis of the indeterminacy of translation of theoretical sentences. I use my discussion here, moreover, to mount a more general criticism of Gibson’s exegetical efforts. I conclude by suggesting a different key to Quine’s philosophy than the one which Gibson proposes.

Gibson’s book not only offers a meticulously detailed account of the interconnections between these various views, but also relates these and a great many other themes on which Quine has touched, e.g., Quine’s proscriptions on intensional objects, his attack on the analytic-synthetic distinction, and Quine’s views on reductionism. What is important about Gibson’s book is the leading thread – Quine’s Naturalistic-Behavioristic view of language, or the NB thesis – which Gibson uses to tie all of this together. Gibson and I agree that much of the Quinean project requires that we accept his proscriptions on the analysis of meaning and the positing of intentional entities; however, when it comes to saying why to accept this proscription, I find Gibson’s account unconvincing.

Gibson divides his presentation of the Quinean system into three general parts (a fourth section of his book, a defense of Quine against certain criticisms of Chomsky’s, will not concern me here). The linch-pin of Gibson’s reconstruction of the Quinean system is the NB thesis.

As I see it, Quine’s behaviorism prescribes the content of almost all of his more important
doctrines and theses by restricting, ahead of time, what are to count as acceptable answers to a multitude of philosophical questions. Quine's behaviorism also serves to unite these doctrines and theses into a systematic philosophy. (Gxx)21

The stress here, in other words, is on Quine as an epistemologist.

Quine rejects Carnap's efforts because Carnap looks to explicate scientific rationality by relying on distinctions which will not bear the weight. Why should we follow Quine and foreswear rational reconstruction or the distinction between external and internal questions? Simply put, because they do not advance our understanding of why science works. Quine concludes that it is "better to discover how science is in fact developed and learned than to fabricate a fictitious structure to a similar effect" (OR78). The point is not to discredit the logic of science, but to recognize that we cannot transcend it. Hence, Quine counsels a naturalistic attitude. "Why not just see how this construction really proceeds? Why not settle for psychology?" (OR74).

Gibson, in turn, siezes on Quine's pragmatic stance with respect to scientific inquiry and proposes that this be taken as the basic assumption which guides and shapes Quine's philosophizing. "The goal of the new empiricism is to provide an account of how, given only the evidence of our senses, we construct (but do not deduce) our theory of the world" (G4). To reach this goal, the enlightened empiricist can use all and only the methods of science. "Quine's naturalism is a departure from the old epistemology because it constitutes an abandonment of the latter's quest for a first philosophy upon which to construct scientific theory; it is a reorientation of the old epistemology in the sense that it relocates epistemology within the confines of scientific theory itself" (G12). What Gibson calls the NB thesis is just epistemology practiced in this mode. His concern is to show how Quine's key theses and characteristic themes are consequences of this style of epistemology.

The naturalistic/behavioristic thesis, as Gibson presents it, involves stressing, on the naturalistic side, the social nature of language and the central role which the study of this "social art" has for the analysis of knowledge. The behavioristic aspect of the thesis commits Quine to a behavioral account both of language learning and of linguistic meaning (G31). Given this focus on language learning, and keeping within the limits imposed by a behavioral account, Gibson proposes to derive the rest of Quine's philosophic program.

It is important to note explicitly what Quine says results when, with Dewey, we turn
toward a naturalistic view of language and a behavioral view of meaning: (1) we give up the museum figure of speech, (2) we give up assurance of determinacy, and (3) we recognize that there are no meanings nor likenesses nor distinctions of meaning beyond those that are implicit in people's dispositions.

I shall argue... that, fully expanded, (1)–(3) amount to the following Quinean doctrines and theses: (a) indeterminacy of translation, (b) inscrutability of reference, (c) ontological relativity, (d) underdetermination or doctrine of empirical slack, (3) revisibility or holism thesis, (f) rejection of intensional objects... (g) rejection of synonymy, (h) rejection of analytic-synthetic distinction, (i) rejection of radical epistemological reductionism, (j) rejection of modal logic, (k) pragmatic philosophy of science. (G65)

I shall not here explore whether Gibson makes good his claim for each particular thesis that he lists. I will content myself, rather, with raising two related questions. First, are there good reasons to believe that the NB thesis implies (1)–(3) above? Second, and more specifically, does the NB thesis offer a plausible argument for (a), the indeterminancy of translation? My answer to both questions is negative (although, with respect the first question, highly qualified). I will begin with the second (and narrower) question.

One of the most persistent problems raised in the extensive literature on Quine concerns his proscriptions on meaning. The proscriptions are licensed by the claim that meaning is indeterminate. The problem for Quine is often put in the following way. Our accounts of meaning and of truth are, let us agree, context dependent. Truth is immanent to received scientific doctrine; meaning is immanent to the accepted codifications (e.g., dictionaries) used in communication. Moreover, our account of meaning – our manual of translation – and our account of truth – accepted scientific theories – are built up from observation sentences. Granted, in addition, that all theories are underdetermined by the available evidence. Yet, despite all these parallels, questions of, e.g., equivalences of meaning, are said to have no fact of the matter. Manuals of translation suffer from a problem which is additional to the garden variety underdetermination of theories. But given all the aforementioned parallels, just why is meaning indeterminate, and so not properly part of whatever is to count as objective inquiry?

It is here that Gibson's fidelity to Quine, while it makes him such a worthy guide in other matters, aggravates rather than alleviates the doubts expressed above. "The essence of Quine's almost infamous doctrine of the indeterminacy of translation can be stated as the claim that 'manuals for translating one language into another can be set up in divergent ways, all compatible with the totality of speech dispositions,
yet incompatible with one another' (WO27)” (G65). But the quote which Gibson elects to cite from Quine here sounds for all the world like a restatement of the underdetermination thesis. If this is what there is to the “essence” of the indeterminacy, the critics of Quine have sustained their complaint.

However, perhaps Gibson’s choice of quotation here is simply unfortunate. Indeed, Gibson goes on to identify three specific lines of argument by which Quine attempts to make good his distinction between meaning and truth.

So far as I can detect, Quine offers three lines of argument in favor of the indeterminacy claim; they are: (1) the argument drawn from the holism thesis (sometimes called Duhem’s thesis or revisibility thesis) together with Peirce’s thesis, (2) the argument drawn from Quine’s naturalism and his attitude of scientific realism together with the underdetermination of physical theory (sometimes called the doctrine of empirical slack), and (3) Quine’s conviction that indeterminacy is plausible because any considerations that guide us in translating the individuative apparatus of a language...are so broadly structural and contextual in character as to allow divergent translations. (G78–79)

I shall ignore the third argument for two reasons. First, it does not concern the indeterminacy of translation of theoretical sentences; it’s a statement of the argument for the inscrutability of reference. Second, the argument as stated recognises no distinction between indeterminacy and underdetermination, and so is properly an instance of the problem and not a solution. Let us look at Gibson’s treatment of the first two arguments in turn, remembering that what is wanted from his analysis is, at least, a plausible method of differentiating indeterminacy and underdetermination.

What Gibson identifies as argument (1) above is based on a quote from Quine (OR80–81) in which the indeterminacy of translation is described as the “natural conclusion” of combining key ideas from Duhem and Peirce. Now the conjunction of these ideas has the following significance. The Duhem thesis claims that individual theoretical sentences have their evidence only when viewed in the context of the theory of which they are a part; the Peircian claim is (following the general line of verificationism) that the meaning of a sentence is determined by what would count as evidence that it is true. Together, these premises lead, in Gibson’s words, to the conclusion that “the semantical relationships and the evidential relationships among the sentences of a theory are isomorphic” (G81). That is, on this account, the meaning or the truth of an individual theoretical sentence
is never directly established by some observed results. The available evidence supports the theory – the relevant set of sentences – without supporting just any one of them.

Does this interpretation of argument (1) sustain the claim that there is a distinction between indeterminacy and garden-variety underdetermination? It does not. For Gibson’s reading, far from establishing that there is no fact of the matter to translation, simply emphasizes that the status of any theoretical sentence is just what a Quinean would expect, i.e., it is tied to observational consequences – a fact of the matter – only through its relation to the other sentences of the theory. The consequences of this view have interesting and much debated implications regarding the revisability of sentences in the face of anomalous experiences. But the argument provides no hint with regard to how one differentiates physical theory and translation.

Turning to the second argument for the indeterminacy thesis, the suggestion is that Quine’s naturalism, his realism, and his belief in the underdetermination of theories are what support the claim that translation is indeterminate. Gibson’s analysis here begins with an acknowledgment that there must be something more to indeterminacy than the underdetermination of manuals of translation.

If indeterminacy is not just an instance of the empirically underdetermined character of physics, then whatever additional properties it has cannot follow solely from the doctrine of underdetermination. Hence, the thesis of indeterminacy must be based upon something in addition to Quine’s underdetermination thesis. That something-in-addition is Quine’s naturalism and his attitude of scientific realism. (G92)

How does Quine’s naturalism and his realism fill the gap – provide the missing premise – in this construal of the argument for the indeterminacy thesis? One consequence of Quine’s naturalism is that he denies that there is any “first philosophy” – any basis for certainty and truth apart from physical theory: “physical theory serves as the last word regarding the truths of nature” (G93). In addition, underdetermination of theories in science is mitigated, in practice, by our acquiescing to the authority of received scientific doctrine. That is, Quine’s advocates adopting a realist view of scientific posits despite knowing that the theory is underdetermined. There is no gauge of what is real apart from accepted scientific theory; we accept what the community of scientists tells us, subject to revision and correction.

However, Gibson claims, the standards of meaning are not so conventionally well defined. In the case of translation we can do no
better than to "appeal to one of several possible, partially arbitrary, manuals of translation, which, far from being an ultimate parameter, has merely conventional acceptance on its side" (G93). Are the conventions of translation—our dictionaries and grammars—less widely accepted than those of scientific theories? Surely such a suggestion is quite implausible. The point here cannot be that our established canons of communication have no fixed base, for Quine admits that translation begins with observation sentences. The suggestion that we have "indeterminacy by convention," then, will not do since it is quite unclear that there are any well grounded conventional distinctions by which to mark off the canons of translation and those of truth.

A variant on the foregoing argument which Gibson considers would take the indeterminacy thesis to be as yet unestablished. A question such as "Do neutrinos have mass?" "has a (physical) fact of the matter, by dint of physics being the court of last appeal" (G93). A question about the meaning of a term, however, "has no (physical) fact of the matter because when all the (physical) facts are in, the question (i.e., the indeterminacy) remains unanswered. Translation, therefore, is indeterminate, for there is no fact of the matter for the translation to be right or wrong about" (G93). The problem here is that the claim that translation is indeterminate is interpreted as a bet regarding what the future course of science will show (in particular, that it will uncover no "facts about meaning"). My problem here is that Quine typically gives his argument an "in principle" cast, and this stance would not be justified if he were only loosely speculating about the future course of science. The claim Quine makes using the indeterminacy thesis is that it "makes no sense" to ask what the native really means. The argument, construed as above, does not show why it is nonsensical to ask such a question.

Yet this final point leads, in turn, to a deeper unease I have with Gibson's approach. For he wants us to understand Quine's rejection of meaning to be a consequence of granting Quine's naturalism and his realism. But why should one take the turn dictated by the NB thesis in the first place? Was not despair over meaning supposed to be the reason for trying the naturalistic-behaviorist way out? Unless we see why the indeterminacy should be accepted in advance of accepting the NB thesis, in other words, it appears that Quine is simply indulging in a priori legislation, i.e., dictating to scientists what sort of theoretical entities can serve as posits and which cannot.
I have no doubt but that Gibson is correct in taking the NB thesis as the organizing principle for Quine's naturalized epistemology. My question, however, concerns Gibson's argument for taking the NB thesis as Quine's "original position" and not as derived from some philosophically more basic considerations. (My reasons for thinking the NB thesis derivative are hinted at in the preceding paragraph (and developed at length elsewhere).)

Gibson contends that the central role of the NB thesis in Quine's philosophy is discerned when one contemplates Quine's critique of the verificationist theory of meaning in 'Two Dogmas and Empiricism'. For the holism - the Duhemian conception of language and knowledge - which Quine espouses there is a consequence of the NB conception of language; and it is this very same holism which is Quine's preferred replacement for sentence-by-sentence verificationism. The key point is Gibson's belief that Quine's critique of positivism presupposes the correctness of the NB thesis. However, Gibson admits that this way of viewing the argument of 'Two Dogmas' is very much his own.

It seems fair to conclude that Quine's rejection of both the dogma of reductionism and the analytic-synthetic dogma is a natural consequence of his allegiance to the NB conception of language. I think this remark is true despite the absence of any explicit appeal to the NB thesis in 'Two Dogma of Empiricism.' (G106)

Just what are we to make of Gibson's ingenious suggestion? My claim, contra Gibson, is that Quine subscribes to the Duheim thesis for reasons unrelated to the NB thesis. The NB thesis, which encapsulates Quine's proposal to naturalize epistemology, is a later development. Yet it is no surprise that the NB thesis is fully consistent with the Duheim thesis, for it is Quine's belief that any adequate naturalized epistemological theory must provide the appropriate genetic account of its own origins.

Quine's holistic turn is made, in 'Two Dogmas', in the form of a countersuggestion, i.e., as an alternative to the sentence-by-sentence verificationism which Quine rejects. However, Gibson argues, we cannot assume that because the holism is broached in this way, Quine need not worry about arguing for it. Indeed, and this is the core of Gibson's suggestion, the argument against the dogmas of empiricism is unconvincing if the countersuggestion is left without argument.

Why? Gibson considers a thesis which Quine is concerned to refute. Following Gibson, I label this (C1):

C1: The truth of each statement of a theory is analyzable into a linguistic component and a factual component. (G103)
Gibson claims that Quine needs to establish not only that (C1) leads to difficulties, but also that he has an alternative in hand with which to replace (C1). And just why must an alternative be formulated here? Gibson structures Quine’s argument against the analytic-synthetic distinction as a “pragmatic reductio” (Gibson’s term, G104). The reductio proceeds, under the assumption of (C1), to show that certain practical difficulties arise.

Quine claims that if we hold (C1) to be true, then, as empiricists, we are led also to hold [that all meaningful statements of a theory are analytic or synthetic] . . . . But, he protests, surely we ought to have been impressed with the difficulties:

(R1) The problem of arriving at any explicit theory of empirical confirmation of a synthetic statement.
(R2) The problem of drawing any straightforward analytic-synthetic distinction.

(G104)

In short, if (C1) is true, then the analytic-synthetic distinction ought to be viable; but (R1) and (R2) suggest that the distinction is certainly not straightforwardly explicable, and so not clearly visible. Hence, we ought to reject (C1).

The problem with this perspicuous construal of Quine’s argument is, as Gibson readily acknowledges, that the conjunction of (R1) and (R2) is not obviously formally inconsistent with (C1). Hence, Gibson worries, the erstwhile defender of (C1) might reply that “merely showing that some view gives rise to various seemingly irresoluble perplexities is not, of itself, sufficient justification for rejection of the view in question.” (G104). It is this worry that prompts Gibson’s assertion that in order to complete the argument against (C1), what is needed is a plausible alternative to it (G105). Hence the need to take Quine’s countersuggestion as part of his argument and not simply, e.g., as a promissory note.

Specifically, the countersuggestion is that “our statements about the external world face the tribunal of sense experience not individually but only as a corporate body” (FLPV41). However, Gibson notes in despair, Quine gives no argument for this countersuggestion in ‘Two Dogmas’. In order to fill this critical lacuna in Quine’s argument, Gibson proposes imputing much of Quine’s subsequent writings to the position articulated in ‘Two Dogmas’. In other words, Quine’s unpacking of the NB thesis in his later writings is to be viewed as an extension
of an argument sketched in ‘Two Dogmas’.

[In 3.3 I argued that the holism doctrine (i.e., Duhem’s thesis, or the revisibility thesis) is firmly grounded in Quine’s theory of language learning and in his theory of meaning (i.e., in the NB conception of language); hence my claim at the beginning of this section that Quine’s argument against the dogma of reductionism is bound up with the naturalistic-behavioristic conception of language. ... Consequently, it seems fair to conclude that Quine’s rejection of both the dogmas of reductionism and the analytic-synthetic dogmas is a natural consequence of his allegiance to the NB conception of language. I think this remark is true despite the absence of any explicit appeal to the NB thesis in “Two Dogmas of Empiricism.” (G106, emphasis mine)]

So the weakness of the argument in ‘Two Dogmas’ is that Quine does not there show that the NB thesis is, in fact, a plausible alternative to the doctrines attacked. However, once it is seen, as Quine’s later writings reveal, that the NB thesis can be cashed out as promised, the earlier argument gains credibility; the “pragmatic reductio” against (C1) is completed with (let us assume) the publication of The Roots of Reference.

But does the reductio depend on the articulation of an alternative to the challenged dogmas? It is necessary to recall here a point that I stressed in my discussion of Romanos. The heart of the issue between Quine and Carnap is how best to explicate the canons of rational inquiry. The logic of science, and the nature of rationality as such, is what each hopes to clarify. Gibson is appropriately appreciative of this point, for as he observes, “the conflict here [between Carnap and Quine in ‘Two Dogmas’] is over the proper canons of rational justification” (G104, emphasis mine). But, having recognized this as the critical issue, Gibson infers that “merely showing that the positivistic (C1) is the root of much nonsense (i.e., perplexity) is not enough to swing the argument” (G105). But this inference is, I suggest, mistaken. For what else does one need to show to establish the inadequacy of purported canons of rational justification other than to show that the canons are obscure and unclear as they stand? And this is precisely what Quine does show, prior to broaching his countersuggestion.

The positivists (as the early, polemical writings of Carnap and Ayer illustrate) believed that if they had a hold on any basic philosophic insight, it concerned how to divide or distinguish sense from nonsense. The verifiability criterion of meaning was the cornerstone of their efforts to provide a constructive account of this insight. What Quine
shows is that Carnap et al. presupposed the efficacy of certain analytic tools which proved, upon inspection, to be blunted by obscurity. In short, if what is at issue is a claim about the nature of rational inquiry and the standards of rational justification, no more is needed to upset this claim than to show that the standards, as proposed, are not clear enough to be useful in doing their intended job. That is, the pragmatic reductio goes through even if no alternative is advanced. For it is sufficient to show that the proposed criteria of rationality, insofar as they are based on the dogmas Quine attacks, generate perplexity rather than clarity.

The interesting historical and philosophical fact is that Quine was and is an empiricist, and his subsequent writings reflect his concern with how to salvage empiricism, as he understands it, from the ruins of the positivist project. Quine answers the old epistemological question with regard to what the standards of rational justification are by changing the question. Prior to Quine, the question is understood to involve a justification of the standards (indeed, especially the standards) found in the natural sciences. However, given Quine's pragmatic view that the use of scientific standards is the best we can do by way of justifying knowledge claims, the new problem becomes one of providing a genetic account of scientific knowledge. The explanation of what we know is, on this conceptions, the natural history of how certain beliefs gain community wide acceptance.

The NB thesis as Gibson sketches it is epistemology in this genetic mode. And if, in the fashion of a pre-Quinean empiricist, the question is asked why the canons of science are themselves rationally acceptable, the (Quinean) answer is that science works, at least better than anything else we presently have. And this pragmatic stance – judging theories by their success in helping us to cope with experience – is forced on Quine by his Duhemian view of theories, for it is this view which precludes some form of sentence-by-sentence test of the statements believed true. It is an acceptance of the Duhem thesis, then, that leads to settling for the NB conception of language. Although, as I noted above, Gibson correctly perceives that the NB thesis leads us back to a Duhemian view, the reason for this is now clear. Like the proverbial serpent consuming its tail, Quine’s epistemology must end where it begins, i.e., with a Duhemian view of the relation of evidence and theory. However, the impetus for moving to the NB thesis is provided by prior acceptance
of the Duhem thesis; we end up with the Duhemian thesis because the NB thesis has been tailored to fit, i.e., to yield just such an account.\textsuperscript{24}

Quine begins with a pragmatic stance towards verification in science, and he leaves us with a gentic account of how such a science as ours might have arisen. The only argument that Gibson has for taking the NB thesis as originative and not derivative fails to support his claim. In this respect, i.e., by not perceiving that the holism is central to Quine's philosophic outlook, Gibson also misses Neurath's boat.

\section*{Notes}

* My thanks to Dick Ketchum and Jim Walters, whose comments greatly helped to improve this paper. A version of this paper was read to the Philosophy Department at Western Illinois University and I further benefited from questions raised there.


Advertisements for the Romanos book were run by MIT press in publications such as \textit{The New York Review of Books}. Although Gibson's book was released almost a year before their own, and Orenstein's book several years before either of them, MIT Press promoted the Romanos book as "the first major explication and defense" of Quine's philosophy. When I wrote to them pointing out their error, they agreed to change their ad.

3 Roger Gibson, Jr., \textit{The Philosophy of W. V. Quine: An Expository Essay}, University of South Florida Press, Tampa, Fla., 1982, with a Foreword by W. V. Quine. Hereafter cited as G.

4 For Quine's recent thoughts on this topic, see 'On Empirically Equivalent Systems of the World,' \textit{Erkenntnis} 9, 1975, 313–328. He has shifted his position somewhat on this question.


7 Although Neurath uses this metaphor in a number of his writings, the \textit{locus classicus} is
MISSING NEURATH'S BOAT


9 One version of the analytic conception Romanos calls "linguistic Kantianism." On this view there is a determinate element, e.g., mental images or concepts, which fix meanings. Romanos sees this rationalist tendency in some strange places. In particular, Wittgenstein (in the *Philosophical Investigations*) and Kuhn are claimed to have fallen into the trap of linguistic Kantianism.

Kuhn employs Wittgenstein's version of the analytic conception of language to argue that, because the meaning of expressions take shape only within the contexts of applied conceptual or theoretical frameworks, there is no way, in principle, that persons "seeing" the world from different frameworks can either communicate or share essentially similar experiences . . . . The starting point for these views is the basic idea that the way the world is relative to, or dependent upon, one's linguistic or theoretical framework . . . . (R90).

Such view [as those of the "later" Wittgenstein] also embody the same analytic conception of language presupposed by Carnap and other proponents of philosophical analysis -- the idea that language possesses a fixed and determinate meaning or conceptual content; that there is something language *really says, means, or is about* that is open to objective philosophical scrutiny and examination even if the extralinguistic world is not. (R88-89)

Now this reading of the Wittgenstein's later work does not agree with, among others, Quine's reading. Although Quine is not much apt to praise Wittgenstein, he does note that Wittgenstein abjures the "myth of the museum" (OR 27) and that "the doctrine of indeterminacy of translation will have little air of paradox for readers familiar with Wittgenstein's latter-day remarks on meaning" (WO 77, fn. 2). Now this is no proof, of course, that Quine is right and that Romanos is wrong. My point is that it is at least odd to quote Quine as refuting someone whom Quine takes to be agreeing with him. The problem I have here, as so often with Romanos's allegations, is that Romanos is content to treat his claims as if they were obvious. More homework and intellectual legwork are needed to establish that his characterizations have any legitimacy.


12 This point is most forcefully expressed by Quine in 'On Carnap's Views on Ontology', *Ways of Paradox*, Random House, New York, 1966, p. 133. Consider what he says there: No more than the distinction between analytic and synthetic is needed in support of his
doctrine that the statements commonly thought of as ontological are proper matters of contention only in the form of linguistic proposals. The contrast which he wants between those ontological statements and empirical existence statements... is clinched by the distinction of analytic and synthetic.... However, this is not an end of my dissent. On the contrary, the basic point of contention has just emerged: the distinction between analytic and synthetic itself. (emphasis mine)


18 (La Salle, IL: Open Court, 1973). Hereafter cited as RR.

19 I develop this point further in “Seigel on Naturalized Epistemology,” forthcoming in Philosophy of Science.

20 Quine most lucid statement of his views here are to be found in “The Scope and Method of Science,” The Ways of Paradox, op. cit.

21 Gibson’s approach here should be compared to Schuelenfreil’s, op. cit. Gibson’s development of the NB thesis also adds depth to Rorty’s discussion of “epistemological behaviorism” in Philosophy and the Mirror of Nature, op. cit., p. 173ff.

22 This view is also urged by Michael Friedman, “Physicalism and The Indeterminacy of Translation,” Nous 9 (1975), 353–73.


24 Quine is not always clear when he is arguing for epistemology naturalized and when he is arguing from within that perspective. This leads to confusion regarding what Quine

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