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WHY THERE IS NOTHING RATHER THAN
SOMETHING: QUINE ON BEHAVIORISM, MEANING,
AND INDETERMINACY

I consider myself as behavioristic as anyone in his right mind could be.

— W.V. Quine, *Words and Objections*

INTRODUCTION

Quine's behaviorism belongs to his notion of evidence for scientific explanations, an account which places a premium on observability. He prizes observability because it features crucially in his project of "externalizing" empiricism. In contrast with classical empiricism, which takes what appears to appear to individuals, e.g., sense impressions, as explanatorily basic, empiricism externalized explains meaningful behavior by taking the publicly available as where explanation must begin.¹

This externalization of basic evidence allows Quine to "naturalize" epistemology. For externalization positions epistemology so that it can utilize science both to explicate and to analyze the justificatory relations between evidence and beliefs, an exploration which, if successful, would yield as one result how we develop these very sciences.² Empiricism itself is an *intra*-theoretic assumption endorsed by science as Quine understands it; the argument for empiricism resides in the explanatory successes of the sciences.³ Conversely, whatever plays no legitimate role as an explanatory posit has no claim to reality, to belong to the realm of facts.⁴

A naturalized epistemology — science self-applied — also examines and reveals where and how humans bridge the many gaps between input and output.⁵ Linguistic behavior provides the most striking and important case of such an "input-output" gap. Just here Quine emphasizes that language learning, to be explained at all, must be explained behaviorally. "I hold further that the behaviorist approach is mandatory. In psychology one may or may not be a behaviorist, but in linguistics one has no choice."⁶ But just

how Quine's behaviorism fits with his account of scientific explanation prompts perplexities. Human linguistic abilities represent a crucial unsolved puzzle, a standing challenge to the explanatory aspirations of current science. On the one hand, Noam Chomsky famously identifies the failure of Skinnerian behaviorism as an explanation of linguistic ability as its Achilles' heel.⁷ But, on the other hand, when he similarly indicts Quinean behaviorism, Quine remains unpersuaded.⁸ Yet how could Quine fail to find Chomsky's criticisms relevant? Why presume that an externalized empiricism drives a principled wedge between empirical science (a notion Quine construes quite broadly)⁹ and the explanatory utility or scientific respectability of meanings in his pejorative sense?

Chomsky's views provide a natural foil for those of Quine's. For they share a common view of what needs to be explained. Both Quine and Chomsky emphasize the interesting, important, and deeply puzzling explanatory challenge that language use presents. Yet Chomsky insists upon the scientific respectability of just the sort of theoretical posits — the reality and so causal efficacy of mental states, the necessity of conceptual structures — that Quine finds entirely bereft of explanatory merit. Moreover, while Chomsky insists that Quine's behaviorism signals a vast disagreement between their positions, Quine finds nothing important that divides them with regard to the characterizations of the problem and the empirical bases for answers.

This essay explicates Quine's behaviorism and its place in his philosophy. Attention to Quine's behaviorism serves, somewhat surprisingly, to make perspicuous the most contested thesis of Quine's philosophy, the indeterminacy of translation of theoretical sentences. Quine's thesis of the indeterminacy of translation — that there is "no fact of the matter" to disputes about meaning — develops from arguments that conceptual structures and mental states cannot contribute to explanation.

Section I clarifies in what Quine's behaviorism consists and how this constrains his account of what legitimates posits for purposes of explanation. Section II further develops Quine's notion of what constrains explanation by connecting the constraints sketched in the previous section with Quine's critique of the notion of linguistic convention. Section III shows how the points regarding posits, conventions, and explanation developed in the first two sections combine to provide a compelling argument for the indeterminacy of translation. This argument shows why indeterminacy does *not* hinge on what future science may hope to discover. Finally, this examination of Quine's behaviorism, its place in his general epistemology, and how these intersect with Quine's views on mind and meaning point to what constitutes a post-Quinean philosophical problematic.

I

People speak. On this everyone agrees. But what must be the case for a language to be the case? Here disputes arise. In particular, must any explanation of a capacity for language involve conceptual or intentional elements, i.e., attribute necessity to some meanings and causal efficacy (reality) to some mental states? Quine thinks not. Such posits have no place, he insists, in any scientifically respectable strategy of explanation.

What particularly needs explaining is how humans manage the transition from, in Quine's words, "meager input to torrential output," a study of how collectively we move from "stimulus to science." The question of how people acquire language and knowledge holds intellectual center stage for both Chomsky and Quine. As Alexander George rightly emphasizes, "Chomsky's explananda do not differ from Quine's...Like Quine, Chomsky considers his work a response to 'the problem of "causation of behavior".'"¹⁰ The striking and obvious fact for both concerns how our accepted pronouncements far outrun the perceptually available evidence. This fact, in turn, sets the explanatory agenda for their competing accounts.

Yet their very agreements deepen the mystery of how exactly to account for what divides them. As George observes, "If the disagreement is not over the sort of data to be explained, the need for innate mechanism, or the commitments of the far-future fundamental theory, then whence does it stem?"¹¹ Quine and Chomsky diverge as well on a basic consequence of accepting the inadequacy of behaviorist/empiricist explanations in linguistics. Quine declares, "If Chomsky's antiempiricism or anti-behaviorism says merely that conditioning is insufficient to explain language-learning, then the doctrine is of a piece with my doctrine of the indeterminacy of translation."¹² Chomsky disagrees. Regarding indeterminacy of translation in particular, Chomsky maintains, "Quine's thesis of indeterminacy of radical translation amounts to an implausible and quite unsubstantiated empirical claim about what the mind brings to the problem of acquisition of language...as an innate property."¹³ Construed epistemologically, Chomsky finds no distinction between the alleged indeterminacy of meaning and garden variety forms of underdetermination. "Quine's thesis is simply a version of familiar skeptical arguments which can be applied as well to physics, to the problem of veridical perception or, for that matter, to his 'genuine hypotheses'."¹⁴ Chomsky finds the underdetermination of linguistic theory to be true but trivial, but the alleged indeterminacy of meaning unsupported by argument.¹⁵

Goaded perhaps by Quine's self-characterized behaviorism, Chomsky further complains that it is "not at all obvious that the potential concepts of ordinary language are characterizable in terms of simple physical dimensions of the kind Quine appears to presuppose or, conversely, that concepts characterizable in terms of such properties are potential concepts

of ordinary language."¹⁶ As a psychological theory, Chomsky insists, Quine's theory simply refuses to recognize the mind's role in structuring the deliverances of experience. Understood epistemologically, Chomsky puzzles how linguistics could be worse off than physics, for each explains the observed by the unobserved. In the end, Chomsky insists, Quine's account "receives no support from what is known about language learning, or from human or comparative psychology."¹⁷

Quine's response here signals the depth of the divide between his views and Chomsky's. For, on the one hand, Quine remarks that "Chomsky's remarks leave me with feelings at once of reassurance and frustration. What I find reassuring is that he nowhere clearly disagrees with my position. What I find frustrating is that he expresses much disagreement with what he thinks to be my position."¹⁸ Yet, on the other hand, regarding Chomsky's dismissal of indeterminacy as a special problem, Quine responds, "Chomsky did not dismiss my point. He missed it."¹⁹

What Chomsky missed, I suggest, are the parameters of Quine's account of explanation, and how his behaviorism fits into that account. Behaviorism constitutes Quine's criterion for ascertaining what there is by way of evidence for shared meaning. Behaviorism naturalizes, in Quine's sense of the term, the study of meaning.

With Dewey I hold that knowledge, mind, and meaning are part of the same world that they have to do with, and that they are to be studied in the same empirical spirit that animates natural science...

When a naturalistic philosopher addresses himself to the philosophy of mind, he is apt to talk of language. Meanings are, first and foremost, meanings of language. Language is a social art which we all acquire on the evidence solely of other people's overt behavior under publicly recognizable circumstances. Meanings, therefore, those very models of mental entities, end up as grist for the behaviorist's mill.²⁰

Taken in its (for Quine) pejorative non-behavioral/mentalist sense, meaning is indeterminate. There is "no fact of the matter," no truth-maker, which could possibly decide the issue between incompatible attributions of meanings — different translations.²¹

Quine's own characterizations of his behaviorism tend to be terse, concerned more to distance himself from standard characterizations of behaviorism than positive expositions of how he intends the notion.²² Positive characterization proves somewhat more difficult to come by. Looking to work by Wilfrid Sellars helps here, for Quine strongly endorses and embraces an exposition of behaviorism which Sellars provides.²³

Sellarsian behaviorism gets its philosophical grip precisely when one focuses on cases of initial language acquisition, i.e., infant language-learning. Both Sellars and Quine consider this to be the philosophically significant case. For an infant just is someone who must break into discourse

with nothing by way of prior training or background to help. Accounting for an infant's success in acquiring language represents a philosophical natural experiment, a genuine case of "radical translation."

In asking how an infant *qua* radical translator might manage, Sellars parallels the acquisition of concepts used to characterize mental states with those used to speak of observable physical objects. Just as objectification involves mastering terms others use to characterize what goes on around us, "subjectification" similarly involves coming to apply terms acquired in the public domain to what goes on within. That is, Sellarsian behaviorism takes introspection as "a *conceptual* response to psychological states and the concepts included in this response are *common sense* psychological concepts and, as such, no more adequate to an understanding of what is really going on than are common sense concepts pertain to the middle sized physical objects of everyday experience."²⁴ Sellars emphasizes that notions so acquired have no special claim to scientific standing.

Sellars observes that some sort of reasoning must be involved in an infant's learning to speak. But how in turn to account for this ability? Is reasoning learned or part of one's natural endowments? He astutely observes that these alternatives are neither as simple nor as clear as might first appear. The former alternative seemingly endows infants with too few resources, the latter with too many. For the latter case particularly imagines infants *qua* radical translators as, *ab initio*, practicing scientists, relentlessly applying the method of hypothesis and test to connect newly heard words to their newly found world. Infants so conceived are not merely potentially rational, but actually so, and to a high degree.

§14. According to this model the infant — confronted by salient linguistic configurations of sounds, formulates increasingly subtle hypotheses about them and the contexts in which they occur; and accepts, rejects or modifies these hypotheses. Each new occasion provides more grist for the child's inductive mill.

§15. Now it leaps to the eye that this kind of explanation assumes that the child is no merely potential rational animal. Its rationality is full fledged. It operates with concepts and logical forms which have a high degree of sophistication...

§16. If the question is now raised — How does the infant acquire the conceptual abilities mobilized by his inductive reasonings? One answer is clearly precluded: "in the course of learning a language." Nor could these abilities be acquired by a process of inquiry or reasoning. The pressure towards an *innatist* account of the child's logical powers would be almost irresistible.²⁵

The latter alternative, in short, *creates* an explanatory need for a very rich conception of a "language of thought." But Sellars enters a critical cautionary note on just this point.

The caution is this. The primary argument for innateness turns on claim that key elements of reasoning and conceptualization cannot be acquire

through experience, i.e., be learned. Explaining language learning, on this view, must begin by identifying what *cannot* be learned, and so what is necessarily innate. These capacities must always already be there. But what, in general, distinguishes what is learnable from what is not?

Sellarsian behaviorism expresses just this caveat: beware positing preexisting mental capacities, for this may create more mysteries than insights. Needed is an account of just how the unlearned makes learning possible; invoking mental states threatens instead only *obscurum per obscurius*.

§25 ...But from the standpoint of methodology the binding principle was to be: Don't simply *borrow* concepts and principles from the framework of introspective knowledge. Use all the *analogical* and *suggestive* power of Mentalistic concepts and principles, but be sure that the concepts and principles you introduce have no more Mentalistic structure than can be *justified* in terms of their ability to explain observable behavior phenomena.

§26. As I see, this was — and remains — the methodological stance of a sophisticated behaviorism.²⁶

He advocates instead a behaviorism that, while recognizing no *a priori* restriction on the character of “intervening variables,” also represents a principled refusal to countenance any more mental structure than *required* to turn the learning trick.

How much to attribute to innate capacities awaits, then, a more general theory of learning. Precisely the wrong, indeed unjustifiable, methodological move here is to posit innate structures in the absence of some prior general account of what can or cannot be learned. “*Invoking ‘Innateness’ only postpones the problem of learning; it does not solve it.* Until we understand the strategies which make general learning possible — and vague talk of ‘classes of hypotheses’ — ...no discussion of the limits of learning can even begin.”²⁷ In light of how little of behavior can be made sense of by appeal to rules, time has only underscored the wisdom of this behaviorist caution.²⁸

In this regard, Quine’s identification of the Sellarsian account as his own puts his demands on justifying posits in proper perspective. What work posits do to earn their theoretical keep?²⁹ Quine’s behaviorism recognizes two strategies for justifying theoretical posits. First, a posit could be held to be constitutive. Meeting this requirement involves proving, for example, a need to assume some such ability as a condition of utilizing behavioral or other empirical evidence in the first place.

Quine’s argument for quality spaces provides a model here. “A standard of similarity is in some sense innate. This point is not against empiricism; it is a commonplace of behavioral psychology...Without some such prior spacing of qualities, we could never acquire a habit; all stimuli would be equally alike and equally different...Needed as they are for all learning, these distinctive spacing cannot themselves all be learned; some must be

innate.”³⁰ A theoretical posit — e.g., a genetic/innate disposition to notice color differences — explains something — a set of stable responses — that cannot be explained except by a prior ability to make certain discriminations in perception. The stability of responses across individuals and across times marks the same as the same. A biologically rooted and evolutionarily acquired ability to make certain perceptual discriminations provides a mechanism.

Second, in the context of a naturalized epistemology, proposed explanatory posits may “pay their way” by providing a means to independently mark out what they purport to characterize. This demand sets a special hurdle, or so I argue, for posits claimed explanatory of “meaningful” behavior. For much behavior taken to be meaningful is so only on the *prior assumption* that it is intentional or expressive of some conceptual ability. But precisely this assumption puts the theoretical cart before the horse. Behavior may be seen as flirtatious, insincere, etc., but what makes it such depends on nothing that objectively identifies the behavior as being as the type it is. Unlike the stabilities of behavior which underwrite the imputations of quality spaces, there exists no consensus across individuals and times regarding how to interpret specific behaviors. What explanatory advantage accrues to science by positing a kind and then being able only to identify willy-nilly behaviors that supposedly fit it? How otherwise to distinguish between kinds actually needed for explanation and those that merely free-ride and do no explanatory work?

Quine’s commitment to behaviorism asks only for evidence that the categories invoked are about something rather than nothing.³¹ Regarding the interpretation of behavior, there are no facts objectively determining if things are what putative explanations say they are. But in such cases, what then gets explained? Wheels turn, but nothing moves. This breaks the parallel between conflicts of interpretation and garden-variety underdetermination. For the issue does not concern conflicting but empirically equivalent theories, but how initially to ascertain what the explanations explain.³²

II

What would the discovery of meaning be the discovery of? How would one “know the meaning” if, so to speak, one stared it in the face? The previous section brings this question to the fore. The friends of meaning owe a story of how to mark by any jointly observable, stable, and so objectively determinable feature that which the theorized entity picks out and supposedly explains. Quine only asks how to identify what the evidence allegedly evinces. He makes no prior judgment regarding what may serve to verify.

If, for example, a speaker avers that 'Gavagai' pick out a whole rabbit and not an undetached rabbit part, what makes the utterance evidence for something over and above a disposition to affirm some sentences and deny others? Nothing in the world remains unexplained by the dispositional account, an account itself explicable in terms of learning.³³ Thus what may first appear to be a base physicalist prejudice is not.

The foregoing suggest why Quine believes that the "problem of evidence for a linguistic universal is insufficiently appreciated."³⁴ What, he puzzles, does a claim to have discovered such a universal "amount to, pending some standard of faithfulness and objectivity of translation?"³⁵ The very posing of evidence as *evidence for universals* "presupposes some prior behavioral standard of what, in general, to aspire to include."³⁶ At issue here is imputations of sameness of meaning. Quine only asks for an empirical mark by which the "same" can be, in point of fact, shown to be such. *But what would the discovery of "same meaning" be the discovery of?*³⁷

Quine distinguishes between what is evidentially fundamental, naturally fundamental, and conceptually fundamental.³⁸ What is conceptually fundamental concerns terms and descriptions whose use we learn first. Fluency here qualifies us for membership in our linguistic community. By contrast, what is either evidentially or naturally fundamental concerns evolving scientific explanations of what there is. Quine concedes that the intentional idiom might just be conceptually fundamental; what he denies is that this idiom finds a place in our best explanatory scheme of things.³⁹

Issues surrounding when posits explain and when they do not can be clarified by paralleling Quine's worries about the mental with claims that appeal to conventions sheds light on the nature of mathematical truths.⁴⁰ As in other cases, discussion of the mathematical or logical contexts proves instructive for more ambiguous contexts, e.g., ordinary language. For standards of clarity or explicitness lacking in the former case invariably obtain and to a greater degree in the latter.

Quine suggests two criteria which any satisfactory definition or a term or sign must satisfy. On the one hand, there is a formal requirement of "unambiguous eliminability." Definitions must show how the *definiendum* can be replaced by other, presumably more primitive and well-defined terms, e.g., truth tables definitions of logical connectives. On the other hand, a proposed definition "must also conform to the traditional usage in question. For such conformity it is necessary and sufficient that every context of the sign which was true and every context which was false under traditional usage be construed by the definition as an abbreviation of some other statement which is correspondingly true or false under the established meaning of its signs."⁴¹ Without this substitutivity, I take it, the proposed definition simply becomes stipulative, just as the truth table definition of 'and' respects some ordinary language contexts but not others.

Moreover, definitions should discriminate between statements true by accident of circumstance from those which are logically true. "A definition which fails in this latter respect is no less Pickwickian than one which fails in the former; in either case nothing is achieved beyond the transient pleasure of a verbal recreation."⁴² Nothing inherent to the process of assigning conventions itself restricts us, including consistency. Conformity to antecedent use alone guides us in assessing whether the translation comes out "right."⁴³

Yet, conventions *per se* fail to explain the esteem given some truths over others because the putative strategy of explanation applies equally as well to subject matters not so esteemed. Conventions provide a method one can use to circumscribe certain types of truths — ones of mathematics or logic, say — but nothing about this method distinguishes these truths from, e.g., those of empirical science.⁴⁴

If in describing logic and mathematics as true by convention which is meant is that the primitives *can* be conventionally circumscribed in such fashion as to generate all and only the accepted truths of logic and mathematics, the characterization is empty; our last considerations show that the same might be said of any other body of doctrine as well. If on the other hand it is meant merely that the speaker adopts such conventions for those fields but not for others, the characterization is uninteresting; while if it is meant that it is a general practice to adopt such conventions explicitly for those fields but not for others, the first part of the characterization is false.⁴⁵

Rather, we tailor conventions to fit established usage. But the use of antecedent behavior as a guide precludes taking the resulting conventions as explanatory of behavior. "Still, there is the apparent contrast between logico-mathematical truths and others that the former are *a priori*, the latter *a posteriori*...View behavioristically and without reference to a metaphysical system, this contrast retains reality as a contrast between more and less firmly accepted statements; and it obtains antecedently to any *post facto* fashioning of conventions."⁴⁶ That is, the assignment of conventions merely formalizes what prior behavior already reveals.

[I]t is not clear wherein an adoption of the conventions, antecedently to their formulation, consists; such behavior is difficult to distinguish from that in which conventions are disregarded. When we first agree to understand 'Cambridge' as referring to Cambridge in England, failing a suffix to the contrary, and then discourse accordingly, the role of linguistic convention is intelligible; but when a convention is incapable of being communicated until after its adoption, its role is not so clear. In dropping the attributes of deliberateness and explicitness from the notion of linguistic convention we risk depriving the latter of any explanatory force and reducing it to an idle label. *We may wonder what one adds to the bare statement that the truths of logic and mathematics are a priori, or the still barer behavioristic statement that they are firmly accepted, when he characterizes them as true by convention in such a sense.*⁴⁷

Quine's well-known conclusion to the argument here is that if the goal is to justify intuitions that truths of logic or mathematics differ in kind from those of the natural sciences, appeal to conventions supply no such explanation or justification. Appeal to conventions represents no advance (for purposes of explanation) over the claim that some truths are behaviorally well-confirmed.

Quine's denial that meanings have any explanatory role to play parallel his arguments that "truth by convention" fails to explain how mathematical truth differ in kind from those of empirical science. Work by Thomas Ricketts helps make this point and indicates how Quine's concerns about explanation connect to indeterminacy.⁴⁸

The starting point here, as with so much else with Quine, involves Quine's disputes with Carnap. Carnap believed that the notion of shared linguistic frameworks had explanatory utility, specifically in regard to accounting for the character of scientific rationality. The attribution of a "shared framework," Carnap claims, explains in what the rationality of scientific investigators consists. Constitutive of scientific rationality are those beliefs/statements not open to revision by experience. For Carnap, the notion of statements that are rationally unrevisable — analytic statements — provides a supposed key to explicating scientific rationality extra-scientifically. Quine, as argued above, finds nothing that distinguishes so-called analytic sentences from the rest — "It is sometimes cold on Thursdays." Quine's challenge to Carnap asks for a justification of the explanatory "value added" by positing a distinction in kind between truths.

The question now becomes how to identify those rules constitutive of scientific rationality — rules it would be irrational to give up. Quine presses Carnap to show in what non-arbitrary feature the alleged difference between the two sorts of statements consists. Carnap attempts to meet the challenge by appeal to behavioral criteria.

In the end, Carnap does recognize Quine to be asking after the ground for attributing linguistic frameworks. Carnap attempts to meet this challenge by presenting a "behavioristic, operational procedure" for identifying the analytic sentences of a person's language by reference to the person's speech dispositions...[T]hese dispositions are those which mark a sentence as rationally unrevisable. Description of these dispositions is, however, couched in concrete, more or less behavioral terms. Thus it, unlike the previously described criterion, avoids illicitly presupposing the availability of a criterion of analyticity. Carnap hypothesizes that the procedure for attributing linguistic frameworks could be cast into the form of a handbook, a manual.⁴⁹

Carnap's behavioral criterion promises an empirical basis for distinguishing the "merely" empirical from the rationally unrevisable. Such a behavioral standard would vindicate his distinction between truths constitutive of rationality and other accepted beliefs.⁵⁰

But how can behavioral evidence do that? For nothing in behavior marks the behaviors as cases of following one rule rather than another. The problem is not physicalism. The issue, rather, concerns what marks behavior as evidence for one kind of rule and not another? As Ricketts observes, "the thesis of indeterminacy of translation is Quine's response to Carnap. Quine's examination of the role independently describable speech dispositions play in guiding and constraining translation show Carnap's criterion to be a counterfeit."⁵¹ It is not (just) that behaviors might be compatible with different rules. Lacking is an argument that the behaviors can only result as a consequence of some specific rule. Fitting behaviors to rules does not show that the behavior results from a rule. As in the case of the assignment of conventions, rules just recapitulate rather than explain what behavior first reveals.

Ricketts analysis helpfully identifies the key role played in the debate by Quine's behaviorism. On his account, what Quine develops is a behavioristic analog for terms of positivist epistemology that cannot be justified as the positivists sought — so Quine's behavioral definition of an observation sentence — and dismisses those for which he can find no suitable behavioral analog, e.g., notions of analyticity and synonymy.⁵² Distinctions between kinds of truths fails Quine's behavioral tests. Experience reveals some truths to be more stubbornly held than others, but what goes for "7+5=12" goes for "It is sometimes cold on Thursdays."

Ricketts remarks also prove enlightening regarding the core differences between Quine and Chomsky. On this reading, Chomsky is just one more case of explanation by attribution of shared frameworks.

Quine could take Chomsky to be arguing with him, one scientist to another. In particular, Quine could construe Chomsky as offering a rival approach to Quine's behaviorism...To dismiss Chomsky's challenge here, Quine need only, from the vantage point of the physical theory of which psychology is a component part, express his justified confidence that every instance of speech behavior admits of a physical explanation. The failure of behaviorism shows only that we will not have very much to say by way of systematic explanation of verbal behavior until neurophysiology is far more advanced than it is today.⁵³

What Quine questions is not whether Chomsky has the framework right, but what appeals to a "shared something" actually explain. This brings together Quine's doubts about the illumination provided by explanation via conventions and his worries about the unlearned as explanatory of the learned.

One the last move remains for friends of the meaning. Advocates could insist that there exists a class of explananda left unexplained by Quine's naturalized epistemology. This is the class characterized as meaningful speech, and not "mere" behavior.

To explain an emission of noise is not, however, to explain an utterance of an English sentence, let alone an assertion that it is raining outside...On the basis of this explanatory deficiency, Chomsky challenges the explanatory omniscience of Quine's science.⁵⁴

At this point, Ricketts worries, the debate reaches a logical impasse.

But now, from Quine's perspective, we see Chomsky as begging the question, or rather as failing to raise any question at all...The disagreement between Quine and Chomsky is not a clash of rival theories addressed to the same data but a difference over what counts as data, over the terms we take for granted to represent data.⁵⁵

Since their rival theories cannot agree on what needs explaining, a choice between them "will then opt for Quine's account of language or Chomsky's depending on whose convictions about what there is to be explained persuade us."⁵⁶ But this conclusion is premature.

Claims that some set of innate rules explains verbal behavior would need to first establish that certain rules guide, and not merely fit, behavior.⁵⁷ "Guiding" is a causal notion. Syntactical models at best fit the data. No account presently exists explaining how individuals manage to be guided by syntactic structures in the relevant causal sense. Moreover, it is difficult to imagine just how such an account might help, for adhering to syntactic forms is neither necessary nor sufficient for meaningful speech.

But the steeper obstacle concerns how to provide an objective determinant of the supposed products of mental causes. For behavioral criteria, as already noted, cannot suffice for this purpose. Nothing in the world marks, e.g., states, meanings, or concepts as "the same." We do not know what the discovery of "same meaning" would be the discovery of.

What marks out mental kinds as members of those kinds cannot be given a *defining* observable correlate. Quine endorses Davidson's anomalous monism for this very reason.⁵⁸ Why assume with regard to meaning or the mental that something exists which needs explaining? No shared facts distinguish behaviors said to have an intentional property from those that lack it. Assigning mental states, on this view, is like formulating conventions. We tailor assignments to fit behaviors, hence the assignments cannot explain the behaviors. The distinction between the intentional and the non-intentional goes the way of the distinction between the analytic and synthetic. Nothing objective allows us to determine what such distinctions supposedly distinguish.

III

The argument for indeterminacy, as I reconstruct it, does not depend upon any *a priori* philosophical assumption regarding what must be excluded from scientific explanation. Indeterminacy obtains because meaning in the pejorative sense has no explanatory use. It has none because it is not required to explain how evidence is possible (and so play a constitutive role) or to designate properties which objectively define a thing as being of a certain kind, and so a scientific or explanatory role.

The overall structure of the argument may be represented as follows:

Pr. 1: For posits to have claim to reality, they must be justified as part of an explanatory theory within a naturalized epistemology;⁵⁹

Pr. 2: In order to be a justified part of an explanatory theory, the posits must either be necessary for (constitutive of) stimulations being evidence (as in quality spaces), or must provide an observable mark marking them as the things they are, i.e., there must be an objective basis for ascertaining that some behavior has been rightly or wrongly categorized a behavior of a certain type⁶⁰;

Pr. 3: But mental states and concepts have yet to be shown to be necessary for or even robustly explanatory of observed stabilities in behaviors; in addition, nothing marks a behavior as objectively categorized correctly or incorrectly⁶¹;

C: Meanings and mental states have no claim to reality (because no claim to any genuine explanatory function). Whatever has no place in our best scientific scheme of explanations is not real. Whatever is not real does not belong to the realm of facts, i.e., constitute a fact of the matter.

The first premise strikes me as self-evident. Why call something real if it has no role in explanation? If causally idle or redundant with regard to impacting how everything else in the world goes on, in what would its "reality" consist?

The second premise states what legitimates a posit. Posits can be constitutive of the possibility of stimulations being evidence, or they can be kinds made objective by accepted theoretical explanations. Substantiating the third premise has been the burden of each of the first two sections. Together, they establish that meaning in the pejorative sense fails to be legitimated by either standard — it has no constitutive role and it lacks objective markers. The failure of both constitutive and objective verificationist rationales for meaning is why there is nothing rather than something.

As Quine comes to concede, the notion of "sameness" needed to account for agreement by speakers cannot be cashed out in terms of some comparison of nerve endings of those involved. No doubt information comes to us perceptually; but equally not in doubt is that, at this perceptual level, individuals exhibit more differences than not.⁶² Quine comes to speak, late in his writings, of a "preestablished harmony", an evolutionarily developed disposition for people to respond alike under certain conditions. But, in this case, behavior provides only a symptom of a physiological condition.

Chomsky rightly notes my *penchant* for innate ideas. Rightly, anyway, if we construe 'innate ideas' in terms of innate dispositions to overt behavior ...[T]his *penchant* is one I share with behaviorists generally...Language aptitude is innate; language learning, on the other hand, in which that aptitude is put to work, turn on intersubjectively observable features of human behavior and its environing circumstances, there being no innate language and to telepathy. The linguist has little choice but to be a behaviorist at least qua linguist; and, like any behaviorist, he is but to lay great weight upon innate endowments.⁶³

What explains, on Quine's view from early to late, are accounts cashed out in terms of how bodies respond and work.⁶⁴ The presence of stable behavioral criteria provides a unified explananda. "Another distinctive point about the indeterminacy of translation is that it clearly has nothing to do with inaccessible facts and human limitations. Dispositions to observation behavior are all there is for semantics to be right or wrong about."⁶⁵ As Quine emphasizes, taking mental states as causes simply introduces causal *Doppelgänger* into a theory. If evolutionary explanations can account for the apparent "preestablished harmony," then there is no need to explain things twice, once by a biological mechanism, a second by a conceptual one. Føllesdal nicely characterizes the relation of what he terms Quine's "evidential behaviorism" to Quine's general argument for indeterminacy.⁶⁶ The problem, as Føllesdal develops it, is that in attempting to infer from purported evidence for mental states back to those states the evidence allegedly evinces, there are only two options. The states can be identified directly, by comparison of one to the other, or indirectly, via corresponding physical states.⁶⁷ This harkens back to the Sellarsian point so strongly endorsed by Quine that in appropriating the vocabulary of a folk psychology, we literally do not know what it is we appropriate.

In claiming that the verbal behavior is evidence for anything at all, the friend of mentalism needs a way of objectively discriminating the objects the evidence picks out from others — a fact of the matter to the claim that something is of one kind rather than another. But physical states, including behavior, provide no such criterion. Different anatomies do not match up. Moreover, to identify any two bodily states as states of the "same meaning," we would already have to know what to count as such.⁶⁸ But, of course, what counts here is precisely what is unknown.

In "Two Dogmas of Empiricism," when discussing interchangeability *salva veritate* as a criterion of analyticity, Quine notes that one could discern which contexts were analytic and which not provided one understood a term such as 'necessarily.' But understanding this term, he goes on to complain, presupposes rather than explicates the meaning of 'analytic.' Such an account, he observes, "is not flatly circular, but something like it. It has the form, figuratively speaking, of a closed curve in space."⁶⁹ A related metaphor figures as well in his complaints regarding taking evidence to be evidence for one linguistic universal rather than another. "We are looking for a criterion of what to count as the real or proper grammar, as over against an extensionally equivalent counterfeit...And now the test suggested is that we ask the native the very question which we do not understand ourselves: the very question for which we ourselves are seeking a test. We are moving in an oddly warped circle."⁷⁰ The suggested criteria — a prior understanding of 'necessarily', a prior mode of discriminating behaviorally — prove unsatisfactory because they turn out to presuppose exactly what we seek to know. Just what should be looked for? What would the discovery of meaning be the discovery of? The metaphysics of meaning collapses under the weight of these questions.

In this respect, Quine anticipates and responds to what Warren Goldfarb terms the "scientific objection" to critiques of the possible role of mental states and meanings in the scheme of explanation.⁷¹ The objection goes as follows: a philosopher who denies explanatory efficacy of mental states (Wittgenstein, Quine) "is simply making a bet on the future course of science or else he is engaged in *a priori* anti-science, denying *a priori* that certain projects could bring results, and hence they ought not even be investigated empirically."⁷² But if the former, the Quinean claim loses its principled cast; if the latter, it represents just the sort of philosophic prescribing to science Quine otherwise abjures.

Goldfarb examines this objection in relation to Wittgenstein's procedures, but suggests (quite correctly on the account developed here) that the considerations apply as well to Quine.⁷³ On Goldfarb's reading, Wittgenstein shares Quine's skepticism about the explanatory efficacy of the mental, and for similar reasons: such terms cannot be shown to mark out kinds needed for or needing explanation. "Wittgenstein's treatment...of the cognitive or intentional mental notions are evidently meant to persuade us that, in some sense,...[they] are not particular or definite states or processes."⁷⁴ But this appears to provide an opening for the "scientific objection." Why, such an objector may ask, "isn't Wittgenstein here usurping the place of empirical inquiry? Is it not possible that empirical science — neurophysiology, in particular — will find specific states and processes that will fill the bill, as far as understanding, believing, remembering, etc. are concerned?"⁷⁵ Clearly, a Quinean or Wittgenstein owes an answer to this objection.

Goldfarb's analysis here brings together the Sellarsian and Quinean points about learning and behaviorism in a perspicuous fashion. For the core of a Wittgensteinian response to the scientific objection resides in consideration of examples. The examples work to show that characterizations of "same behavior" exemplify no defining attributes.

Wittgenstein asks us to look in detail at the range of our practices relevant to an ascription of understanding. We find an enormous variety of considerations that can enter, a dependence on context that is impossible to describe accurately by any general rules, a lack of uniformity in mental accompaniments. In individual cases [of ascription of mental states such as understanding] we have stories to tell to justify our ascriptions, but there is no uniform feature that pulls the various cases together...If it is at such a juncture that the scientific objection is voiced — if the objector is saying, even though our ascriptive practices now show no uniform features, 'that's only because we have too little acquaintance with what goes on in the brain and the nervous system' ([PI] §158) — then the roots of the objection in *a priori* demands that something unitary and definite must ground the ascription are evident.⁷⁶

Considerations such as these coincide precisely with Quine's complaints. Nothing in the world marks the ascription of mental kinds as being the kinds they supposedly are.⁷⁷

In this regard, the scientific objection gets things backwards.⁷⁸ For it is the friend of a science of the mental who demands science respect certain categories even while lacking any independent evidence of what might possibly make things members of this category. "[T]he scientific objection is undercut for its attractive empirical stance — its appearance of making only the modest claim that things might turn out either way, we might or we might not discover an appropriate neural state — is seen to be a pretence. The objection loses its scientific cachet...It becomes just a restatement of a picture of what *has* to be there."⁷⁹ Absent an account of what behaviors objectively exemplify when exemplifying one mental state rather than another, the scientific objection merely manifests a philosophical disease, not its cure.⁸⁰

Quine charts what falls by the way in an advancing scientific picture of what there is. His view of epistemology as science self-applied, and his corresponding conclusion about the explanatory utility of meanings, has interesting parallels here to Kantian themes. For at least one important link that connects a tradition that runs from Kant to Quine studies how a human minds come to constitute a shared and mutually intelligible world. Kant, in this regard, assigns the inquiring mind a strongly constitutive role. But how concepts and percepts come together to form understanding remains an unsolved problem, a problem which finds its modern incarnation in questions of finding rules that guide behavior. Quine despairs of the task of using philosophical analysis to find such rules. He proposes, instead, to turn that job over to empirical psychology. How an account of the place of mind

in the world plays out in the context of Quinean naturalism, however, is a story for another day.⁸¹

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NOTES

1 Quine (1980b), 259.

2 Quine does not limit epistemology, in this regard, to the so-called "doxastic assumption," i.e., the view that only beliefs can be used to justify other beliefs. Causation and implication are, for him, just two interrelated strategies for the justification of beliefs. "The business of naturalized epistemology, for me, is an improved understanding of the chains of causation and implication that connect the bombardment of our surfaces, at the one extreme, with our scientific output at the other. The first link is causal: The bombardment of the exteroceptors causes a neural intake. The next link connects the neural intake with language: observation sentences become associated with ranges of perceptually similar neural intakes, at first by conditioning. The subject learns to assent to the observation sentence on the occasion of any global neural intake in the associated range." Quine (1995c), 349. See also his discussion in (1990), 41-4. I explicate and defend Quine's account in Roth (1999), 87-109. A sympathetic treatment may also be found in Koppelberg (2000), 101-19.

3 Quine (1990), 20-1: "Even telepathy and clairvoyance are scientific options, however moribund. It would take some extraordinary evidence to enliven them, but, if that were to happen, then empiricism itself — the crowning norm, we saw, of naturalized epistemology — would go by the board. For remember that that norm, and naturalized epistemology itself, are integral to science, and science is fallible and corrigible."

4 See, e.g., Quine (1960), 22-3, also 264.

5 The focus centers on the theory-evidence relation, one which, as Quine remarks (1969d), 83: "...we are prompted to study for somewhat the same reasons that always prompted epistemology; namely, in order to see how evidence relates to theory, and in what ways one's theory of nature transcends any available evidence."

6 Quine (1990), 37-8. Quine emphasizes the role of his behaviorism as a theory of explanation in many places throughout the course of his writings. It is strongly implicit in remarks such as: "Language is a social art. In acquiring it we have to depend entirely on intersubjectively available cues as what to say and when. Hence there is no justification for collating linguistic meanings, unless in terms of men's dispositions to respond overtly to socially observable stimulations." Quine (1960), "Preface", ix. It is explicit in remarks such as: "The more special point is that verbal behavior is determined by what people can observe of one another's responses to what people can observe of one another's verbal stimulations. In learning language, all of us, from babyhood up, are amateur students of behavior, and, simultaneously, subjects of amateur studies of behavior...For empiricism as thus reoriented, the focus of understanding is outside us...This is behaviorism." Quine (1970), 4: "In all we may distinguish three levels of purported explanation, three degrees of depth: the mental, the behavioural, and the physiological. The mental is the most superficial of these, scarcely deserving the name of explanation. The physiological is the deepest and most ambitious, and it is the place for causal explanations. The behavioural level, in between, is what we must settle for in our descriptions of language, in our formulations of language rules, and in our explications of semantical terms. It is here, if anywhere, that we must give our account of the understanding of an expression, and our account of the equivalence that holds between an expression and its translation or paraphrase." Quine (1975), 87.

7 The *locus classicus* of this criticism is Chomsky (1959), 26-58.

⁸ The debate has many iterations, representative being Chomsky (1969) and Quine (1969e). Quine remains unswayed from this view. Quine (1990), 37-8: "Critics have said that the thesis [of the indeterminacy of translation] is a consequence of my behaviorism...I agree...Each of us learns his language by observing other people's verbal behavior and having his own faltering verbal behavior observed and reinforced or corrected by others. We depend strictly on overt behavior in observable situations. As long as our command of our language fits all external check-points, where our utterance or our reaction to someone's utterance can be appraised in the light of some shared situation, so long all is well. Our mental life between check-points is indifferent to our rating as a master of the language. There is nothing in linguistic meaning beyond what is to be gleaned from overt behavior in observable circumstances."

⁹ See, e.g., Quine (1997b), 571-2; and (1995b), 251-61. See also my discussion of this topic in Roth (1999).

¹⁰ George (1986), 489-99, esp. 491-2.

¹¹ *Ibid.*, 492; see also 494.

¹² Quine (1980b), 258-9.

¹³ Chomsky (1969), 66.

¹⁴ *Ibid.*

¹⁵ See, e.g., Chomsky (1978), 12-24.

¹⁶ Chomsky (1969), 63.

¹⁷ *Ibid.*

¹⁸ Quine (1969e) 302

¹⁹ *Ibid.*, 304. Pinker's work indicates that nothing has changed over the intervening 30 years since the exchanges before, in, and after *Words and Objections* with regard to the inadequacies that Chomskians takes to be inherent in Quine's position. Pinker structures the dispute as a disjunctive syllogism: either explain language acquisition and use in terms of local/cultural conditioning (what he also terms the Standard Social Science Model — SSSM — aka the Sapir/Whorf view), or explain it by postulating innate, universally shared concepts existing prior to (and as necessary to account for) language acquisition. Quine is among those identified as holding the SSSM. Sufficient to convict Quine of this view is that Quine insists, "The most notable norm of naturalized epistemology...[and] the watchword of empiricism: *nihil in mente quod non prius in sensu*. This is a prime specimen of naturalized epistemology, for it is a finding of natural science itself, however fallible, that our information about the world comes only through impacts on our sensory receptors." Quine (1990), 19. Yet, Pinker responds, by this very precept empiricism stands refuted: "Grammar offers a clear refutation of the empiricist doctrine that there is nothing in the mind that was not first in the senses...[The] paraphernalia of syntax are colorless, odorless and tasteless, but they, or something like them, must be a part of our unconscious mental life." (Pinker (1994), 117) There is more in mind, on Pinker's view, than can be dreamed of in Quine's philosophy. See Pinker (1994) e.g., 11, 72-3, and esp. 419-48. This characterization of Quine's views on language acquisition retains wide currency. Note the easy attribution of this view in Gosselin (2000), 57-77. For Quine's skeptical take on this view, see, e.g., (1970), 15.

²⁰ Quine (1969b), 26.

²¹ The point to emphasize, in order to achieve the intended contrast between the indeterminacy of translation and the more general underdetermination of (any) physical theory is that, once one settles on a physical theory, one has a basis for attributing reality to objects and truth to sentences. But, Quine insists, settling on a choice of physical theory fails to provide suitable justification for ascribing reality to mental states or for differentiating among truths by marking out some as necessary and some not. "Though linguistics is of course a part of the theory of nature, the indeterminacy of translation is not just inherited as a special case of the underdetermination of our theory of nature. It is parallel but additional....The point about indeterminacy of translation is that it withstands even all this truth, the whole truth about nature...[W]here indeterminacy of translation applies, there is no

real question of right choice; there is no fact of the matter even to within the acknowledged underdetermination of a theory of nature." Quine (1969e), 303.

²² A sympathetic effort to exposit Quine's notion of behaviorism and distinguish it from other senses that the term has in the literature can be found in Rappaport (1978), 164-83.

²³ Quine (1980a) 26-30; see esp. 26, 29. The exposition by Sellars Quine refers to is Sellars (1980), 3-25.

²⁴ Sellars (1980), 4, §9.

²⁵ *Ibid.*, 5.

²⁶ *Ibid.*, 6-7.

²⁷ Putnam (1980), 249. The context of the quote is worth noting as well. "Just how impressed should we be by the failure of current learning theories to account for complex learning processes such as those involved in the learning of language? If innateness were a general solution, perhaps we should be impressed. But the I.H. *cannot*, by its very nature, be generalized to handle all complex learning processes...the theorems of mathematics, the solutions to puzzles, etc., cannot on any theory be *individually* 'innate'; what must be 'innate' are heuristics, i.e., learning strategies. In the absence of any knowledge of what general multipurpose learning strategies might even look like, the assertion that such strategies (which absolutely must exist and be employed by all humans) cannot account for this or that learning process, that the answer or an answer schema must be 'innate', is utterly unfounded." Quine (1969e), 307, cites with strong approval exactly this criticism.

²⁸ Kripke's (1982) work on Wittgenstein remains exemplary here. I discuss the futility of hypothesizing rules as explanatory of behavior in Roth, "Mistakes," unpublished.

²⁹ Quine, (1980a), 26: "His [Sellars] moderate behaviorism is exactly to my taste. Mentalistic predicates can be tolerated in the manner of the theoretical predicates of physics, e.g. electron spin, or even electron. For them there is no observational criterion, except as these predicates contributes to the coherence and simplicity of an inclusive theory for which there is observational support as a whole. In a word, we can admit them as hidden variables. Among hidden variables, however, there are better and worse. There is a premium on any links to observation, however partial and indirect; the less partial the better, and the more direct the better. The importance of behaviorism is its insistence on shoring up mentalistic terms, where possible, by forging substantial links with observation. For a deep causal explanation of mental states and events, on the other hand, we must look not just to behavior but to neurology. For this reason there is a premium not only on substantial connections between our hidden variables and observation, but also on the amenability of these hidden variables to explanatory hypotheses in neurology. Their value lies in fostering causal explanations."

³⁰ Quine, (1969c), 123.

³¹ Quine (1990), 44: "Unlike Davidson, I still locate the stimulations at the subject's surface, and private stimulus meaning with them. But they maybe as idiosyncratic, for all I care, as the subject's internal wiring itself. What floats in the open air is our common language, which each of us is free to internalize in his peculiar neural way. Language is where intersubjectivity sets in. Communication is well named." *Ibid.*, 43-4: "What is utterly factual is just the fluency of conversation and the effectiveness of negotiation that one or another manual of translation serves to induce...Such was my parable of the trimmed bushes, alike in outward form but wildly unlike in their inward twigs and branches. The outward uniformity is imposed by society, in inculcating language and pressing for smooth communication."

³² This I take to be a key point in a critical but difficult passage in which Quine summarizes his disagreements with Chomsky. Quine (1969e), 304: "A conviction persists, often unacknowledged, that our sentences express ideas, and express these ideas rather than those, even when behavioral criteria can never say which. There is the stubborn notion that we can tell intuitively which idea someone's sentence expresses, our sentence anyway, even when the intuition is irreducible to behavioral criteria. This is why one thinks that one's question 'What did the native say?' has a right answer independent of choices among mutually incompatible manuals of translation." On my account, what is "irreducible to behavioral criteria" just is the claim that most categorizations of so-called meaningful behaviors sort into kinds in the way

that behavioral discriminations of color do.

³³ As will become apparent, although I endorse Kripke's observation that Quine's route to indeterminacy goes through a skepticism about meaning based on behavioral behavior while Wittgenstein's skepticism goes through introspection, he underrates the full force of Quine's argument as developed below. Kripke (1982), 14-5, 55-8. Both Quine and Wittgenstein present fundamental challenges to the folk psychological assumption that the terms of folk psychology mark out "kinds" distinguishable by some common behavioral or introspectible property. See esp. discussion of Goldfarb in Section III.

³⁴ Quine (1972), 446.

³⁵ Ibid.

³⁶ Ibid., 445.

³⁷ Quine is looking for something in the public realm that marks the same as the same. Here it is possible to see Quine and Wittgenstein converging, as Kripke suggests, inasmuch as Wittgenstein is read as skeptical that anything in introspection reveals a mark marking things as the same, even when the "sameness" at issue is the rule one allegedly follows in doing what one does. More on this below.

³⁸ Quine (1976c), 233-41.

³⁹ See esp. Quine (1960), 221.

⁴⁰ Quine (1976b).

⁴¹ Ibid., 72.

⁴² Ibid., 77.

⁴³ Ibid., 89-90: "Let us now consider the protest...that our freedom in assigning truth by convention is subject to restrictions imposed by the requirement of consistency. Under the fiction, implicit in an earlier stage of our discussion, that we check off our truths one by one in an exhaustive list of expressions, consistency in the assignment of truth is nothing more than a special case of conformity to usage...It is only the objective of ending up with our mother tongue that dissuades us from marking both '—' and '~ —' [as true], and this objective would dissuade us also from marking 'it is always cold on Thursday'...As theoretical restrictions upon our freedom in the conventional assignment of truth, requirements of consistency thus disappear. Preconceived usage may lead us to stack the cards, but does not enter the rules of the game."

⁴⁴ See, e.g., Ibid., 93.

⁴⁵ Ibid., 95.

⁴⁶ Ibid.

⁴⁷ 98-9, emphases mine

⁴⁸ Ricketts (1982), 117-36.

⁴⁹ Ibid., 125.

⁵⁰ Ibid., 126: "Analyticity is then revealed by speakers' reflective responses to suitably designed contrary-to-fact questionnaires. So, Carnap would have us attribute to a scientist a linguistic framework whose logical-consequence relations mirrors the scientist's intuitions of rational unrevisability."

⁵¹ Ibid., 127.

⁵² Ibid., 132.

⁵³ Ibid., 135.

⁵⁴ Ibid., 135-6.

⁵⁵ Ibid.

⁵⁶ Ibid., 136.

⁵⁷ See Quine (1972), 442-54, esp. 442-5.

⁵⁸ Quine (1990), 71: "The point of anomalous monism is just that our mentalistic predicates imposes on bodily states and events a grouping that cannot be defined in the special vocabulary of physiology. Each of those individual states and events is physiologically describable, we presume, given all pertinent information." Quine (1995a), 88. Likewise, Quine maintains. "What are irreducibly mental are ways of grouping them [physical, e.g.,

neural events]: grouping a lot of respectably physical perceptions as perception that *p*. I acquiesce in what Davidson calls anomalous monism, also known as token physicalism: there is no mental substance, but there are irreducibly mental ways of grouping physical states and events. The keynote of the mental is not the mind; it is the content-clause syntax, the idiom 'that *p*'."

⁵⁹ Quine (1960), 22.

⁶⁰ Consider the following example. A substance may or may not be salt. Categorizing something as a salt, and taking NaCl as its chemical structure are all, let us say for the sake of argument, products of a theory. But once that theory is in hand, whether or not something is salt can be determined by looking at its chemical structure. The chemical structure marks the substance as belonging or not to a certain kind, whether or not that kind and its markers are artifacts of a contingently held theory. In claiming that behavior is intentional, in contrast, no objective markers can be given as in the case of chemical structure.

⁶¹ Quine (1960), 216 ff.

⁶² As I argued in chapter 2 of Roth (1987), overt behavioral provides the only plausible criterion for Quine has for determining such key notions such as, e.g., sameness of stimulus meaning. Indeed, in later writings, Quine gives up the notion of "same stimulus meaning" altogether in favor of either basically behavioral or assumed genetic accounts. See, e.g., Quine (1996), 159-63, esp. 162-3 and (1997a), 575-7, esp. 576.

⁶³ Quine (1969e), 306.

⁶⁴ The issue of the possible explanatory efficacy of appeal to mental states is explicit in Quine (1975), 86-7.

⁶⁵ Quine (1990), 101.

⁶⁶ Føllesdal (1990), 98: "Another version of behaviorism, which I call 'evidential' behaviorism, and which I regard as that of Quine, is a position concerning evidence: the only evidence we can build on in our study of man, as in any other scientific study, is empirical evidence, in particular the observation of behavior. A Behaviorist of this kind is open to accepting mental states to the extent that there is evidence for them."

⁶⁷ Ibid., 106-7: "Traditionally, philosophers of mind have tended to identify mental states by help of language. Two speakers are in the same mental state if and only if their states are appropriately expressed by the same or synonymous expressions...But thereby we are back full circle. We asked what it means for two mental states to be the same, we were told that they are the same if they are expressed by synonyms. And we are now told that for two expressions to be synonyms, they must express the same mental state. One might try to avoid the circularity by finding other ways of correlating different people's mental states, without going by way of language...[O]ne might perhaps hold that two mental states are the same if their physical aspects are the same, or very similar. However, given the individual differences between human brains and also the holistic nature of the mental, such a proposal, if anybody were to make it, would seem highly implausible."

⁶⁸ Quine (1980a), 29: "Anyway, this question of uniformity of neural hookup is not relevant to the problem of explicating meaning, or likeness of meaning. We are already assuming this relation, after all, when we speculate on the neural mechanism that make for like meanings."

⁶⁹ Quine (1961b), 30.

⁷⁰ Quine (1972), 448.

⁷¹ Goldfarb (1992), 109-22.

⁷² Ibid., 109-10.

⁷³ Ibid., 118: "The note Wittgenstein is here sounding has a Quinean ring. In fact, I do see a confluence between the two at this point...[T]here exists little reason to think there will be a scientifically discoverable state that will group together just the right things under the concept of understanding...You have a mere metaphysical insistence rather than anything that comes from a scientific worldview."

⁷⁴ Ibid., 109.

⁷⁵ Ibid.

⁷⁶ Ibid., 113.

⁷⁷ Ibid., 121: "[T]he inclination to think that science might discover an appropriate state rests on an accession to a picture of the mental apparatus, of definite states and processes of some sort; given those states and processes, questions can then be framed of whether they can be tied down physically. If, on the contrary, the only apparatus assumed is physical, then upon scrutiny it becomes clear how little conception we have of what is supposed to be discovered." Ibid., 118. Or, again, "[O]ne has to undermine a picture of the mental apparatus at the start, and emphasize the intricacy, connectedness, and nonuniformity of our practices of ascription, so as to make clear how different this is from the case of mechanisms in the physical world. The scientific objector always has examples from the physical sciences in mind. We discovered the internal constitution of ammonia, after all...To this we ought respond: understanding is not like ammonia. Wittgenstein's investigations are meant to bring us to see how different the cases are."

⁷⁸ Ibid.: "[W]e shall lose the idea of the specific particular process or state that is the understanding, along with the idea that we need such a thing. That is, Wittgenstein's investigations are to have the effect of making entirely obscure what could be scientifically discoverable that would be the mental state-or-process of understanding — since, if you will, there is nothing for it to be; there is no role for it to play."

⁷⁹ Ibid.

⁸⁰ Ibid., 112: "For Wittgenstein, it is characteristic of the notions that figure in philosophical problems — prominently, mental concepts and linguistic concepts like meaning — that a structure is imposed on them, without grounding in the ordinary use of these notions and without being noticed, when they are taken to be amenable to certain explanatory projects...Hence, only through clarification of what the legitimate questions are can proper sense be made of the applicability of science. A scientific viewpoint ignores this need for clarification. As a result, for Wittgenstein scientism is just as misguidedly metaphysical as traditional, more transparently a prioristic, approaches." Goldfarb expands on this point in a powerful and illuminating way, one which makes clear the overlap I suggest between the Quinean and Wittgensteinian strategies at this point. Ibid., 116-7: "The variegation and lack of uniformity make clear how far any unitary state or process is from what we observe in the cases of understanding, and thus emphasizes the leap made in postulating such a 'hidden' state or process. Any of the features that play a role in an ascription of understanding would have to be construed as evidence for this hidden state. But our grasp on the state-evidence model is cast into doubt by the variability of what and when any particular feature functions as evidence. For we lack any conception of how the state is connected to just the particular things that matter in a particular context. If we say that in each particular case there is some particular connection, then all we are saying is that the particular circumstances justify me in my ascription; the one state drops out. But what conception can we have of a general connection that issues in such variability?...[T]his is a notion of internal standard gone wild. It also look as if the state has to be able to take account of all possible circumstances. But that is not a well-defined totality...If, however, we return to the scientific objection, with its envisaged brain states and processes and its recourse to physical causation as linking state and manifestation, the upshot of that range and variegation is fairly straightforward. They show that we have little grasp of how to identify what is at issue in the brain...If the objector is saying that we could in principle discover that which biochemically causes us to behave in ways that a person who understands does to this we can now point out that the latter is simply not definite enough: there is no surveyable checklist of such behaviors..."

⁸¹ For an interesting and important discussion of potential issues developing from how Quinean themes play out against a Kantian back-drop in contemporary philosophical discussion, see Friedman (1996), 427-67.

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