A Critical Examination of Quinean Naturalism
A Closer Look at Quine’s Naturalized Epistemology

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We always speak from within a theory, a system of the world. There is no neutral or presuppositionless position from which we can make judgments about the world and our theory of it: all of our judgments must be evaluated as being part of a substantive theory of the world. In particular our philosophical remarks are made from within such a theory.

— Peter Hylton

Introduction

The resources of traditional epistemology have been exhausted. The result is the necessary paradigmatic shift from ‘first philosophy’ to a more plausible, and albeit, naturalized enterprise. W.V. Quine’s shift towards naturalizing epistemology serves as a catalyst for epistemic inquiry through the inclusion of the natural sciences in epistemology. In so naturalizing epistemology, Quine does not view epistemology as a prior or foundational discipline that can be justified a priori but rather, as an integral part of our web of beliefs about the world. 1 Such a radical departure from the foundationalist program better captures our epistemic aims by focusing on the resources found in the natural sciences relative to knowledge acquisition.

This paper will provide a critical examination of Quinean naturalism through a close examination of Quine’s “Epistemology Naturalized.” Indeed, through this critical examination of Quine’s epistemological project, we should see how Quine’s naturalized epistemology serves as a radical yet, practical starting point for epistemic inquiry, along with how such a naturalized shift establishes a more philosophically plausible approach to epistemology. Accordingly, this paper will develop an account of Quine’s project that follows the logical structure of Quine’s position. That is, this paper will provide an account of how Quine is ultimately able to naturalize epistemology.

Furthermore, this critical examination of Quine’s major theses will also provide an alternative and, albeit, more modest interpretation of Quine’s naturalized epistemology, an interpretation that bypasses appeals to Quine’s project as a form of replacement naturalism. Rather than pursuing a more dogmatic and literal interpretation of Quine’s insistence on the inclusion of the natural sciences within epistemology, this essay will, instead, propose an alternative conception of Quine’s project inspired by more contemporary version of cooperative naturalism. In this context, the mention of cooperative naturalism will serve as the means by which it becomes possible to rearticulate the relation between epistemology and the natural sciences as one of interdependence or symbiosis. Here, the primary focus will be on the continuity of epistemology and the natural sciences, a form of continuity that makes explicit the more holistic and, thus, non-reductive aspects of Quine’s project.

This paper will progress as follows: Section One will focus on Quine’s critique of both analyticity and reductionism as a starting point for naturalizing epistemology; Section Two will critically examine Quine’s notion of confirmation holism as a crucial element of his epistemological project; Section Three will provide a closer look at Quine’s “Epistemology Naturalized”; Section Four will present a more robust and non-reductive interpretation of Quine’s naturalized epistemology not beholden to replacement naturalism. And finally, Section Five will focus on the most common objections to Quine’s position in terms of circularity, along with whether or not such objections warrant our attention.

I. Quine’s Critique of Both Analyticity and Reductionism

In order to defend a more robust and non-reductive version of Quine’s naturalism, we must first consider Quine’s “The Two Dogmas of Empiricism.” Empiricism, according to Quine, has been largely conditioned by two dogmas: one is a fundamental cleavage between analytic statements (true by virtue of meaning) and synthetic statements (true by virtue of fact). The second dogma of empiricism entails a form of reductionism. On this view, reduction is the belief that each statement can be reduced and is, therefore, logically equivalent to an immediate experience that provides the proper context for the term’s usage. Quine refutes the
two dogmas of empiricism and, instead, advocates for a more pragmatic and holistic epistemic framework consistent with the enterprise of naturalism.

Accordingly, the distinction between analytic and synthetic statements is, for Quine, underdeveloped and unnecessary. Quine defines one criterion of analyticity as: "a statement is analytic when it is true by virtue of meanings independently of fact." ² Examples of this are as follows:

(1) No unmarried man is married
(2) No bachelor is married

Statements in form (1) are considered logical truths; statement (2) can be transformed into a logical truth by switching synonym for synonym. However, if the notion of logical truths is sufficient to explain the analyticity of statements like (1), we are still left with insufficient characterization of the second class of analytic statements. It, thus, follows that we have an insufficient characterization of analyticity and are forced to lean upon the notion of 'synonymy,' which is in need of as much clarification as analyticity itself. ³ Quine refutes possible objections to his critique of the analytic/synthetic distinction, finding reliance on definition as insufficient, precisely because a definition itself relies on the notion of 'synonymy,' which again has yet to be sufficiently explained.

Though Quine explores many forms of definitional explanations, he finds that all are insufficient in accurately describing the notion of 'synonymy' without presupposing synonymy as a criterion of analyticity itself. Thus, Quine attempts to demonstrate that synonymy cannot be defined in terms of interchangeability salve-veritate. Indeed, as Quine shows, because interchangeability salve-verify is not a sufficient condition for synonymy, it cannot be the case that synonymy be defined in this way. We can see that this account fails when we interchange the words "bachelor" and "unmarried male." In example (2) the two terms can be interchanged without a shift in truth-value. However, in the statement:

(3) "Bachelor" is a term with less than ten letters

It is clear that "bachelor" and "unmarried man" can no longer suffice as interchangeable. As can be seen in this example, the impossibility of successful interchangeability between these terms, by appeal to interchangeability salve-veritate, becomes an insufficient criterion to defend analyticity and synonymy. Quine's inability to develop concrete criteria for the notion of synonymy by way of definition or interchangeability salve-veritate, leads him to attempt to clarify the scope of analyticity by deriving the definition for 'synonymy' from analyticity.¹ Rather than trying to reduce statements like (2) into statements like (1), which would satisfy the concept of logical truths by way of representation, Quine chooses instead to focus on clarifying analyticity itself.

Upon developing the criteria by which the analyticity of a statement can be compared, Quine claims that as a result of the vagueness or ambiguity of ordinary language, an artificial language with explicit semantic rules is necessary to specify analyticity. However, this specification of analyticity presupposes an a priori understanding of analyticity and illustrates that there is little hope in reviving analyticity from the perspective of a more semantically consistent artificial language. Turning back to the concept of synonymy, Quine attempts to pursue an acceptable concept of synonymy through the verification theory of meaning.

According to Quine, the verification theory of meaning states that, "The meaning of a statement is the method of empirically confirming or infirming it." ⁵ Using the verification theory of meaning, two "Statements are synonymous if and only if they are alike relative to methods of empirical confirmation or infirmation." ⁶ It follows, then, that a statement is analytic if and only if it is synonymous with a logical truth, thereby reducing statements of type (2) to analytic statement of type (1). Quine refutes the verification theory of meaning and the synthetic/analytic distinction by positing the following question: "What, in other words, is the nature of the relation between a statement and the experiences which contribute to or detract from its confirmation?" ⁷ Here, Quine insists that if we are to allege that two statements are synonymous, provided that they are alike and can be confirmed empirically, then it follows that it would be beneficial to look into the notion of empirical confirmation as it is applied to propositions that are truth-confirming.⁸

We turn now to the second dogma of empiricism. The second dogma of empiricism lies in "the dogma of reductionism [which] ultimately presupposes that each statement, taken in isolation from its fellows, can admit of confirmation or infirmation at all." ⁹ Reductionism relies on a precarious notion regarding the relationship between semantically charged propositions and sensory experience. This notion leads us to believe that we can effectively reduce all of our claims to linguistic and factual components.¹⁰ This dogmatic view of reductionism, constructed in the form of an either/or scenario, upholds the notion that individual statements can be either confirmatory or infirmatory. Hence, we see that Quine’s reluctance to endorse reductionism can be seen as his first arguments in support of holism and, ultimately, naturalized epistemology; a point which will be further developed in the following section.

In line with Quine, each individual statement is part of a larger web of statements, all of which are associated with experience. Here, Quine asserts that no statement taken in isolation from other statements holds any sort of privileged epistemic and/or empirical content. That is, any attempt to isolate an individual statement, ultimately results in the decontextualization of the very statement in question, thus stripping it of its empirical or epistemic import. Alternatively, we can understand this radical shift in Quine as undermining the plausibility of determining a statement’s meaning or context in a vacuum. In other words, determining the meaning or epistemic import of a statement or observation requires the specification of a practical medium and/or norm which
allows us to gain access to the statement or observation in question. Hence, when taken out of context, a statement’s epistemic import or empirical content is void of meaning.

Likewise, a vast majority of the statements in our systems of knowledge are not directly tied to any one specific empirical observation. In saying that systems of knowledge are justified so long as we can readily account for their interdependency and reliance on the very systems of knowledge in question, we are able to conclude that just as a single thread of silk does not constitute a web, a single statement alone cannot be expected to hold empirical content or epistemic import in of itself. As a result, any attempt to either (1) distinguish analytic statements from synthetic statements or (2) reduce all statements to their factual and logical components becomes increasingly problematic and implausible. In light of these complications, we turn now to Quine’s position of confirmation holism. That is, the next section of this essay will present Quine’s defense of confirmation holism as a starting point for Quine’s radical project of naturalizing epistemology.

II. Quine’s Confirmation Holism

The following section will be devoted to underscoring the ways in which defending a more robust and non-reductive account of Quine’s naturalized epistemology requires that we critically examine Quine’s confirmation holism as a consequence of his rejection of both analyticity and epistemological reductionism. Hence, we will focus on Quine’s view of knowledge as continuous with language, and why confirmation holism calls for a more robust defense of Quinean naturalism as fundamentally non-reductive. Here, the emphasis will be on the intersubjectivity, along with the practical and/or pragmatic undertone of Quine’s holistic enterprise as more conducive to epistemic inquiry.

We will begin our discussion by emphasizing the fact that Quine’s theory of confirmation holism can be seen as a direct consequence of his rejection of the two dogmas of empiricism. Again, as Quine writes, it is “Not only impossible to deduce truths of nature from truths of immediate experience, it is also impossible to translate (or define) the former, individually, in terms of the latter.”

As a result, Quine insists that there is no one-to-one correspondence between meaning and experience. In light of this complication, Quine argues that relative to experience, statements attain meaning and consistency only insofar as these statements can be made to fit within the context of a preexisting operative theoretical framework. Note, however, that this theoretical framework, for Quine, is established intersubjectively.

Accordingly, it is this synergetic relationship between (1) intersubjective agreement regarding preexisting theoretical frameworks and (2) the meaning of language that must be rendered consistent with sensory experience that ultimately leads Quine to conclude that knowledge is continuous with language. Quine’s emphasis on knowledge as continuous with or an extension of language stems from his view that the primary focus of epistemology should be centered on knowledge acquisition. Despite the fact that the relationship between knowledge and language is far from direct, Quine still maintains that since knowledge is still loosely connected to sensory experience – linking theory to evidence – this evidence can be accounted for by way of language.

Indeed, the intersubjective dimensions of Quine’s confirmation holism indicate that knowledge is contingent on both our ability to communicate with one another intelligibly, along with our shared response to certain stimuli that allow for our comprehensive world-views. Indeed, the intersubjective aspects of Quine’s holism show that, “community-wide acceptance” is the key to epistemic inquiry, where “All speakers of a language give the same verdict when given the same concurrent stimulation.” In other words, because certain stimuli can elicit similar responses to our sensory receptors within communities, by introducing holism into epistemology, we can now readily revise a theory and by extension, our epistemic goals, in the event that the theory or epistemic aim no longer satisfies the very standards that initially gave rise to the theory or epistemic aim in question.

This alternative approach to epistemology, then, rests on the primacy and/or centrality of knowledge acquisition and belief formation as a fundamentally self-correcting program. Quine’s holism is intimately connected to and dependent on the notion of revisibility, where revisibility accounts for the fluid status of truth. The fluidity of truths and/or facts about both ourselves and our world requires the radical departure from fixed or static truths, therefore, expounding the pragmatic undertone of Quine’s position.

Here, Quine’s pragmatic convictions become increasingly evident in that he views science as revisionary, and as fundamentally self-correcting. By extension, then, Quine argues that like science, once we introduce the possibility for internal revision within philosophy itself, philosophy becomes better suited to evolve and yield productivity with regard to epistemic inquiry. Indeed, according to Quine, no statements, including the laws of logic are immune to revision.

Since Quine’s naturalism does not cater to the notion of irrevisible truths, we must accept that we’re always working within the confines of our current systems of knowledge. Thus, in Quine’s view, we exist within a scientific system of the world; we always speak from a perspective within a scientific theory. Additionally, by refuting the notion that individual statements hold empirical content, and turning to holism to naturalize epistemology, Quine undermines the traditional foundationalist program of epistemology. Again, Quine’s major contention stems from the impossibly of both explaining and deducing the truths of nature from immediate sensory experience. Indeed, as Quine maintains, “Holism ushers out first philosophy; theoretical terms can neither be defined nor translated into terms of immediate experience...”
Furthermore, as Quine insists, since the relationship between meager input and torrential output is open-ended, the indeterminacy of translation further expounds the impossibility of traditional epistemology. Here, Quine posits a distinction between the conceptual and doctrinal project of traditional epistemology in order to expound the failures of the paradigm. On this view, the conceptual project is ultimately a semantic project that is concerned with providing explanations and/or descriptions of concepts.

Alternatively, the doctrinal project is primarily concerned with the nature of justification and the positing of certain a priori rules or principles which accurately link sensory experience with the natural laws that govern science and understanding. As Quine writes, “The conceptual studies are concerned with meaning, the doctrinal with truth.” 12 Indeed, for traditional epistemology, the primary concern stems from the ability to successfully ground the doctrinal project based on the truths of logic and/or fundamental a priori principles of natural laws on the conceptual project responsible for a clarifying a concept’s meaning.

As Quine indicates, both projects fail. On the doctrinal side, the traditional program fails given that it is impossible both in practice and in principle to derive such a priori truths or natural laws from sensory experience. That is, there can be no derivation between immediate sensory experience and the truths of scientific laws or theories. On the conceptual side, the problem resides in the impossible task regarding the the translatability of theoretical terms and the evidence used to support these terms. Put simply, the failures of both projects can be understood as an extension of Quine’s rejection of analyticity and reductionism. In this context, the failures of the conceptual project mirror Quine’s dismissal of analyticity and/or the precise translatability of meaning. Similarly, the failures of the doctrinal project mirror Quine’s dismissal of reductionism and/or the derivation of more complex truths from their logical and factual components.

Therefore, Quine insists that neither the a priori principles nor the concepts used to explain these principles can adequately account for both the translation and derivation from sensory experience to both the truth and meaning of natural phenomena. Such intermediacy of translation, then, cannot provide an adequate foundation for our most foundational beliefs; foundational beliefs that are made possible through our ability to link theory to evidence. As Quine states:

> If we recognize with Peirce that the meaning of a sentence turns purely on what would count as evidence for its truth, and if we recognize with Duhem that theoretical sentences have their evidence not as single sentences but only as larger blocks of theory, then the indeterminacy of translation of theoretical sentences is the natural conclusion.16

Here, Quine’s rejection of both projects stems from the idea that any attempt to make use of both the conceptual and doctrinal projects, in line with traditional epistemology, renders the relation between knowledge and sensory experience indeterminate and speculative, at best.

Consequently, this is what ultimately leads Quine to his thesis regarding the naturalization of epistemology given that, "The only genuine questions there are to ask about the relationship between theory and evidence about the acquisition of belief are psychological questions." 17 The next section, hence, will provide a closer look at Quine’s epistemological project, along with how a critical examination of naturalized epistemology allows for a more non-reductive and, albeit, philosophically plausible conception of naturalism.

### III. A Quinean Call For the Naturalization of Epistemology

Since as mentioned earlier in this essay, Quine insists that the only plausible means by which we can appropriately link theory with evidence requires the introduction of the natural sciences into epistemology, we turn now to consider the nature of Quine’s epistemological project. As a methodological scientific naturalist, Quine insists that as a result of the traditional program’s inability to provide a rational reconstruction for knowledge, epistemologists ought to employ methods found in the natural sciences to further epistemic inquiry. Indeed, Quine insists that the natural sciences serve as a model for epistemic inquiry given that it is traditionally the task of science, not first philosophy, to study the ways in which we do acquire or arrive at knowledge.

Again, referring back to Section Two, Quine’s refutation of the two dogmas of empiricism allows for the safeguarding of the a posteriori nature of epistemology. That is, on this view, Quine is able to reconceive of the relation between sensory experience and knowledge acquisition as indirect. Here, language is posited as intermediary and allows for the holistic examination of statements, theories, and world-views, where holism becomes the guiding principle for understanding, along with the intersubjective nature of systems of beliefs.

This radical dismissal of the traditional program that seems to advocate for the replacement of epistemology with empirical psychology, should ultimately be regarded as the means by which Quine is able to explain the relationship between science and observation. As Quine states:

> If we are out simply to understand the link between observation and science, we are well advised to use any available information, including that provided by the very science whose link with observation we are seeking to understand.” 18
Given that one of the main goals of epistemology is to clarify the relationship between theory and evidence as it relates to science, instead of trying to explain the foundations of science, along with how science ought to be justified, Quine insists that, “It is better to discover how science is in fact developed and learned.” 19

On this view, Quine’s naturalized epistemology allows for the possibility of both successful prediction and the presence of intersubjectivity in terms of our comprehensive world-views in the absence of certain a priori principles, principles that place limits on what ought to count as knowledge or how we ought to conduct epistemic inquiry. Additionally, Quine advocates for a model of epistemology that openly rejects distinctive forms of knowledge. That is, Quine’s naturalized epistemology rejects the idea that scientific or philosophical knowledge can be regarded as separate and/or distinct from ordinary knowledge.

Note, however, that despite Quine’s reluctance to posit any meaningful distinction between philosophical knowledge and other forms of knowledge, Quine still maintains that if we wish to explore the means by which knowledge is acquired, it is better to emulate the practices or methods consistent with the natural sciences. In other words, since the natural sciences have continued to serve as the most successful and most productive systems of knowledge, the naturalization of epistemology requires that we let the methods that guide scientific inquiry also guide epistemic inquiry.

Likewise, since Quine’s naturalized epistemology demands that epistemic inquiry be consistent with our current world views regarding the natural world, “[In] studying certain natural phenomena — beliefs, evidence, etc— we should make use of, and try to fit those phenomena into, our overall theory of the world.” 20 Consequently, Quine encourages the expansion of our current epistemic horizons. Such an expansion in epistemic horizons is predicated on their responsiveness to discipline-specific inquiry.

This expansion, then, as a form of responsiveness, further highlights the pragmatic aspects of Quine’s project. In other words, by focusing on responsiveness to discipline-specific inquiry as a means for the expansion of our epistemic horizons, the emphasis is shifted to the various practical problems that may arise within specific disciplines. Indeed, Quine endorses the view that knowledge can be arrived at by solving certain practical problems; practical problems that emerge from within specific contexts.

Faced with this radical shift, the question we must now ask ourselves is: After Quine’s naturalized epistemology has identified the natural sciences as viable resources for furthering our epistemic inquiry, do they hold a privileged epistemic status? Here, those who support a non-reductive conception of naturalized epistemology could respond by making use of Quine’s implicit distinction between science and SCIENCE. In other words, the non-reductive naturalist could maintain that science is but one way of understanding the natural world, whereas SCIENCE refers to the totality of knowledge. Moreover, the non-reductive naturalist could also respond by denying the primacy of science since science, as a theory of knowledge, exists within the much broader epistemic framework of SCIENCE. Again, SCIENCE refers to the entirety of our intersubjective system of beliefs, where science is but one approach or vehicle by which knowledge can be acquired.

Note, however, that this implicit science-SCIENCE distinction is still perfectly consistent with Quine’s acknowledgement that no true distinction can be made in terms of philosophical and/or scientific knowledge and ordinary knowledge. In other words, because science is not immune to revision within the broader context of SCIENCE, in order to pursue our epistemic goals as part of the network of SCIENCE, it may be the case that we are required to account for the totality of our beliefs as not exclusively beholden to our scientific understanding of the world.21 On this view, scientific knowledge is part of the totality of our theories, where SCIENCE provides a more encompassing epistemological framework for scientific understanding. Thus, science’s successful application to epistemology depends on the totality of our theories found within the more encompassing framework of SCIENCE itself, wherein no one form of knowing or understanding should hold any privileged status.

Quine’s holistic and non-reductive approach requires that we not fixate on certain patterns or specific epistemic concerns found within our system of beliefs. Rather, we must examine all parts of the web of knowledge, where Quine’s naturalism becomes no more than the demand for consistency.22 In support of Quine’s naturalistic turn, it is evident that the pragmatic shift towards naturalizing epistemology makes it less abstract and more applicable to actual bodies of knowledge — scientific or otherwise— that can only enrich and/or enhance epistemic inquiry.

Furthermore, Quine’s naturalization of epistemology also illuminates the embeddedness of our beliefs regarding knowledge about the natural world. For Quine, it is clear that individual beliefs are tied to a system or web of beliefs about the world. Consequently, this naturalized shift ultimately entails that knowledge is situated between epistemology and the natural sciences. Hence, the following section of this essay will present a more modest defense of Quine’s naturalism, a defense that supports the idea of reinforcement, rather than strictly replacement between epistemology and the natural sciences.

IV. A More Modest Interpretation of Quine’s ‘Epistemology Naturalized’

We will begin this section by first briefly highlighting the fact that Quine, a radical naturalist, is frequently associated with replacement naturalism, where epistemology becomes nothing more than “a chapter in empirical psychology.” 23 Hence, we will first underscore some of the earlier remarks made by Quine in terms of why and how epistemology should be understood from within the context of empirical psychology, before turning towards a more robust and non-reductive interpretation of Quine. An interpretation of Quine’s project that is more inclined to support a version of cooperative naturalism, a form of naturalism predicated on the idea of interdependence or symbiosis between epistemology and the natural sciences.
Quine’s original position regarding the relationship between epistemology and science, stems from his commitment to the idea that traditional epistemology is both implausible and incomplete. Both the implausibility and incompleteness of traditional epistemology, according to Quine, is made explicit when considering some of the more foundational questions set forth by the traditional paradigm. Here, Quine’s dismissal of traditional epistemology is grounded in the idea that, “[Traditional] epistemology is concerned with the foundations of science,” where discovering the foundation for science is arrived at by way of derivation. This form of derivation is predicated on the idea that epistemologists are capable of deriving justified claims about the natural world from claims regarding our own immediate sensations.

Again, Quine’s ambivalence towards the traditional paradigm rests on his view that such forms of derivation are impossible which, in turn, render the fundamental task of epistemology impossible. The particular line of reasoning that Quine openly rejects is as follows: Given that we can be “certain” of the sensations we have immediate access to, in so deriving our beliefs about the natural world from these immediate sensations, this would allow us to be certain of these derived beliefs/truths about the natural world.

Such a position, however, cannot be justified since such a hypothetical derivation is at best, speculative. This speculative epistemological project is beholden to apriorism, which requires that philosophers be able to account for a rational reconstruction of how we ought to arrive at knowledge and/or what we ought to believe. It is important here, to note that while Quine seems to be attacking versions of traditional epistemology more consistent with empiricism or the belief that knowledge is grounded in experience, such a tradition still implicitly advocates for certain a priori constraints relative to epistemology.

Accordingly, since Quine denies the possibility of epistemology being a strictly a priori endeavor, Quine does not support the idea that epistemology can be autonomous and/or prior to the natural sciences. This, then, leads Quine to pursue an epistemic framework that is more sympathetic towards the idea of epistemology as a construction rather than a reconstruction.

Note, however, that we need to be clear about what the distinction between construction and reconstruction represents for Quine. The idea of reconstruction within epistemology should be understood as the means by which we can prove that we do, in fact, have access to knowledge. Alternatively, the notion of a rational reconstruction can be re-articulated as the means by which we carry out the specific derivation between immediate sensory experience and facts about the natural world, a form of derivation that ought to show that we do have knowledge.

Contra this notion of reconstruction, however, Quine’s insistence on epistemology as construction requires, instead, that we focus on the ways in which we do form beliefs and do arrive at knowledge. That is, Quine denies the possibility of finding strict a priori support when conducting inquiry and, instead, advocates for an epistemology which studies the ways in which certain sensations allow us to construct certain beliefs about the natural world. As Quine writes:

The stimulation of his sensory receptors is all the evidence anybody has to go on, ultimately, in arriving at his picture of the world. Why not just see how this construction really proceeds? Why not settle for psychology? 23

Here, Quine sharply distinguishes old epistemology from his more robust and ‘new’ epistemology by claiming, “A conspicuous difference between old epistemology and the epistemological enterprise in this new psychological setting is that we can now make free use of empirical psychology.” 26

In line with this radical departure from traditional epistemology, it becomes tempting to assume that Quine’s insistence on placing epistemology within a psychological and/or scientific setting, entails that epistemology (1) loses its autonomy as a discipline concerned with the foundations of science and (2) that because of this loss of autonomy, epistemology ought to be replaced with the natural sciences. While it is certainly the case that this idea of ‘settling for psychology’ is often understood as a replacement thesis, a more modest interpretation of Quine’s claim regarding empirical psychology, as a natural science, requires that we view epistemology as simply one possible way of understanding the natural world.

As a matter of fact, rather than viewing Quine’s project as one that entails the replacement of epistemology with the natural sciences, the notion that epistemology is one possible way of understanding the natural world allows for a more modest and, albeit, non-reductive interpretation of Quine’s naturalized epistemology. On this view, it becomes possible to endorse a version of naturalism commonly referred to as cooperative naturalism. Here, the fundamental distinction between replacement naturalism and cooperative naturalism rests on the assumption that the empirical findings of the natural sciences relative to how individuals actually arrive at knowledge help promote, rather than justify epistemic inquiry. That is, the empirical facts that spring from the natural sciences serve as a means for progressive changes in epistemology, rather than as prerequisites for epistemology.

Consequently, this more robust interpretation of Quine’s naturalized epistemology underscores the important relationship between epistemology and the natural sciences, namely, a relationship predicated on symbiosis. The idea of the symbiotic relation between epistemology and the natural sciences is echoed in the following claim:

There is thus a reciprocal containment, though containment in different senses: epistemology in natural science and natural science in epistemology. 27

That is, epistemology and the natural sciences are now seen as disciplines that reinforce one another, rather than replace or be reduced to one another. This interpretation ensures that epistemology remain critical of the natural sciences but, nevertheless, continues to support the idea that science can be used to further epistemic inquiry.
This non-reductive conception of Quine’s project rejects only the view that the natural sciences (i.e. empirical psychology) presuppose or exist prior to epistemology. While the idea of reinforcement entails that there can be no true autonomy between the disciplines, such symbiosis allows those who defend Quinean naturalism to bypass arguments regarding epistemic reduction. Rather than having to establish a reliable proof regarding how the findings of epistemology can be reduced to the findings of empirical psychology, this notion of continuity better preserves the dignity of each discipline as related to or dependent on but not reducible to one another.

As a result of this interdependence or symbiosis, a more modest interpretation or defense of Quinean naturalism insists that knowledge is to be regarded as a continuum, a continuum that exists on a sliding scale positioned between epistemology and the natural sciences. Thus, rather than arguing for the replacement of epistemology with the natural sciences, a more modest interpretation of Quine allows for epistemology to be regarded as continuous with the natural sciences.

Since a more modest interpretation of Quine’s naturalism posits knowledge as resting between both epistemology and the natural sciences, this entails that there exists some indeterminacy, precisely because knowledge is understood as a sliding scale situated between two disciplines that serve to reinforce one another. As a result of the implicit ambiguity of knowledge relative to the two disciplines, we turn now to possible objections raised by non-naturalists. That is to say, the following section will be devoted to addressing some of the possible objections against Quine in terms of circularity, along with whether or not such objections truly undermine Quine’s project.

V. A Quinean Response to the Charge of Circularity

Before concluding this essay, we must consider the possible objections to Quine’s call for the naturalization of epistemology. However, since Quine’s radical dismissal of traditional epistemology rests on the assumption that the original concerns of the Cartesian skeptic are void of epistemic promise, we must first briefly review the extent to which skepticism has influenced the objections raised in terms of the plausibility of Quine’s project. This section will focus on one major objection raised against Quine, along with the ways in which a naturalist, like Quine, could respond to this objection. The objection that we will focus on is the issue of circularity.

Starting with skepticism, the role of the Cartesian skeptic in epistemology has been predicated on the idea that, in the absence of absolute certainty, justifying the relationship between knowledge and the external world requires the positing of certain regulative rules *a priori*. The Cartesian skeptic, as understood from within the paradigm of traditional epistemology, insists that justifying epistemic inquiry entails that knowledge be *a priori* or independent of experience. As a result of the *a priori* nature of traditional epistemology, epistemic inquiry is justified only insofar as such inquiry can be made consistent with super-scientific principles.

Accordingly, in terms of the charge of circularity, the charge of circularity rests on the Cartesian skeptic’s concerns regarding whether it is, in fact, possible for less foundational disciplines (i.e. the natural sciences) to justify epistemic inquiry in the absence of certain regulative *a priori* rules or principles. In the context of science, the charge of circularity is an immediate consequence of naturalism’s inability to put forth a firmer foundation for science, a firmer foundation for science such as in the case of epistemology. Quine, however, does not view this line of reasoning as legitimate given that knowledge or epistemic inquiry emerges only within specific contexts, rather than emerging from within a vacuum. In this context, Quine rejects the notion that we must appeal to super-scientific principles in order to engage in epistemic inquiry. As Bergstrom indicates:

Naturalism sees natural science as an inquiry into reality, fallible and corrigible but not answerable to any super-scientific tribunal, and not in need of any justification beyond observation and the hypothetico-deductive method.29

Here, Quine argues that the only means by which we can legitimize the charge of circularity ultimately entails that certain regulative rules be posited independently of the specific epistemic concerns in question, principles that grant epistemic concerns the status of truth-conducive.

Consequently, Quine argues that skepticism about science presupposes science, and that science needs no more justification beyond correlation to observation.27 If attempting to answer the skeptic requires more of us than we are capable and does not contribute to furthering our epistemic ends, Quine claims that this is grounds for abandoning the traditional framework, as well as vindicating naturalized epistemology. Again, Quine’s bold dismissal of the concerns of the Cartesian skeptic stem from his belief that answering the skeptic is a non-issue provided that s/he does not endorse the *a priori* foundation of epistemology, which rests on sets of contrived rules established prior to engaging in epistemic inquiry.

Nevertheless, Quine does still maintain that the skeptic is well within his right to assume science when refuting science. However, in doing so, the skeptic’s doubts become identical to scientific doubts.30 The process by which the skeptic can readily use science as a means to refute science becomes identical to the process the practicing scientist employs when testing, confirming, or disconfirming theories in order to safeguard epistemic import. Hence, in so using science, the skeptic implicitly confirms or acknowledges the naturalistic turn in epistemology, since justifying science rests on the presupposition that science does not lend itself to more foundational and super-scientific interpretations.
As Quine would have it, the traditional concerns of the Cartesian skeptic are obsolete since the requirements for traditional epistemology are too demanding and ultimately, remain outside of our current system of beliefs. Hence, the questions of the skeptic become the same questions that scientists seek to answer. The fundamental difference is that while the Cartesian skeptic strives to answer questions regarding the nature of science independently of science, Quine chooses instead to work within the preexisting confines established by science. In fact, as Quine states:

We are after an understanding of science as an institution or process in the world, and we do not intend that understanding to be any better than the science which is its object. This attitude is indeed one that Neurath was already urging in Vienna Circle days, with his parable of the mariner who has to rebuild his boat while staying afloat in it. 31

Likewise, as Bergstrom writes, “It is within science itself, and not in some prior philosophy, that reality is to identified and described.” 32 Note, that in a different context, Bergstrom comments on this allegation of circularity by stating:

There may be a kind of circle here, but it is hardly vicious. It is not really a case of something being justified by itself. Rather, it is a matter of some ingredients of a system being justified by their coherence with other ingredients of the same system. 33

Although seemingly circular, this method is the most practical means through which we can acquire viable claims to knowledge. In line with Quine, we do not possess a “God’s-eye-perspective,” we cannot go beyond our reigning theory of the world in order to obtain any a priori principles or criteria by which we can pass judgments about the natural world.

Indeed, while critics may allege that Quine’s proposal for scientific naturalism is circular, the circularity of science justifying science is, nevertheless, the most practical and/or pragmatic method through which we can obtain reliable knowledge about science itself. Thus, Quine views this circularity as part of the way in which we go about obtaining knowledge about the natural world. As a matter of fact, in terms of how we both interpret and engage with scientific data, we must make pragmatic choices, and as Bergstrom notes, “All coherence theories involve a certain circularity, but this is usually not taken to be fatal.” 34

Conclusion

As we have seen, implicit in his major theses, Quine supports the continuity of science and philosophy in that philosophy and, more specifically, epistemology can be seen as an extension of the natural sciences. The holistic and, hence, non-reductive aspects of Quine’s naturalism collapse the distinction between ordinary knowledge and scientific knowledge making our epistemic pursuits more in line with how we actually arrive at knowledge, knowledge understood from within our current and intersubjectively maintained comprehensive worldviews.

Furthermore, the notion of revisability allows Quine’s naturalism to flourish as an epistemic enterprise that is more accessible and more closely able to resemble the ways in which we both acquire knowledge and engage with our natural world. In so advocating for the concepts of holistic revision and the symbiosis between the natural sciences and epistemology, Quine opens the door for epistemic inquiry that takes into account the context-sensitive nature of epistemic inquiry predicated on the successful engagement with our natural world.

Notes

5 Quine, W.V. “The Two Dogmas of Empiricism”, p. 37.
6 Ibid.
7 Ibid., p. 38.
9 Quine, W.V. “The Two Dogmas of Empiricism”, p. 37.
10 Ibid., p. 41.
11 Gibson, Roger F. Jr., “Quine on Naturalism and Epistemology”, p. 61.
13 Quine, W.V. “The Two Dogmas of Empiricism”, p. 43.
14 Ibid., p. 65.
15 Quine, W.V. “Epistemology Naturalized”, p. 15.
16 Ibid., p. 22.
19 Ibid., p. 21.
24 Ibid., p. 15.
25 Ibid., p. 19.
26 Ibid., p. 24.
27 Ibid.
29 Gibson, Roger F. Jr., “Quine on Naturalism and Epistemology”, p. 63.
30 Ibid., p. 74.
33 Ibid., p. 33.
34 Ibid., p. 35.