

## NATURALISTIC APPROACH TO EPISTEMOLOGY

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The naturalist approach to epistemology is an important issue in the second half of twentieth century analytic philosophy. The image of analytic philosophy is now widely understood in terms of a commitment to naturalism is largely a result of the influence of W.V. Quine. The search for the foundations of knowledge has been the profession of traditional epistemologists. They claim that human knowledge is founded on certain self-evident truths. This is accepted without an elaborate justification. This raises many issues. As a result a new conception of philosophy has emerged with a radical different attitude which is known as naturalistic bend in philosophy. The naturalistic turn consists in understanding language through a natural process.

The term ‘naturalized epistemology’ was coined by Quine to refer to an approach to epistemology which he introduced in his essay “Epistemology Naturalized.”<sup>1</sup> Quine’s contributions toward the naturalizing of epistemology is directed against old-time epistemology, i.e., against first philosophy and in favor of its replacement by natural science. Quine’s naturalistic epistemology has invited many criticisms. My aim in this paper is to defend a Quinean form of naturalistic approach to epistemology by which the subject matter of epistemology is properly understood in a certain aspects of nature and the method used in epistemology ought to be the method of empirical science. This defense will consist in a criticism of certain more or less well-known objections against Quine’s project. I will elucidate Quine’s notion that naturalistic turn consists in making language less a matter of a priori grammar but more a matter of the natural world which indicates that the linguistic rules and meaning of linguistic expression all evolve through a natural process.

#### **The abandonment of Foundationalism:**

The problem of knowledge of the universe has been the cornerstone of traditional epistemology. According to the traditional view, the main aim of

epistemological enquiry is to determine what knowledge consists in and what makes knowledge possible. Typically, knowledge is viewed as a particular variety of true belief, namely justified true belief. It assumes that knowledge has a hierarchical structure, that it has a base and an apex, such that the base-level beliefs provide the foundation for the apex-level beliefs. This is accepted without an elaborate justification. Foundationalist who claims that human knowledge is founded on the self-evident truths that mark the unassailable basis of all knowledge. An important aspect of the classical debate between rationalists and empiricists concerned the nature of immediate justification. For the rationalists, the notion of immediate justification was linked to those of indubitability, infallibility or incorrigibility as borne out by intellectual intuition, whereas for empiricists, immediately justified beliefs were those directly based on sensory experience. Kant himself, though dissatisfied with the claims of the rationalists and the empiricists, offered a similar foundationalist response to the skeptic in his discovery of the *a priori* foundations of human knowledge. Foundationalism, and in particular the Post-Fregean varieties of foundationalism, can be offered as a prime example of this traditional approach. It is one of the main conceptions of how the traditional epistemological program should be carried out. The post-Fregean approaches to epistemological investigations, traditional epistemology conceives of epistemological enquiry as an *a priori* form of enquiry based on logical or conceptual analysis. It is also the main target of the naturalistic critique. Quine is an empiricist. This may suggest that, for him, all knowledge is a posteriori. It is indeed often supposed that naturalism is hostile to a priori justification of belief. Since the concept of justification is fundamentally a normative concept, epistemology is at heart a normative discipline. That epistemology is essentially a normative venture can be considered as the first central tenet of traditional epistemology.

Exponents of naturalistic approaches to epistemology argue that the problem of justification as envisaged by foundationalism is insoluble and

hence that the foundationalist project is certain to failure. The main reason put forward by Quine in favour of a naturalization of epistemology is that he distinguishes two parts in the traditional foundationalist programme. Conceptual reduction aims at reducing, via definition, the meaning of physical and theoretical terms to the meaning of terms referring to the phenomenal features of sensory experience. Doctrinal reduction aims at reducing theoretical and physical truths to truths concerning sensory experience. However, these two central ambitions of radical empiricism remain unfulfilled: there is no successful first philosophy. According to Quine, we have known, at least since Hume's discussion of induction, that the doctrinal part of the programme cannot be completed. And, as Quine laconically puts the point, "The Humean predicament in the human predicament".<sup>2</sup> The most profound radical empiricist, Rudolf Carnap, readily acknowledged the impossibility of deducing science from immediate experience, he nevertheless kept pursuing the other primary aim of radical empiricism, namely, the defining of the concepts of science in sensory and logico-mathematical terms. According to Quine, Carnap's heroic attempt at *rationaly reconstructing* scientific discourse in observation terms and logico-mathematical auxiliaries was doomed to fail because not every sentence of scientific theories has a fund of experiential implications it can call its own. When this observation is coupled with the verificationist theory of meaning, the result is that not every sentence of scientific theories has a meaning it can call its own. And, if this is so, then it is clear that Carnap's program of rationally reconstructing theoretical discourse on the basis of observation terms and logico-mathematical auxiliaries is hopeless. However, each side of the program is hopeless: the conceptual sidefails because, due to Quine's holism about meaning and the doctrinal sidefail because, as Hume showed in his discussion of induction, theory cannot be logically deduced from observation. So, Quine concludes, the traditional approach to epistemology has failed irredeemably.

### **Search for an alternative:**

Rejecting the doctrinal side of the foundationalist programme Quine offers a new field i.e. the empirical study of the human subject in interaction with environment. Conceived in this way, “epistemology... simply falls into place as a chapter of psychology and hence of natural science”.<sup>3</sup> Quine coined the label ‘Epistemology naturalized’ for his new philosophical field. The new setting of epistemology is psychology. Quine thinks epistemology is “contained” in natural science, given that the subject of epistemological study is a physical, human one.

The differences between naturalized epistemology and traditional epistemology are indeed impressive. While both traditional and naturalized epistemology look at the relationship between input (sense data) and output (beliefs) in a person, only traditional epistemology looks at the relationship in an evidential or justificatory light. Quine's naturalized epistemology on the other hand, looks at the relationship in a purely causal light. Quine freely admits that this form of epistemology amounts to little more than scientific psychology. Naturalized epistemology throws out any sense of justification of beliefs, focusing on merely the environmental causes of such beliefs. As such, it lacks the normative or prescriptive element found in traditional epistemology. Naturalized epistemology does not address what the rules are for justification, or whether any belief is justified.

How should we characterize in general terms the difference between traditional epistemological programs, such as foundationalism and coherence theory, on the one hand and Quine’s program of naturalized epistemology on the other? Quine’s stress is on the factual and descriptive character of his program; he says, “Why not see how (the construction of theory from observation) actually proceeds? Why not settle for psychology?<sup>4</sup>“Better to discover how science is in fact developed and learned than...”<sup>5</sup> We are given to understand that in contrast traditional epistemology is not a descriptive, factual inquiry. Rather, it is an attempt at a ‘validation’ or rational

reconstruction of science. Validation, according to Quine, proceeds via deduction, and rational reconstruction via definition. Thus, it is normativity that Quine is asking us to repudiate. Traditional epistemology is normative to the extent that it aims at justifying the whole of natural science by deducing it from its observational basis. On the contrary, naturalized epistemology aims at describing and explaining the relations between scientific theories and their observation basis. This shift of goals has methodological consequences of major importance. Epistemology is to be “a chapter of psychology”, a law-based predictive-explanatory theory, like any other theory within empirical science; its principal job is to see how human cognizers develop theories (their “picture of the world”) from observation (“the stimulation of their sensory receptors”). Epistemology is to go out of the business of justification. Quine is urging us to replace a normative theory of cognition with a descriptive science.

**The reciprocal containment of epistemology and ontology:**

Ontology and epistemology are concerned with different issue. Ontology focuses on the issue of what there is; and what is a question of *truth*. Epistemology focuses on the issue of how we know what there is; and how we know what there is, it is a question of *method* and *evidence*. Evidence is, for Quine, sensory evidence, so epistemology is, for Quine, empiricism. It follows that empiricism is not a theory of truth but a theory of evidence. It does not purport to tell us what there is, but only what evidence there is for what there is. It is in this sense that Quine suggests that empiricism is the epistemology of ontology.<sup>6</sup> The relationship between ontology and epistemology is complex and subtle, and it is best characterized, in Quine’s own word, as “reciprocal containment”<sup>7</sup>

Quine abandons traditional epistemology (first philosophy) but he does not abandon epistemology itself. Traditional epistemology, rationalistic or empiricist, attempted to deduce to rationally reconstruct ontological claims concerning the external world from a conceptual foundation that, itself, was

not to be a part of that body of ontological claims. There are three central assumptions of such epistemology: that if there is an external world, then its existence needs proving; that any such proof would be viciously circular should it depend essentially on any existential claim about the external world; and that knowledge, by its very nature, must be indubitable. Quine rejects all the three of these central assumptions of traditional epistemology. The deduction of and the reconstruction of knowledge of the external world on the basis of some epistemologically prior footing are impossible dream.<sup>8</sup> To repudiate first philosophy is not to repudiate epistemology in toto: there is still naturalized epistemology, an epistemology that presupposes ontology- the ontology of natural science.

So Quine's epistemology, his theory of method and evidence, is empiricism, and his ontology, his theory of what exists, is that of contemporary natural science. From within this naturalistic framework of the reciprocal containment of epistemology and ontology, of empiricism and natural science, we rightly construe epistemology as our attempt to provide a scientific account of our knowledge of what exists, it follows that epistemology is our attempt to provide a scientific account of science itself.

**The scope and the limits of epistemology naturalized:**

Quine's proposal has met with a number of objections. First, it was objected that the failure of the foundationalist programme did not justify a general condemnation of the epistemological enterprise as traditionally conceived. An objection of this kind has been put forward, for example, by Jaegwon Kim in his "What is "Naturalized Epistemology"?"<sup>9</sup> he says "that justification is a central concept of our epistemological tradition, that justification, as it is understood in this tradition, is a normative concept, and in consequence that epistemology itself is a normative inquiry whose principal aim is a systematic study of the conditions of justified belief".

Kim focuses his criticism largely on Quine's essay "Epistemology Naturalized". It is important to note, however, that this essay was merely a

summary of a project Quine had already been pursuing for years. As early as “Two Dogmas of Empiricism,” Quine had sought to undermine the positivist insistence on an analytic/synthetic distinction that had separate philosophy from science. He rejected the distinction, not just because philosophers had not drawn it clearly, but on principled grounds deriving from confirmation holism. According to this view, only blocks of theory as a whole can be confirmed or refuted, so any individual statement can be held true or revised come what may; therefore, analytic statements are not a distinctive type of statement that is confirmed no matter what. With this rejection of analyticity, he held statements of science and statements of mathematics or logic to be on equal epistemological ground. Quine wants to defend an empiricism purified of ill-founded dogmas. Yet, for him, two cardinal tenets of empiricism remain unassailable. One is that whatever evidence there is for science is empirical evidence and the other that all inculcation of meanings of words must rest ultimately on sensory evidence. Traditional epistemology, insofar as it sets itself the task of providing *a priori* criteria allowing us to decide among theories or sets of beliefs on the basis of their epistemic merits, meets with a principled limitation in the guise of confirmation holism. Hence, the necessity for Quine of pursuing epistemology in a new setting, by giving empirical answers to questions insoluble by *a priori* methods. It seems to me that this difficulty constitutes for Quine the main motivation for a replacement of traditional epistemology by naturalized epistemology.

Further Kim's objection is that the type of investigation intended by Quine, although it may well be a perfectly legitimate scientific enterprise, is not a variety of epistemology. Given their lack of common concerns, it is immaterial to ask whether one could replace the other or be a better way of doing what the other purports to do. One may wonder whether Quine is really asking for us to give up any form of normative epistemological enquiry, whether, in other words, his naturalistic epistemology should be seen as a brand of eliminativism vis-a-vis normativity. Certainly, this is the impression

he gives in "Epistemology naturalized". But in more recent writings, he has attempted to correct this impression: "Naturalization of epistemology does not put away the normative and settle for the indiscriminate description of ongoing procedures".<sup>10</sup> As long as Quine's epistemology can concern itself with examining the relationship between evidence and language, Quine thinks it still has an important task to accomplish, even if this involves no reference to "knowledge" or "justification". Quine's naturalism, after all, is pragmatist. He is not concerned with preserving the *traditional* concepts of "justification," "knowledge," or even "epistemology".

Barry Stroud in his recent book, *the significance of philosophical Skepticism*<sup>11</sup> dealing exclusively with Quine's version of naturalized epistemology. Stroud provides no account of Quine's doctrine of the reciprocal containment of ontology and epistemology.<sup>12</sup> Stroud argues that insofar as Quine's naturalized epistemology purports to be 'an enlightened persistence... in the original epistemological problem,'<sup>13</sup> it is a failure, for it does not answer the skeptic.<sup>14</sup> Quine argues that epistemological skepticism presupposes scientific knowledge about the world. Once this fact is recognized, it is clear that the defender of science is free to use scientific knowledge in defending science against the skeptical challenge. Stroud concludes that the naturalized epistemologist has not answered the skeptic, for the epistemologist cannot use the now discredited science in constructing his defense of science.

Hilary Putnam, in his article 'Why Reason Can't Be Naturalized'<sup>15</sup> maintains that Quine rules out normative epistemology, while the Quine of 'On Empirically Equivalent Systems of the World'<sup>16</sup> advocates it. On the one hand, Quine emphasizes the descriptive nature of his program; on the other hand, he emphasizes the normative nature of his program. Regarding the normative, Putnam says, "I believe that... this is what the 'normative' becomes for Quine: the search for methods that yield verdicts that oneself would accept"<sup>17</sup> Another writer who shares Putnam's uneasiness with Quine's

program is Harvey Siegel.<sup>18</sup> According to him “Quine’s appeal to psychology can only help in accounting for the psychological mechanisms and processes of theory development-not in the relational evaluation of theory”<sup>19</sup>

Richard Rorty<sup>20</sup> expressed his disappointment that Quine has not gone further in distancing himself from traditional epistemology. Rorty focuses on the justification-explanation and public-private distinctions. Epistemology is concerned with justification, it is public (i.e., social). Empirical psychology is concerned with explanation, it is private (i.e., it is concerned with internal mechanisms and processes that is, naturalized epistemology is in no legitimate sense of epistemology. Rorty is not merely saying that Quine’s naturalized epistemology cannot answer traditional philosophical questions concerning knowledge, he also saying that such questions are themselves ill-conceived:

Can we find relevance to traditional philosophical problems concerning *knowledge* in actual or expected results of empirical psychological research? Since I wish to say that these ‘philosophical problems’ should be dissolved rather than solved, it is predictable that I should give a negative answer.<sup>21</sup>

Roger Gibson in *Enlightened Empiricism*<sup>22</sup> provides argument against the critics. Stroud’s arguments simply overlook two crucial points about Quine’s theory of knowledge, viz., that epistemology is contained in ontology and that Quine’s genetic approach in answering the central question of epistemology results in the externalization of empiricism. Stroud’s second point that nerve hits cannot serve as evidence for beliefs, Gibson says that Stroud’s claim that naturalized epistemology is rightly considered as merely the physiology of belief formation is mistaken because it overlooks Quine’s genetic approach toward dealing with the epistemological problem. On Quine’s approach the question of the relation between the ‘meager input’ and the ‘torrential output’ becomes two questions: How are observation sentences acquired on the basis of sensory stimulation? And ‘How do observation *sentences* serve as evidence for theoretical sentences? This is the externalizing of empiricism that Quine’s genetic approach requires is one of Quine’s major philosophical contributions. Skeptical doubts do not arise in a vacuum; they

are immanent to a theory. Skeptical doubts, no less than the epistemology they motivate, and no less than the scientific claims that motivate them, are immanent to a theory. Thus, the skeptic, no less than the scientist and the epistemologists, is a busy sailor adrift on Neurath's boat. Gibson tried to provide Putnam and Siegel with an intelligible account of how naturalized epistemology is, consistently, both descriptive and normative. For Quine science requires no stronger justification than what it derives from conforming to observation and the hypothetico-deductive method, for he rejects first philosophy.

Finally, Gibson suggested that Rorty's failure to see Quine's epistemology as 'public' is due to his ignoring Quine's genetic strategy for investigating the relation between evidence and theory. Rorty's misinterpreting Quine's explanation of how observation sentences are related to sensory stimulation. According to Quine, this relation is a matter of conditioning, not 'correspondence', 'mirroring', or 'referring'. In order to understand this Quinian account, one should recall that every observation sentence can be taken both holophrastically and analytically, i.e., analyzed into its component terms and particles. In his 'Reply to Hilary Putnam', Quine explains this distinction as follow:

When the infant or the field linguist learns one of his early observation sentences by ostension, he learns it holophrastically. It is holophrastically that these sentences are conditioned to ranges of stimulation, and it is holophrastically that their stimulus meaning is their meanings. Even when they are one-word observation sentences, it is anachronistic at first to reckon them as terms, referring to things. A one-word observation sentence or a component word of a longer observation sentence will make its way into standing sentences of increasingly theoretical character, and the child is then on his way to acquiring the word as a term and as referential. I have speculated on this development in *Roots of Reference*. In the case of the field linguist, the corresponding development proceeds rather though his devising of what in *Word and Object* I called analytical hypotheses. At that stage a semantic wedge is indeed driven between the stimulus-synonymous sentences 'Lo, a rabbit', 'Lo, rabbithood,' 'Lo, undetached rabbit parts', and the rest. Analytical meaning then supervenes upon holophrastic meaning, and resists satisfactory general explication.<sup>23</sup>

It is the naturalistic point of view, represented by that half of the reciprocal containment thesis which asserts that ontology contains epistemology, or, more to the point, that natural science contains empiricism. This aspect of Quine's reciprocal containment thesis is frequently slighted or entirely overlooked by his commentators and critics, yet it is essential to a proper understanding of Quine's philosophy.

**Conclusion:**

Thus, for Quine naturalization means the elimination of normative epistemology. The naturalistic turn consists in making language less a matter of *a priori* grammar but more a matter of the natural world which indicates that the linguistic rules and the meaning of the linguistic expressions all evolve through a natural process. The natural processes are of the type of causal and deterministic structures such that an empirical science of those structures is possible. In this sense a science of language and meaning is possible that tells how the semantic relations have evolve in time and also how the meanings have come into existence as a part of the social life of the people concerned. The moral is to draw that we should revise the traditional notions of knowledge and objectivity. Quine offers a new field the empirical study of human subject in interaction with environment. It follows that epistemology is our attempt to provide a scientific account of science itself. If we explain our knowledge from within our evolving and changing theory of the world, the significance of philosophical skepticism might yet decline. Therefore our traditional notions of knowledge stand in need of revision, naturalism can offer a new dimension towards epistemology.

**NOTES:**

1. Quine, *Ontological Relativity and Other Essays*, (1969, pp.69-90) and several of his later papers and books.
2. *Ibid.* p.72.
3. W.V. Quine, *The Web of Belief*, p.75.
4. *Ibid.* p.12

5. W.V. Quine, "Ontology and Ideology Revisited." *Journal of Philosophy*, 80(1983). P.500.
6. W.V. Quine, *Epistemology Naturalized* p.83.
7. *Ibid.* p.74.
8. Barry Stroud. *The Significance of Philosophical Skepticism*, Oxford: Oxford University Press, 1984.
9. Kim, J. 1994. "What is "Naturalized Epistemology"?" In *Naturalizing Epistemology*, second edition, ed. H. Kornblith. Cambridge, MA: The MIT Press.
10. Quine, 1986, p. 664.
11. Barry Stroud. *The Significance of Philosophical Skepticism*, Oxford: Oxford University Press, 1984.
12. Barry Stroud. *The Significance of Philosophical Skepticism*, pp. 209-28.
13. *Ibid.*
14. *Ibid.* pp. 243-54.
15. Hilary Putnam. "Why Reason can't be Naturalized", *Syntheses* 52(1982): pp.499-502.
16. W.V. Quine, "On Empirically Equivalent System of the World" *Erkenntnis* 9 (1983):pp.499-502.
17. Hilary Putnam, "Why Reason Can't Be Naturalized".
18. H. Siegel, "Empirical Psychology, Naturalizing of Epistemology and First Philosophy," *Philosophy of Science*, 47 (1980) 667-76.
19. *Ibid.*
20. Richard Rorty *Philosophy and the Mirror of Nature*.
21. *Ibid.* pp. 219-20.
22. Roger Gibson's *Enlightened Empiricism, an Examination of W.V. Quine's Theory of Knowledge*.
23. W.V. Quine, *Reply to Hilary Putnam* pp. 7-8, see also *Pursuit of Truth*, pp.8-9.

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