

Epistemological Vs. Causal Explanation in Quine

Or

Quine: Sic et Non

Introduction*

The epistemological writings of W.V.O. Quine may, to some extent, be seen as a response to the on-going dialectic between empiricism and realism. The problem with Quine is that depending on which of his works one reads he appears to be (a) An empiricist realist arguing that what is needed to bridge the gap between appearance and reality has been grossly overestimated - the Quine of such articles as "The Scope and Language of Science" and "Posits and Reality," (b) A phenomenalist idealist who treats physical objects as mere conveniences for predicting experience - the Quine of certain sections of "On What There is" and "Two dogmas of Empiricism," (c) An anti-realist who debunks the notion of absolute ontology - the Quine of "Ontological Relativity," and (d) An anti-epistemologist who claims that normative theories of justification should be replaced by causal accounts of the aetiology of our various beliefs - the Quine of "Epistemology Naturalized."¹

The fact that Quine seems to embrace so many, often contradictory, positions subverts any attempt at a coherent characterization of his epistemological writings. Indeed it has often had the same subversive effect on attempted criticisms of his work. Thus Sandra Harding wryly footnotes in her seminal piece of Quine criticism "Making Sense of Observation Sentences,"

I do not scruple to pry the causal elements out from the evaluational ones in his [Quine's] work - fully aware, of course, that these incompatible elements sometimes occur in the same paragraph and even in the same sentence. It is just this way he rides two horses at once, I think, which allows him to meet virtually any criticism . . . by claiming that the critic had not noticed that elsewhere he, Quine, had taken care of the critic's very point. (Harding (1975), pp.67-68, emphasis Harding's).

The chief aim of the following paper is to show that Quine's epistemological writings are indeed basically inconsistent. In particular, Quine's epistemological writings are inconsistent about the relationship between causal and epistemological explanation. Quine is committed to two incompatible forms of naturalism. One form of Quinean naturalism claims that certain natural relations provide the basis for normative epistemological relations. The other claims that we should abandon the attempt at constructing a normative epistemology and merely settle for a causal account of the aetiology of belief.

Roughly speaking, there are three major options for relating causal and epistemological explanation, **epistemological-causal reductionism**, **epistemological-causal dualism**, and **epistemological eliminativism**.

Epistemological-causal reductionism is committed to the claim that key epistemic concepts, notably the concept of justification, can be reduced to causal concepts. For instance reliabilists such as Goldman and Armstrong claim that schemas such as 'A's belief that x is justified' are to be analyzed in terms of such schemas as 'A's belief that x was the result of a reliable causal mechanism.'

Epistemological-causal dualism is committed to the claim that questions of the aetiology of belief are separate from questions of their epistemic, in particular, their justificatory, status. For instance, some advocates of "rational reconstruction", (e.g., the Carnap of Der Logische Aufbau Der Welt) maintain that an individual's belief that there is a desk before him is justified because there is a rational reconstruction from sentences about sense data to the belief content in question, albeit a reconstruction that may never have entered the head of the individual in question.

Epistemological eliminativism claims that we should forgo epistemological accounts of belief in favor of causal explanations of the aetiology of belief. On this view beliefs are neither justified nor unjustified.

Which, if any, of these three positions, reductionist, dualist, or eliminativist, is Quine's? Recently, in his essay "Why Reason Can't be Naturalized," Hilary Putnam noted that Quine's "Epistemology Naturalized" contains a strong suggestion of epistemological eliminativism. However he reports that in conversation Quine says he does not mean to "rule out the normative." Putnam concludes "So, it's all extremely puzzling." (Putnam (1983) p.244). In this paper I will argue for the following solution to this puzzle: Quine is a fuzzy eliminativist, that is, one who claims that psychological accounts of the aetiology of belief should replace any attempted justificatory account yet at the same time holds that such aetiological accounts provide justificatory status to our beliefs. To show this I will first briefly examine some of Quine's early epistemological writings. In these writings Quine attempts to provide a positive epistemology. Then we shall examine some of his more recent work where he seems to be taking an eliminativist line. To avoid the charge that Quine has merely shifted position over the years we shall examine some of his most recent work which contains both reductionist and eliminativist elements.

1.1 Quine's Early Epistemology

Those mainly familiar with Quine's early epistemological writings, from his 1948 essay "On What There Is" to, say, his 1955 essay "Posits and Reality," will perhaps balk at the suggestion that Quine is an epistemological eliminativist of either the clear cut or fuzzy variety. Now I believe there are elements of fuzzy epistemological eliminativism even in Quine's early works. However I won't try to argue the point here. Let us briefly consider some of the commonly acknowledged major elements of Quine's early epistemology.

First, it is clear that Quine is rejecting certain kinds of epistemological explanation. In particular, he is clearly rejecting those foundationalist epistemological theories which attempt to explain how we can have knowledge with certainty of the external physical world by deducing physical object statements from supposedly incorrigible statements about sense data. For Quine such certainty is not possible. Yet, claims Quine, we need not see the lack of certainty that accompanies our beliefs about the external world as

impugning the right of those beliefs to the title of knowledge. Rather, we can abandon the Cartesian assumption that knowledge requires certainty.²

Second, in place of the Cartesian foundational approach Quine presents what might be called a pragmatic account of justification. On this account, a belief is justified according to its ability to explain, organize, and predict past, present, and future experience. For Quine the fact that a particular posit, say the posit of physical objects, helps explain, organize, and predict past, present, and future experience is evidence for the truth of the posit in question. Such evidence does not guarantee the truth of the posit. Nevertheless it makes the posit highly probable, and for justification such high probability, rather than certainty, is all that is required.³

Third, Quine advances a holistic epistemology. He claims that it is complete theories rather than single sentences that face the tribunal of experience. We will have more to say about Quine's epistemological holism in section 1.5 below.⁴

I believe that this is a largely correct, though simplified, account of the major elements of Quine's early epistemological writings. Further, I presume that these elements of Quine's early epistemological writings are so well known that they do not require further elaboration. What is important for our purposes is to keep in mind the following two features of Quine's early epistemology: First, Quine rejects particular types of epistemological explanation, namely those which assume that certainty is a necessary condition for knowledge. Second, while rejecting this kind of epistemological explanation, Quine is still in the business of providing genuine epistemological explanation. In particular, he advances a pragmatic account of justification. Clearly, Quine, save that he turns about and explicitly rejects his early epistemological writings, cannot be a clear cut epistemological eliminativist. Thus, if Quine is an epistemological eliminativist he is a fuzzy eliminativist.

1.2 Evidence for the claim that Quine is An Eliminativist

The evidence that Quine is a fuzzy epistemological eliminativist comes mainly from various essays and books he wrote during the 60s and 70s. Perhaps the most telling evidence comes from Quine's 1969 article "Epistemology Naturalized." In the first few pages of "Epistemology Naturalized" Quine compares attempts to reduce statements about sense data with attempts to reduce mathematics to "logic proper." Having characterized both these attempts as failed attempts at investing our knowledge of the external world and our mathematical knowledge with certainty, Quine concludes:

The Cartesian quest for certainty had been the remote motivation for epistemology . . . but the quest was seen as a lost cause. To endow the truths of nature with the full authority of immediate experience was as forlorn a hope as hoping to endow the truths of mathematics with the potential obviousness of

elementary logic. (Quine (1969), p. 74).

This fits in well with the feature of Quine's early epistemology noted above, his rejection of the Cartesian quest for certainty. Now we might expect some remarks representing the second feature of Quine's early epistemological writings, namely Quine's claim that we can and should settle for a pragmatic account of justification. This expectation is not fulfilled. Proceeding to reject along with the quest for certainty the quest for a rational reconstruction of our knowledge Quine continues:

But why all this creative reconstruction, all this make believe? The stimulation of his sensory receptors is all the evidence anybody has had 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! (Quine (1969), p.75)

Certainly and typically Quine's language is not unequivocal here. For instance, his use of the epistemological term 'evidence' suggests that he is still treating seriously the notion of justification. To say that A is evidence for B is to imply that A, to some extent, justifies B. Yet when Quine by use of rhetorical questions suggests that we merely examine how individuals come to construct their pictures of the world, that we merely settle for a psychological account of such constructions, it seems fairly clear that Quine is here suggesting that we settle for a mere causal account of the aetiology of our beliefs, of the aetiology of our picture of the world.

More generally, the passage suggests that Quine sees only two possibilities: Either we attempt to give a Cartesian foundationalist account of justification or we give up the whole quest for a theory of justification and settle for a mere psychological account of how we come to believe what we do in fact believe. The middle ground, the position we had previously attributed to Quine, seems to have disappeared. According to that middle position, while there is no need or hope for a successful Cartesian foundationalist account of justification, there is still room for a pragmatic account of the justification of belief.

The passage quoted above is typical of Quine's fuzzy eliminativism. He freely uses the word 'evidence' to make positive assertions about what is evidence for what, yet at the same time he implies that there is no need for any such epistemological assertions.

Consider the subsequent passage from "Epistemology Naturalized":

Why not settle for psychology? Such a surrender of the epistemological burden to psychology is a move that was disallowed in earlier times as circular reasoning. If the epistemologist's goal is validation of the grounds of empirical science, he defeats his purpose by using psychology or other empirical science in the validation. However, such scruples against circularity have little point once we have stopped dreaming of deducing science from observations. If we are out simply to understand the links between observation and science, we are well advised to use any available information, including that provided by the very

science whose links with observation we are seeking to understand. (Quine (1969), pp. 75-76).

What does Quine mean by the clause "If we are out simply to understand the link between observation and science?" Could he possibly be referring to an epistemological link? The answer here must be "No." Why else would Quine oppose the search for this link to the search of those who sought to deduce science from observation? Clearly it is the latter who are searching for an epistemological link. The link that Quine is here referring to is a causal link. Or is Quine's opposition here not to those who seek an epistemological link between observation and science but only to those who seek a deductive link between the two? Perhaps when Quine disparages the old epistemologist's goal of validation he is simply disparaging the goal of a deductive validation. But note (i) Quine makes no mention of any possible inductive validation and (ii) Quine's point that any use of empirical psychology to validate science would be a form of circular reasoning applies as much to inductive validation as deductive validation. Settling for psychology does not help because in doing so we have dropped from a deductive to an inductive standard of validation. It helps because it allows us to simply ignore the whole epistemological question of validation. So here again Quine seems to be acknowledging only two possibilities. Either we try to deductively validate science or we give up the whole project of seeking an account of justification. Quine's picturesque talk of surrendering the epistemological burden to psychology is somewhat misleading. In fact, Quine is not proposing that we transfer some burden from one discipline to another. He is really proposing that we totally abandon the epistemological burden and do psychology instead.

Other passages from "Epistemology Naturalized," though typically ambiguous, reinforce the claim that Quine is claiming that we should settle for a mere account of the aetiology of belief and not attempt any epistemological account of justification. Thus, consider the following passage,

If all we hope for is a reconstruction that links science to experience in explicit ways short of translation, then it would seem more sensible to settle for psychology. Better to discover how science is in fact developed and learned than to fabricate a fictitious structure to a similar effect. (Quine (1969), p. 78).

What is missing here is any mention of the normative, evaluative element that is the heart of epistemology. It is one thing to give a reconstruction of the causal processes that lead some individual/s to adopt some particular belief/s. It is quite another thing to appraise and explain those processes and beliefs with regard to the question of justification. After all, there is presumably a perfectly coherent causal story to be told of how belief in witches came to be developed. Yet this causal story would not count as a justificatory explanation.

Remarkably, Quine himself seems aware of the gap between causal explanations of the aetiology of beliefs and epistemological explanation of the justification of beliefs. In

The Roots of Reference he writes,

Mostly in this book **I have speculated on causes, not justifications** Even in the case of bodies, . . . , I offered no hope of justification. I entertained no thought of translating talk of bodies into talk of sense impressions, . . . I asked how, given our stimulations, we might have developed our corporeal style of talk. . . . One could ask, in the same spirit, how we developed our religious talk, our talk of witchcraft . . . If we managed to reconstruct these causal chains of language learning, we would find that every here and there the learner made a little leap on the strength of analogy or conjecture or confusion; but then the same seemed to be true of our learning to talk of bodies. In short, **I speculated on causes and not on values** (Quine (1973), pp. 136-137. Emphasis mine).

In this passage Quine seems to be rejecting the central claim of epistemological-causal reductionism. He is implicitly rejecting the claim that some causal accounts count as justificatory accounts. It is also worth noting here that Quine seems to be acknowledging that justification involves values. Consider this in light of his claim that "Scientific theory stands proudly aloof from value judgements" (Quine (1973), p.49) and his well known tendency to claim that science provides all the explanation that is needed. The natural outcome is an eliminativist attitude towards justification. And again we see in this passage Quine's tendency to write as if the projects of giving a foundationalist account of justification and giving a causal reconstruction of belief are exhaustive. There are legions of anti-foundationalists who, like Quine, despair of translating talk of bodies into talk of sensations, yet still hold hopes for a justificatory account of such talk.

Rather than pressing on with a tiresome, literal analysis of Quine's words, let us consider a few passages from some of Quine's other articles of the 70's. In Quine's 1970 article "Grades of Theoreticity" we read:

The dilemma (Quine is here referring to a dilemma about what is the basic unit of epistemological explanation) is dissolved and the strain relieved when we give up the dream of a first philosophy firmer than science. If we are seeking only the causal mechanism of our knowledge of the external world .(Quine (1970a), p. 2)

The rest of the quotation need not concern us here. In his 1971 book, *The Roots of Reference*, Quine tells us that:

Our liberated epistemologist ends up as an empirical psychologist, scientifically investigating man's acquisition of science. (Quine (1973), p. 3).

In Quine's 1975 article "The Nature of Natural Knowledge" we read:

Epistemology is best looked upon, then, as an enterprise within natural science. Cartesian doubt is not the way to begin. Retaining our present beliefs about nature, we can still ask how we can have arrived at them. (Guttenplan

(1975), p. 68).

Finally I quote from Quine's 1981 article "Things and Their Place in Theories"

Epistemology, for me, or what comes nearest to it, is the study of how we animals can have contrived that very science, given just that sketchy neural input. (Quine (1981), p. 21).

Now what by Quine's lights comes nearest to epistemology, by the lights of any genuine epistemologist, comes nowhere near it. We should recall here that Quine is not asserting that the whole or certain parts of epistemological explanation are reducible to causal explanation in the manner of the epistemological-causal reductionist. He is claiming that causal explanation should replace epistemological explanation and that the traditional questions asked by epistemologists should be left unanswered. Nevertheless Quine's use of phrases such as "If we are seeking only the causal mechanism of our **knowledge**", his general loose usage of epistemological terms such as 'evidence' and 'knowledge', suggests that he takes his causal explanations as having positive epistemological significance.

Quine is a fuzzy eliminativist. The title of Quine's essay "Epistemology Naturalized" is a sign of his fuzzy eliminativism. As the contents of that article demonstrate, Quine's version of epistemology naturalized is the "epistemology" one does when one isn't doing epistemology.

1.3 The Motivations Behind Quine's Fuzzy Eliminativism, I: Switching the Explicandum

Why does Quine on the one hand claim that we should give up the quest for an account of justification and simply settle for a psycho-causal account of the aetiology of belief and on the other hand suggest that certain causal accounts have important positive epistemological implications? Why is Quine a fuzzy eliminativist? This is a topic time will not allow us to adequately cover here. However, I will try to outline part of the answer to these questions.

One advantage of Quine's fuzzy eliminativism is that his tendency to deftly move from epistemological to causal explanations, without any attempt to reduce the former to the latter, allows him a certain illicit leeway on ontological matters. For instance, Quine, often as not, freely uses a phenomenalist notion of experience as the ultimate epistemological explicandum when purely epistemological issues are being canvassed. Yet when ontological issues are also at stake, he, often as not, switches to mere causal explanation and, in keeping with his physicalist ontology, treats physical sensory stimulation, the stimulation of nerve endings and the like, as the ultimate epistemological explicandum. As epistemologist it makes prima facie sense to talk of making posits in order to explain, predict, and order one's experience. It does not make prima facie sense

to talk of making posits in order to explain, predict, and order one's stimulations of sensory receptors. Yet qua ontologist with a penchant for physicalism talk of experience is highly suspect while talk of sensory stimulation is more grist for the physicalist mill. Now stimulation of our sensory receptors may cause us to adopt the posits we do in fact adopt. But it hardly makes sense to say we adopt those posits in order to explain our stimulations. A good many of us do not even have a concept of sensory stimulation let alone an avocation for explaining such things. Quine's solution to this apparent dilemma is to wear different hats in different arenas. When the focus is on strictly epistemological concerns he loosely invokes the notion of experience relying on the phenomenalist connotations of that concept to lend plausibility to his speculations. However when the focus is on ontological issues he equates experience with a physical concept, for instance stimulation of sensory receptors.

1.4 Motivations, II: Answering the Sceptic

A paradigm case of Quine's switching from epistemological to causal explanation occurs in his various attempts to answer the skeptic. Here we see a second advantage of Quine's fuzzy eliminativism. It facilitates Quine's presenting causal explanations of, for instance, language acquisition, as if they provided genuine answers to traditional epistemological problems. Of course, as is well known, Quine usually refuses to answer the skeptic's challenges. He merely dismisses them out of hand. Yet the following passages from "The Nature of Natural Knowledge" and his book *The Roots of Reference* show that Quine will occasionally take on, or, as we shall soon see, pretend to take on, the skeptic's challenge:

I am not accusing the skeptic of begging the question. He is quite within his rights in assuming science in order to refute science . . . (Quine (1975), p. 68).

Yet it [the new naturalized epistemology] is not a gratuitous change of subject matter, but an enlightened persistence rather in the original epistemological problem. It is enlightened in recognizing that the skeptical challenge springs from science itself, and that in coping with it we are free to use scientific knowledge. (Quine (1973), p. 3).

Quine's manner of coping is quite ingenious. Having, in both the article and book quoted from above, apparently accepted the skeptic's challenge Quine then proceeds to ignore it and give a mere causal account of how it is that we come to believe what we do in fact believe. Quine, by implicitly suggesting that his various causal explanations have epistemological implications, gains the appearance of answering certain traditional epistemological questions when in fact he is not making any epistemological assertions at all. It is instructive to note that in *The Roots of Reference*, after introducing his causal accounts of the aetiology of belief as "an enlightened persistence rather in the original epistemological problem," Quine writes in the concluding chapter of that book "Mostly in this book I have speculated on causes, not justifications!" As noted above (cf. 1.2 above),

the wider context of that quotation makes clear that Quine is occasionally well aware of the gap between straight causal and genuinely epistemological explanation.

Now despite his occasional acknowledgement of the gap between causal and justificatory explanation perhaps we should take more seriously Quine's claim that his causal accounts of language acquisition do count as "an enlightened persistence . . . in the original epistemological problem." Indeed Quine often talks of identifying "the evidence relation" and "the semantical relation" (Quine (1973), p.38) while offering a causal account of the latter. Thus he claims that

Any realistic theory of evidence must be inseparable from the psychology of stimulus and responses, applied to sentences.(Quine (1960), p.17)

In this vein Quine offers a "genetic strategy" for "investigating the relation of evidential support" (Quine (1975), pp.74-5). According to Quine, in studying the process of language acquisition, for instance how a particular child learns through behavioral conditioning to associate a particular range of stimulations with the term 'Fido' or 'dog', we see how it is that we come to take certain sensory conditions as evidence for certain claims. In our case of the child, he comes to take certain stimulations as evidence for the assertion 'Fido here!' or 'Dog here!' because in learning the language he was conditioned to associate such stimulations with the relevant embedded terms. Now, this may indeed account for what typically causes us to regard certain stimulation conditions as evidence for certain assertions. But as long as we remain realists and take the actual presence of, say, dogs to be a separate matter from the presence of any stimulation conditions (whether described in terms of phenomenal experience or stimulation of sensory receptors) we will be open to the sceptical question "Why should we regard those stimulation conditions as good evidence for the presence of dogs?" To give, as Quine does, a causal account of how we come to regard x as evidence of y is simply not an enlightened persistence in the original sceptical epistemological problem of showing why we should regard x as evidence for y, nor is it a method of coping with the sceptical challenge. Indeed the claim that such and such causes us to regard x as evidence for y does not assert anything epistemological at all. It does not even entail that x is evidence for y.

It is worth noting that Quine's vague reductionistic sounding talk of identifying the "evidence relation" and "the semantic relation" is quite opposed to the reductionist line offered by Armstrong and Goldman. While Armstrong and Goldman maintain that certain assertions are justified because they have a particular causal pedigree (they are the result of a reliable causal mechanism) they do not identify this causal pedigree with any "evidence relation." Indeed it is central to their account that an individual can be justified in having a certain belief, for instance, there is a noise within earshot, even though there is no evidence he has for that belief. It is just this move that makes their reductionistic line effective against many sceptical attacks. It blocks traditional sceptic regress arguments by dissenting from the claim that an individual is only justified in believing a claim if he has evidence supporting that claim.⁵

In a recent colloquium address David Stove showed that Popper is a great master of the art of presenting non-epistemological assertions as epistemological claims. It is worth reiterating Stove's point here; especially if we keep in mind that both Popper and Quine regard themselves as proposing naturalist evolutionary epistemologies.

When pressed with the question "What justifies a scientist in rejecting a particular unrestricted statement of factual probability [e.g. The probability of a human birth being male = .9] Popper will usually answer to the effect that certain observations have been made which every respectable member of the scientific community takes as falsifying the statement in question. In fact, the Popperian answer says nothing epistemological at all. It does not even attempt to tell us why the scientist is justified. It merely tells us what particular scientists do. Popper can not (with consistency) make a genuine epistemological assertion about what justifies rejection of such a probability statement. Such statements are consistent with every observation statement and according to Popper we are only justified in rejecting a scientific hypothesis if it is inconsistent with some observation. When faced with a question about what justifies scientists in rejecting a given unrestricted statement of factual probability Popper, rather than putting himself up for ridicule by making the *prima facie* absurd claim that scientists have no justification for rejecting the statement in question, obfuscates by telling us irrelevant truths about what scientists do and do not do.⁶

Quine, as we have seen above, obfuscates in a similar fashion, presenting irrelevant causal statements as if they had important epistemological consequences. Ironically, a case in point occurs in Quine's discussion of Popper in his article "Empirical Content." In that article, having noted that we cannot conclusively confirm an observation categorical such as 'Where there's smoke, there's fire' Quine goes on to say:

This characterization fits Popper's dictum that scientific theories can only be refuted, never established. But we do see scope still for intuitive support of theories. (Quine (1981), p. 28).

Now if Quine were playing it straight he would proceed by telling us what this support is and how it is that such support works. But instead he merely tells us:

An observation categorical gains our confidence as our observations continue to conform to it without exception; this is simple habit forming, or conditioning. A theory formulation, in turn, gains our confidence as the observation categoricals implied by it retain our confidence. (ibid.).

Such talk of what does and does not gain and retain our confidence is simply irrelevant to the questions of what evidence actually supports our theories and how and why that evidence is supportive. The statement that our confidence in A is gained through B, does not even imply that B is evidence for A.

In general, naturalists have two coherent options when it comes to the question of epistemological concepts. The first option is to attempt to give clear analyses of epistemological concepts in naturalistic terms. This is the reductionist strategy. The second option is to adopt an eliminativist position and forgo the positive use of epistemological concepts. There is of course a third incoherent option. This involves a refusal to give clear analyses followed by a general muddying of the distinction between causal and epistemological claims. This is the Popper-Quine route.

1.5 Motivations, III: Quine, Holism, and Observation Statements

Switching from epistemological to causal explanation is essential to Quine's philosophy. It is by this maneuver that he is able to present two contradictory accounts of observation sentences. In various essays, notably his early essays "On What There Is" and "Two Dogmas of Empiricism" Quine presents a holistic epistemology. As Quine relates, he developed this epistemology in reaction to the reductive empiricism of Carnap and other positivists. Carnap in his *Der Logische Aufbau Der Welt* had attempted to show that observation sentences can be reduced to sentences about experience. In the same vein one might attempt to reduce sentences about macroscopic observable objects, for instance, the sentence 'There is a brown rectangular table presently before me,' to such experiential sentences as 'There is a brown rectangular patch in my visual field.' This project was of vital importance to the positivists since they maintained, first, that any statement is meaningful only if it could be completely verified, and second, that any (non-analytic) statement could only be completely verified if it dealt wholly with experience or was equivalent to a statement (possibly a logical compound of statements) dealing wholly with experience.

Notoriously, Carnap's attempted reduction failed. Why did it fail? Let us consider Quine's answer. Take the observation sentence 'There is a brown rectangular table presently before me'. Do my present visual experiences, which happen to include a rectangular brown patch in my visual field, serve in themselves to confirm that sentence? According to Quine they do not, for if I also, with good reason, believe that the light in this room is not a white light, or perhaps that there is a hologram machine in this room projecting images of brown tables, then, presuming I am rational, I would not take my present visual experiences as confirming the statement 'There is a brown table before me.' Thus we have the typical Quinean holistic conclusion that my present visual experience does not singly confirm the statement 'There is a table before me' but confirms a wide conjunction of statements which together imply (that I am having) the relevant experience. Thus we have the typical Quinean conclusion that in the face of recalcitrant experience, for instance, presume there is no brown rectangular patch in my visual field, we are, from an epistemological point of view, free to alter our theories in various different ways to accommodate the recalcitrant experience. Thus we have Quine's conclusion (from "Two Dogmas"):

our statements about the external world face the tribunal of experience not individually but only as a corporate body. (Quine (1961), p. 41).⁷

According to this extreme holistic view, our theory of the world is, I quote here from Quine's essay "On Mental Events,"

not a society of separately established terms and statements each with its own empirical definition. There is no separate meaning in terms of direct experience for the statement that there is a table here. . . it is the system as a whole that is keyed to experience. (Quine, (1976), pp. 221-222).

Quine's holistic epistemology entails that, contra the positivists' claim, there is no epistemologically significant distinction between observation statements and theoretical statements - by theoretical statements I mean to include here both statements about unobservable microscopic entities and universal generalizations. Both types of statements, where justified, are justified by their being part of a total theory which successfully faces "the tribunal of experience." In "Mental Events" Quine says:

I expect that tables and sheep are, in the last analysis on much the same footing as molecules and elections. Even these have a continuing right to a place in our conceptual scheme only by virtue of their indirect contribution to the overall simplicity of our linguistic or conceptual organization of experience . . . (Quine (1976), p. 223, emphasis mine).

In summary then Quine's holistic position entails that observation statements, taken singly, do not have their own set of experiential implications.

Yet this conclusion does not sit well with certain claims made in *Quine's Web of Belief*. Consider the following claim:

the observation sentence itself...is peculiar on this core. It does face the tribunal singly, in the usual case. . . Typical observations sentences are about bodies: "This is a table," (Quine (1970), pp. 13-15).

Note that our previous quotation, from Quine's essay "On Mental Events", gives the opposite verdict on the near identical statement "There is a table here!" So it seems that Quine is endorsing both of the following claims:

(A) Observation statements do not, taken singly, have their own fund of experiential implications

and

(B) At least some observation statements do, taken singly, have their own fund of empirical experience.

Why does Quine give such contradictory accounts of observation statements? And how does he manage to so adroitly slip from one account to another? The answer, briefly, is that his extreme holism commits him to the view that observation statements have no special epistemological status. Yet his desire to explain the objectivity of science, and to avoid the incommensurability theses and relativism favored by Kuhn, Hanson and others, impel him to treat observation statements as having a special epistemological status. Quine wants observation sentences as the theory neutral arbiters of scientific theories. Unfortunately his general holistic framework does not allow observation sentences to play such a special epistemological role. However in his causal stories concerning language acquisition and the aetiology of beliefs observation sentences do have a special role. Quine then rises to the threats of scepticism, relativism, incommensurability theses, et al, by switching from frankly epistemological accounts of observation statements, in which they are accorded no special epistemological status, to causal accounts according to which observation sentences have a direct causal link to sensory stimulation, and then implying that these close causal links are in fact epistemological links.⁸ All this confusing of epistemological links with causal links is typical of Quine's fuzzy eliminativism.

1.6 An Attempted Defense of Quine

In defense of Quine it might be pointed out that the *Web of Belief* was written in 1970, whereas the extreme holism instanced above is presented mainly in Quine's early essays, notably his 1951 essay "Two Dogmas." It may be claimed that the charitable thing to do is to infer that Quine has in the intervening years backed down from his extreme holistic position to a more moderate holism which allows for a special epistemological status for observation sentences. Thus it might be claimed that where thesis (A) is entailed by Quine's extreme holism of the 50's, by the 1970's Quine had moved to a moderate holism which involves acceptance of (B) and hence the rejection of(A).

Unfortunately, this position is untenable. As recently as 1969 Quine, in his article of "Epistemology Naturalized," presents both his extreme holistic and his moderate holistic view in one and the same essay. In "Epistemology Naturalized" Quine claims:

the typical statement about bodies has no fund of experiential implications to call its own. (Quine (1969), p. 79).

Yet a few pages later he asserts:

The observation sentence, situated at the sensory periphery of the body scientific, is the minimal verifiable aggregate; it has an empirical content all its own and wears it on its sleeve. (loc. cit., p. 89).

Lest anyone be bold enough to suggest that Quine here is talking of the two distinct

entities, namely observation sentences and typical statements about bodies, I quote again from "Epistemology Naturalized:"

they [observation statements] will usually be about bodies. (loc. cit., p. 87).

There is no way, short of putting an interpretive strain on Quine's words that they simply won't bear, of eliminating this contradiction. The fact is that Quine's philosophy is fundamentally inconsistent on the question of observation sentences. The fact is that Quine is a fuzzy epistemological eliminativist.

1.7 Prospects

Yet perhaps I have overstated the case against Quine. Perhaps with suitable glosses here and charitable interpretations there Quine can be construed as an epistemological-casual reductionist rather than a fuzzy epistemological eliminativist. Yet interpreting Quine as a reductionist does not simply lead to strained readings of his various texts. It also leads to somewhat embarrassing questions about the depth of Quine's work. In particular, if he is a reductionist then how is it that he, unlike serious reductionists such as Goldman and Armstrong, never forwards specific reductive analyses of epistemological concepts?

In "Epistemology Naturalized" Quine wrote:

Carnap and the other logical positivists of the Vienna Circle had already pressed the term "metaphysics" into pejorative use, as connoting meaninglessness; and the term "epistemology" was next. (Quine (1969), p. 82).

In claiming that "epistemology" was next Quine is not alluding to any unpublished battle plans drawn up by the positivists of the Vienna circle. Rather he is expressing his belief about where the logic of the positivists position would naturally lead. That the positivists were on the way to rejecting epistemology should not be totally unexpected. The positivist *Weltanschauung* has no place for values, thus positivists have always been sympathetic to emotivist and other eliminativist accounts of moral theory. When we recall that epistemology involves a normative element Quine's suggestion that epistemology was next on the positivists hit list seems plausible enough. Yet the same is also true for neo-positivists, such as Quine himself. The logical development of Quine's naturalism is to adopt a clear cut eliminativist position with respect to epistemological concepts. This I believe is the logic of Quine's text, though I do not believe Quine himself is completely aware of this logic. Revolutionaries often do not understand the full meaning of their own position. Having been brought up under the old regime they are prone to inappropriate uses of the old regime's rhetoric in the very moment of announcing their revolutionary manifestos. Thus the revolutionary anti-epistemologist Quine often lapses into old world epistemological idioms. He equivocates between the options of totally rejecting the old epistemological order and that of subsuming it as a

sub-domain of the new causal order.

In a certain sense, Quine, by equivocating on the status of epistemology concepts, lost the opportunity to throw out a clear challenge to a preconception held by nearly all philosophers. That is the preconception that there is a need for a theory of justification.

From the naturalist point of view Quine advocates there is no need for epistemological explanation. From that point of view our torrent of linguistic output is just another natural phenomena to be given a naturalistic, presumably naturalistic-evolutionary, explanation. Perhaps in order to explain how that output contributes to our survival we will need to invoke the notions of content and truth. Thus we might conclude that because much of the content of that output is true, and because the possession of truth contributes to our ability to manipulate the environment in a manner that increases our survival prospects, evolution has favored our tendencies towards linguistic productions. Alternatively, we might even drop the talk of truth and speak directly of the tendency of our linguistic productions to cause us to modify our behavior in ways that, by and large, enhance our survival prospects. In such naturalistic accounts the notion of justification plays no role. None of this, of course, precludes our naturalist from giving a causal-evolutionary account of how justificatory talk arose in our society. By the same token he may be an eliminativist about moral values while giving a causal-evolutionary account of how moral talk arose in our society.

The clear-cut epistemological eliminativist will perhaps face problems when it comes to defending his view. For instance, how is he to respond to the question "What reasons, what justifications, are there for accepting your eliminativist view?" At this point the best the eliminativist can do is give a causal account of how he came to accept his view while claiming that his view, like all others, is neither justified nor unjustified. If asked about the justification of this last claim he will regress to a meta-meta commentary about how he came to make his previous claim. There is nothing inherently vicious about this regress, this series of denials of justification. However it will hardly be convincing to the eliminativist's opponents. Yet this is a matter of pedagogy not truth. When the question is simply one of truth the eliminativist can stick to the above line. When the problem is that of convincing opponents he may practice more rhetorical arts.

Of course, whether a coherent world picture which eschews all positive use of epistemological concepts can be developed is problematic. The claim that epistemology is superfluous is a bold claim. Yet it is one whose time should have come a lot sooner.

In interpreting Quine as a fuzzy epistemological eliminativist I mean to characterize him as a confused revolutionary reaching for but failing to fully grasp the radical position of clear cut epistemological eliminativism. Less flatteringly, we might interpret Quine as a garden variety reductionist, albeit a sloppy one who does not clearly state his position and fails to offer any serious attempts at reductive analyses. Interpreting Quine as a fuzzy eliminativist has two advantages over the Quine as reductionist interpretation. It provides a more adequate fit with Quine's texts and it leaves us with a Quine of deep and abiding

significance.

2. Quine: Sic et Non

The claim that there are tensions, if not plain inconsistencies, in Quine's epistemological writings has been suggested by a number of authors, including Putnam, Rorty, Siegel, Stroud, and, as noted above, Harding.⁹ In order to generally facilitate discussion of this important question I have attempted to gather in one place all the textual evidence for this claim. Below is a series of yes-no questions which raise issues central to Quine's philosophy. Each question is followed by textual excerpts from Quine's various works. These excerpts suggest that Quine gives conflicting answers to the relevant questions. Of course it may be argued that by providing suitable glosses, putting the quotations in a fuller context, allowing for the occasional misstatements on Quine's part, etc, the threat of real conflict may be averted. The cumbersome exercise of providing such glosses, etc, I leave to my more charitable readers. The reference appended to each of the quotations below first cites a place where the quotation can be found and then, where there is a significant difference, gives a year of first appearance.

1. Are there any statements that have meaning in themselves, that may be singly tested?

Sic

The observation sentence, situated at the sensory periphery of the body scientific, is the minimal verifiable aggregate; it has an empirical content all its own and wears it on its sleeve.
(Quine (1969), p. 89).

. . . the observation sentence itself, . . . , is peculiar on this score. It does face the tribunal singly, in the usual case . . . Typical observation sentences are about bodies: "This is a table,"
(Quine (1970), p.13-15)

. . . some statements are closely linked to observation, by the process of language learning. These statements

Non

But what I am now urging is that even in taking the statement as unit we have drawn our grid too finely. The unit of empirical significance is the whole of science.
(Quine (1961), p. 42. 1951).

There is no separate meaning, in terms of direct experience, for the statement that there is a table here . . .
(Quine (1976), pp. 221-222. 1955).

Statements about bodies, common sense or recondite, thus commonly make little or no empirical sense except as bits of a collectively significant containing system.
(Quine (1976), p.254. 1955).

are indeed separately susceptible to tests of observation.
(Quine (1975a), p. 314).

The typical statement about bodies has no fund of experiential implications to call its own.
(Quine (1960), p.79).

2. Does the indeterminacy of translation effect observation sentences?

Sic

For my own part, I think the empirical slack in physics extends to ordinary traits of ordinary bodies and hence that the indeterminacy of translation likewise affects that level of discourse.
(Quine (1970a), p. 181).

Non

The predicament of the the indeterminacy of translation has little bearing on observation sentences.
(Quine (1969), p. 89)

3. Can there be rival translation manuals compatible with the same distributions of elementary particles?

Sic

when I say there is no fact of the matter, as regards, say, two rival manuals of translation, what I mean is that both manuals are compatible with all the same distributions of states and relations over elementary particles (Quine (1981), p.22).

Non

Two sentences agree in objective information, and so express the same proposition, when every cosmic distribution of particles that would make either sentence true would make the other true as well.
(Quine (1970b), p.4).

4. Could there be two theories both compatible with all possible observational evidence yet incompatible with each other in the sense that the truth of one entails the falsity of the other?

Sic

Physical theories can be at odds with each other and yet compatible with all possible data even in the broadest

Non

But what if, happily and unbeknownst, we have achieved a theory that is conformable to every possible observation,

sense.
(Quine (1970a), p.179).

past and future? In what sense could the world then be said to deviate from what the theory claims? Clearly in none. (Quine (1981), p.22).

5. Can and does science give us language independent traits of reality?

Sic

it [science] seeks traits of reality independent of language, . . .
(Quine (1976), p. 235. 1954).

If we were to get to the bottom of it [the question of how it is that man works up his command of science from the limited impingments that are available to his sensory surfaces], we ought to be able to see just to what extent science is man's free creation; to what extent, in Eddington's phrase, it is a put-up job.
(Quine (1973), pp. 3-4).
We cannot strip away the conceptual trappings sentence by sentence and leave a description of the objective world; but we can investigate the world, and man as a part of it, and thus find out what cues he could have of what goes on around him. Subtracting his cues from his world view, we get man's net contribution as the difference. (Quine (1960), p. 5).

Non

The fundamental-seeming philosophical question, How much of our science is merely contributed by language and how much is a genuine reflection of reality? is perhaps a spurious question which itself arises wholly from a certain particular type of language. Certainly we are in a predicament if we try to answer the question; for to answer the question we must talk about the world as well as about language, and to talk about the world we must already impose upon the world some conceptual scheme peculiar to our own language.
(Quine (1961), p. 78. 1950).

6. Is Quine offering genuinely epistemological accounts of justification as opposed to claiming that we should forgo the project of giving such accounts and merely settle for a causal account of how we come to our beliefs?

[The fourth item in the Sic column and the first item in the Non column are worth bearing in mind when considering the question of whether Quine believes that in answering skeptical doubts about the validity of science we are free to use scientific empirical claims in allaying those doubts.]

Sic

I expect that tables and sheep are, in the last analysis, on much the same footing as molecules and electrons. Even these have a continuing right [emphasis mine] to a place in our conceptual scheme only by virtue of their indirect contribution to the overall simplicity of our linguistic or conceptual organization of experience . . .
(Quine (1976), p. 223. 1954).

. . . the testimony of the senses does (contrary to Berkeley's notion) count as evidence for bodies . . .
(Quine (1976), p. 251. 1955).

A sufficient reason for his [the physicist's] positing extraordinary physical things, viz. molecules, is that for the thus-supplemented universe he can devise a theory O' which is simpler than O and agrees with O in its consequences for ordinary things.
(Quine (1960), p. 21).

A far cry, this, from the old epistemology. Yet it is no gratuitous change of subject matter, but an enlightened persistence rather in the original epistemological

Non

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? Such a surrender of the epistemological burden to psychology is a move that was disallowed in earlier times as circular reasoning. If the epistemologist's goal is validation of the grounds of empirical science, he defeats his purpose by using psychology or other empirical science in the validation. However, such scruples against circularity have little point once we have stopped dreaming of deducing science from observations. 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 trying to understand.
(Quine (1969), pp. 75-76).

The dilemma [of what to count as data] is dissolved, and the strain relieved, when we give up the dream of a first

problem. It is enlightened in recognizing that the sceptical challenge springs from science itself, and in coping with it we are free to use scientific knowledge. The old epistemologist failed to recognize the strength of his position.
(Quine (1973), p. 3).

our initially uncritical hypothesis of a physical world gains pragmatic support from whatever it contributes towards a coherent account of lorebearing or other natural phenomena.
(Quine, (1976), p. 230. 1954).

Having noted that man has no evidence for the existence of bodies beyond the fact that their assumption helps him organize experience, we should have done well, instead of disclaiming evidence for the existence of bodies, conclude: such then, at bottom, is what evidence is, both for ordinary bodies and for molecules.
(Quine, (1976), p. 251. 1955)

philosophy firmer than science. If we are seeking only the causal mechanism [emphasis mine] of our knowledge of the external world, and not a justification of that knowledge in terms prior to science, we can settle for a theory of vision in Berkeley's style.
(Quine (1970c), p.2).

For we can fully grant the truth of natural science and still raise the question, within natural science, how is it that man works up his command of that science from the limited impingments that are available to his sensory surfaces. This is a question of empirical psychology, . . (Quine (1973), p.3).

Mostly in this book I have speculated on causes, not justifications. . . Even in the case of bodies, . . . , I offered no hope of justification. I entertained no thought of translating talk of bodies into talk of sense impressions, . . . I asked how, given our stimulations, we might have developed our corporeal style of talk. . . One could ask, in the same spirit, how we developed our religious talk, our talk of witchcraft, . . . If we managed to reconstruct these causal chains of language learning, we would find that every here and there the learner had made a little leap the strength of analogy or

confusion; but then the same seemed to be true of our learning to talk of bodies. In short, I speculated on causes and not on values.
(Quine (1973), pp. 136-137).

Epistemology, for me, or what comes closest to it, is the study of how we animals can have contrived that very science, given just that sketchy neural input.
(Quine, (1981), p.21).

7. Can two different though empirically equivalent theories be construed as being true of the same world?

Sic

Both (of two empirically equivalent theory formulations that we see no way of reconciling by reinterpretation of predicates] can be admitted thenceforward as true descriptions of one and the same world in different terms. The threat of relativism of truth is averted.
(Quine (1981), p. 30).

Non

May there not be some radically alternative conceptual structure, undreamt of, that would fit all the past observations and all the predicted ones equally well [as our own conceptual structure), and yet be untranslatable into our scheme? Our own physical theory and that one would be two world versions, equally sound. Two versions of the world [emphasis Quine's]? But what world is that? To describe it we must retreat into one version or the other; they share no neutral description. Recognize the two versions, Goodman says, and leave it at that. This much will already estrange many of Goodman's readers. Not me (Quine (1981), p.97. 1978).

8. Is the posit of physical objects a myth from the epistemological point of view?

Sic

Viewed from within the phenomenalist conceptual scheme, the ontologies of physical objects and mathematical objects are myths. The quality of myth, however, is relative; relative, in this case, to the epistemological point of view. (Quine (1961), p.19. 1948).

Physical objects, small and large, are not the only posits. Forces are another example . . . Epistemologically these are myths on the same footing with physical objects and gods, neither better nor worse except in the degree they help expedite our dealings with sensory experiences . . . Total science, mathematical and natural and human, is similarly but more extremely underdetermined by experience. The edge of the system must be kept squared with experience; the rest, with all its elaborate myths or fictions, has as its objective the simplicity of laws. (Quine (1961), p. 45, emphasis mine. 1951).

9. Is science value free?

Sic

Scientific theory stands

Non

To call a posit a posit is not to patronize it. . . . Nor let us look down on the standpoint of the theory as make-believe; for we can never do better than to occupy the standpoint of some theory or other, the best we can muster at the time. (Quine (1960), p. 22).

We cannot properly represent man as inventing a myth of physical objects to fit past and present sense data. (Quine (1976), p. 251. 1955).

Non

Our speculations about the

proudly and notoriously aloof
from value judgments.
(Quine (1973), p. 49

world remain subject to norms
and caveats, but these issue
from science itself as we acquire it.
(Quine (1981), p. 181).¹⁰

References

- Armstrong, D. M., *Belief, Truth and Knowledge* (Cambridge: Cambridge University Press, 1973).
- Harding, S., "Making Sense of Observation Sentences," *Ratio* 17 (1975), 65-71.
- Putnam, H., *Realism and Reason, Philosophical Papers, volume 3* (Cambridge: Cambridge University Press, 1983).
- Quine, W. V. O., *Word & Object* (Cambridge: M.I.T. Press, 1960).
- _____, *From A Logical Point Of View* (New York: Harper and Row, 1961).
- _____, *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969).
- _____ and Ullian, J. S., *The Web of Belief* (New York: Random House, 1970).
- _____, "On the Reasons for the Indeterminacy of Translation," *The Journal of Philosophy* 67 (1970a), 178-183.
- _____, *Philosophy of Logic* (Englewood Cliff, N.J.: Prentice-Hall, 1970b).
- _____, "Grades of Theoreticity," in Swanson and Foster (eds.), *Experience and Theory* (London: Duckworth, 1970c).
- _____, *The Roots of Reference* (La Salle: Open Court, 1973).
- _____, "The Nature of Natural Knowledge," in S. Guttenplan (ed.), *Mind and Language* (Oxford: Clarendon Press, 1975).
- _____, "On Empirically Equivalent Systems of the World," *Erkenntnis* 9 (1975a), 313-328.
- _____, *The Ways of Paradox and Other Essays*, 2nd ed. (Cambridge: Harvard University Press, 1976).
- _____, "Facts of the Matter," in W. Shahan and C. Swoyer (eds.), *Essays on the Philosophy of W. V. Quine* (Norman: University of Oklahoma Press, 1979).
- _____, *Theories and Things* (Cambridge: Harvard University Press, 1981).
- Rorty, R., *Philosophy and the Mirror of Nature* (Oxford: Basil Blackwell, 1980).

Siegel, H., "Justification, Discovery and the Naturalizing of Epistemology," *Philosophy of Science* 47 (1980), 297-321.

Stove, D., *Popper and After: Four Modern Irrationalists* (Oxford: Permagon Press, 1982).

Stroud, B., *The Significance of Philosophical Scepticism* (Oxford: Clarendon Press, 1984).

Notes

* A version of this paper was first delivered at the Sydney University Philosophy Colloquium in May 1983.

1 "The Scope and Language of Science" and "Posits and Reality" appear in Quine (1976). "On what there is" and "Two dogmas of empiricism" appear in Quine (1961). "Ontological Relativity" and "Epistemology Naturalized" appear in Quine (1969).

2 For textual evidence of Quine's anti-Cartesianism Cf. Quine (1975), p.68 and Quine (1969), pp.74-76.

3 For textual evidence of this pragmatic element in Quine Cf. Quine (1976), pp. 223 and 230, Quine (1961), p.46.

4 For textual evidence of Quine's holism Cf. Quine (1961), pp. 40 and 42.

5 Cf., for instance, chapters 11 and 12 of Armstrong (1973).

6 Stove reiterates this point in his Stove (1982).

7 We should perhaps pause here to note that in "Two Dogmas" Quine does claim that some statements do have close links with experience. Thus in "Two Dogmas" Quine tells us:

Certain statements, though about physical objects and not sense experience, seem peculiarly germane to sense experience - and in a selective way: some statements to some experiences, others to others.... But in this relation of "germaneness" I envisage nothing more than a loose associating reflecting the relative likelihood, in practice, of our choosing one statement rather than another for revision in the event of recalcitrant experience. (Quine (1961), p. 43).

It seems Quine is here making a practical point about the causal proximity of certain sentences to sense experience, and using this to explain why certain statements seem particularly relevant to particular experiences. This practical point does not touch on the epistemological claim that from an epistemological point of view no statement, singly, enjoys any direct link with experience.

8 Similar points are tellingly made in Harding (1975).

9 Cf. Putnam (1983), esp. pp.240-245; Rorty (1980), esp. pp.221- 230; Siegel (1980)esp. pp.317-320; Stroud (1984), esp. pp.208- 254; and Harding (1975).

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