Review for *Theoria.*

W. V. Quine, *Confessions of a Confirmed Extentionalist and Other Essays*, ed. by Dagfinn Føllesdal and Douglas B. Quine, Cambridge, Mass.: Harvard University Press, 2008. ISBN-13: 978-0-674-03084-8.

This is a collection of forty-six essays by W. V. Quine (1908 - 2000). Twelve (or, or more accurately, nine or ten) of them have not been published before, and some have only been published in relatively unknown or less accessible collections or journals. In earlier years, Quine himself selected some of his best essays for collections: *From a Logical Point of View* (1953), *Ways of Paradox and Other Essays* (1966), *Selected Logic Papers* (1966, 2:nd ed. 1995), *Ontological Relativity and Other Essays* (1969), and *Theories and Things* (1981). But Quine remained productive until very late in his life. The new volume, edited by Dagfinn Føllesdal and Quine's son, Douglas Quine, is meant to contain Quine's most important essays from the last twenty years of his life, but also some other papers that are often referred to but are not included in earlier collections. The previously unpublished essays originate in manuscripts and notes found by Douglas Quine after his father's death. The present collection, named after Quine's last published paper, is appropriately dedicated to "the students of Quine: past, present, and future".

Among the previously published essays are "On the Reasons for Indeterminacy of Translation" (1970), "On Empirically Equivalent Systems of the World" (1975), "The Nature of Natural Knowledge" (1975), "Two Dogmas in Retrospect" (1991), "In Praise of Observation Sentences" (1993), "Assuming Objects" (1994), "Progress on Two Fronts" (1996), and "I, You, and It: An Epistemological Triangle" (1999).

The papers that are published here for the first time have been presented in various places in the years between 1946 and 1997. From 1946 there are lectures on nominalism, analyticity, and Hume's philosophy. The third of these is really a whole series of lectures, covering nearly a hundred pages in the present edition. Quine gave this course somewhat reluctantly. In his autobiography *The Time of My Life*, he recollects: "By the end of the course my lecture notes were full and ready for repeat performance in another year, but I could not bear to offer the course again." Some of the other papers published for the first time are quite short, and some have the character of lecture notes rather than finished essays.

In what follows I shall offer some comments on three topics that crop up here and there in the various essays and are of central importance in Quine's philosophy. The three topics are naturalism, analyticity, and extensionalism.

Naturalism.

The term "naturalism" has been used to designate many different philosophical views; Quine's naturalism is not necessarily what other philosophers mean by that term. Essay 41 in this collection is entitled "Naturalism; Or Living within One's Means" (from 1995). Here Quine refers to his statement in *Theories and Things* (1981) that naturalism is "the recognition that it is within science itself, and not in some prior philosophy, that reality is to be identified and described" – but he also raises the question of how much qualifies as "science itself" and not "some prior philosophy". This is clearly a good question.

Science, for Quine, includes not only physics and and other typical exemples of natural science, but also experimental psychology, history, the social sciences, and "mathematics, insofar

at least as it is applied" (p. 462). In *Pursuit of Truth* (1992) he also mentions psycholinguistics, history of science, and logical analysis (pp. 1-2). So what is excluded? Primarily, what is excluded seems to be all attempts to provide a basis for science by a priori reasoning that does not presuppose any scientific knowledge (except, perhaps, mathematics and logic). In particular, what is excluded are philosophical projects like the one embarked upon by Carnap in *Der Logische Aufbau der Welt*: a "rational reconstruction" of science on a phenomenalistic basis. As an alternative to such projects, Quine proposes a *scientific* (or physicalistic, or naturalistic) "reconstruction" of our acquisition of scientific knowledge, a project in which scientific findings can be freely exploited.

What is the point of such an enterprise? It may be criticized for not removing sceptical doubts that one may have about science, since the truth of scientific findings is already taken for granted (with the proviso that they are of course fallible). This may seem obvious to many philosophers from Descartes onwards, but it is perhaps not so obvious after all. A scientific reconstruction of the development of scientific knowledge, apart of being of interest in itself, might greatly increase the coherence of our scientific worldview, thereby making it more plausible. It may provide an explanation of what is otherwise rather mysterious: how we can develop such an intricate and comprehensive scientific picture of the world from a starting-point that merely consists of the triggering of our sensory receptors. More importantly, perhaps, it is the best we *can* do. There cannot be an Archimedean point outside science, something that is more reliable than science and from which science can somehow be derived or defended. For science precisely consists of our best efforts to find out what the world is like. Science is indeed fallible, but there cannot be any external support for science that is less fallible. This last point is sometimes just what Quine means by "naturalism". But when he advocates a naturalistic epistemology, what he has in mind is the view that belief and evidence are natural phenomena that should be studied as other natural phenomena, i.e. by ordinary scientific methods. To explain how knowledge is possible – a classical aim of epistemology – is to explain how it results from human interactions with the natural world.

Still, it is sometimes argued against Quine that the scientific community needs certain norms and values to guide its activities, and that naturalized epistemology – like science itself – being wholly descriptive and explanatory, cannot produce such norms and values. They must therefore come from outside science. To find them could then be seen as the responsibility of a "first philosophy".

Now, even if science is purely descriptive, it can of course provide grounds for practical norms concerning our technological attemps to create artefacts for various purposes. Clearly, this does not make science normative, and this is certainly not what people have in mind for a first philosophy. But Quine claims that naturalized epistemology does indeed have a "normative side", since science can also provide norms for "the technology of scientizing" (p. 468); e.g. it can tell us "that we should be wary of astrologers, palmists, and other soothsayers" and how to choose among alternative hypotheses (p. 469).

This may be questioned. I do not think that science can tell us what we ought to believe or what we ought to do, but it can perhaps tell us what we ought to believe or do *in order* to move closer to a certain aim of science or to increase the probability of scientific progress. This may be included in the "technology of scientizing". But there is nothing genuinely normative about this; it does not include any categorical norms for belief or behavior. It may be stated in the form of

hypothetical norms, but to the extent that these have a scientific standing, they are merely reformulations of causal or statistical statements.

So what would be the norms of a genuinely *normative* epistemology? Maybe they should say that scientific knowledge is valuable and that truth or understanding ought to be pursued? Surely, such norms cannot be derived from or be supported by science. But neither are such norms what the critics of naturalism have in mind when they claim that epistemology is or should be normative. Rather, they seem to think that a central aim of epistemology is to determine the conditions of "justified belief", and that this is a normative problem since *justification* is a normative notion; I suppose they mean by this that a person is justified in holding a belief in certain circumstances only if he or she *ought* or is *permitted* to hold it under such circumstances.

I believe this is misleading at best. Quine might agree that our scientific beliefs should be justified (to some suitable degree), but he claims that "the *most* we can reasonably seek in support of an inventory and description of reality is testability of its observable consequences in the time-honored hypothetico-deductive way" (p. 462). Indeed, for him naturalism is the claim that "in our pursuit of truth about the world we cannot do better than our traditional scientific procedure, the hypothetico-deductive method" (p. 467). Surely, this is a doctrine about "the conditions of justified belief", but there seems to be nothing normative about it.

Or is it? Perhaps the claim that "we cannot do better" might be taken as evaluative – since it employs the word "better" – and by implication normative? Well, if it is, then Quine's critics are wrong when they say that naturalized epistemology is not normative. The doctrine itself would be normative, and if further work within the naturalistic project leads to more refined versions of "the hypothetico-deductive method", such results could also be regarded as normative. But this is not a very plausible interpretation of Quine's position. Rather, what he means is that our use of the hypothetico-deductive method is our most effective means to results that are regarded as valuable by the scientific community. Indeed, he says that prediction of observation as a test of hypotheses is "more than a norm": it is "the name of the game" (p. 468). So it is not a categorical norm. Still, it is an answer to the question about what is the condition of "justified belief".

Someone might claim that there is nevertheless a categorical norm that our beliefs about the world should be justified. However, this is not normally regarded as a claim to be established within epistemology. It may be a background claim or presupposition within scientific practice, and to some extent it may also be accepted in other contexts, but it is seldom if ever argued for.

Analyticity.

One of the previously unpublished essays in the new collection is "On the Notion of an Analytic Statement", a lecture presented in 1946. Also included is "Two Dogmas in Retrospect" from 1991. In the former, a statement is assumed to be analytic if it can be got by putting one expression for another with the same meaning in a statement that is logically true (p. 25). An example is "No bachelor is married". This example may be uncontroversial (even among people who believe that the Pope is an unmarried man, but not a bachelor), but the general definition is problematic. There are two problems: "logically true" can be explained in different, non-equivalent ways, and we have no adequate explanation of sameness of meaning.

The first of these problems is not discussed in "Two Dogmas" (1950). But it is of course important if one wants to evaluate the idea that mathematical truths are analytic. According to Quine, logic can be taken in a narrow or a broad sense. In the broad sense, it has three parts: truth-function theory, quantification theory, and set theory (p. 29). Set theory is not part of logic

in the narrow sense. "The question of taking one sense or the other is itself a far from trivial question, for probably the question whether arithmetic is analytic – hotly contested from Kant onward – will depend on whether we define analytic with help of logical truth in the narrower or broader sense (p. 32). But Quine, of course, wants to stick to the narrower sense.

Now, what about sameness of meaning? Quine is willing to agree that 'bachelor' means 'unmarried man' and that "Every bachelor is unmarried" is analytic (p. 33, 395f). But other examples – such as "Everything extended is colored" – are less trivial and more difficult to classify. In any case, for Quine the really important point is that we do not have a general criterion, *in terms of linguistic behavior*, for analyticity or sameness of meaning. The criterion must be in terms of linguistic behavior, for given the public nature of language there can be nothing in meaning except what is accessible through linguistic behavior. Meaning is use, as the saying goes. A linguist who wants to discover the semantical rules of a language will have to study linguistic behaviour. There is no alternative. But so far, we have no workable general criterion for determining meaning or analyticity.

In many contexts, Quine and other philosophers seem to think of synonymy as a two-place relation between expressions, but in 1946 Quine points out that it is rather a four-place relation, where sameness of meaning is relativized to person and time – even though "afterward we may, as a convenient approximation for purposes of generality, abstract from particular person and time and speak of language community". Presumably, he means that we may say that two expressions have the same meaning (in a certain community) iff they have the same meaning for every person (in the community) at every time, or for most persons most of the time. He cannot offer a definition of this four-place relation, but he proposes a first approximation to such a definition as follows:

> two expressions have the same meaning for x at t if substitution of the one for the other, in any statement believed by x at t, yields a statement believed by x at t (p. 34).

Quine has a number of objections to this proposal. One is that two expressions may not be obviously alike in meaning, but can be shown to be so. For example, "4^9" has the same meaning as "262.144", but a person may believe, e.g., that a town has 262.144 inhabitants, without believing that it has 4^9 inhabitants. But the most important problem with the proposed definition is that of defining *belief*, in turn, in terms of linguistic behavior (and other observable phenomena). Without such a definition, we do not have a workable, empirical criterion for sameness of meaning.

Besides, I would add that if belief is a matter of degree, the proposed definition would have to be refined with the clause that the beliefs in question are of the same degree. If they are not, it may still be held that the two expressions do not really have the same meaning. Or else, we may say that sameness of meaning is itself a matter of degree. This is in fact what Quine himself suggests later on, when he considers a definition of sameness of meaning in terms of analyticity – where analyticity is in turn explained in terms of our "relative reluctance in the face of contrary evidence, to discard a statement as false" (p. 35). For analyticity, in this sense, is clearly a matter of degree.

Another worry about the proposed definition is that two expressions may have the same meaning for each of two persons, even if the expressions are not *intersubjectively* synonymous: they may have different meanings for the two persons or the translation between their idiolects may

be indeterminate. If so, one may be reluctant to say that they have the same meaning within the community. Moreover, does everyone within a given linguistic community speak the same language? (Is this "analytic"?) If so, what is meant by "the same language"? Can there be different idiolects within the same language? In "Two Dogmas Revisited", just as in earlier work, Quine takes analyticity and synonymy to be interdefinable, but he notes that "synonymy and therefore meaning are even worse off when we transcend a single language. For if the two expressions to be equated belong to different languages, their biconditional or equation is far from analytic; it is incoherent, belonging to no language" (p. 397). So, once again, what is a "single" language? How are languages to be individuated? I take it that Quine would not rely here upon "sameness of meaning". Consequently, it is not clear – to me at least – how we could "abstract from particular person and time and speak of language community".

In 1991, Quine also claims that anlyticity is not needed to account for the meaningfulness and apparent necessity of mathematical truths. This can be better explained by holism. (Speaking of holism, he also reports that he did not know about Duhem when he presented the first version of "Two Dogmas"; the reference to Duhem's holism was only inserted in the 1953 version, see p. 394). As regards analyticity, he agrees that it "has a place at a common-sense level" (p. 395), and he reiterates that it can be used for sentences that a person has learnt to hold true by learning the use of one or more of its words; this works for trivial cases and also for the basic laws of logic. Moreover, he wants to provide for deductive closure by letting "truths deducible from analytic ones by analytic steps […] count as analytic in turn" (see p. 395-6).

But for analyticity in general, including philosophically more interesting cases, Quine holds on to his earlier position. His main complaint is that there are *no empirical criteria* for analyticity or for synonymy. "Language is taught and learned by observing and correcting verbal behavior in observable circumstances. There is nothing in linguistic meaning that is not thus determined. John Dewey made this point long ago" (p. 398).

Extensionalism.

As can be deduced from the name of the book, Quine is a confirmed extensionalist; and it turns out (p. 501) that Quine was an extensionalist very early, long before he knew the term or how to define it – even when he studied Whitehead and Russell's *Principia Mathematica* at Oberlin College in 1929-30. Later, his aversion to intensional notions like "necessarily", "meaning", "analytic", and "synonymous" has been aired in many places, e.g. in "Two Dogmas".

Quine wants a scientific theory to be such that it can be formulated in a purely extensional language, a language that contains only individual variables and general terms combined by predication, quantification, and truth functions. Such a language is extensional in the sense that expressions can be replaced by other expressions with the same extension without changing the extension of the context as a whole. Quine writes: "I hesitate to claim that this syntax [i.e., the syntax of predicate logic], so trim and clear, can accomodate in translation all cognitive discourse. I can say, however, that no theory is fully clear to me unless I can see how this syntax would accomodate it" (p. 439). And again: "I doubt that I have ever fully understood anything that I could not explain in extensional language" (p. 500).

Sets are extensional – in the sense that "they are determined by their members"– but properties, according to Quine, are not (p. 500). Two distinct properties may have the same instances: coextensive, but non-identical. Quine's example is the property of being a normal animal with a heart and the property of being a normal animal with kidneys; another may be the

property of being an equilateral triangle and the property of being an equiangular triangle. In the former case the properties may seem obviously distinct, but one might be more doubtful about the latter. But how should one decide such questions? We lack a clear principle of individuation; that is Quine's point, and he sticks to his maxim: *no entity without identity*. This is plausible. Not perhaps as a thesis about the world, but as a recommendation for scientific thinking.

So we should try to do without properties, and similarly with propositions, meanings, and necessity. Ascriptions of propositional attitudes are also intensional, but here Quine claims that we cannot do without them, and he devices a method, involving semantic ascent, by which they can be transformed into extensional formulations (at least for *de dicto* cases). Other intensional idioms are subjunctive and contrafactual conditionals, but Quine thinks that cases where these are used in science can often be covered by universally quantified truth-functional conditionals (see p. 444). Disposition terms should not be defined in terms of subjunctive conditionals, "they just name ordinary properties in a special way, namely, by alluding to a fairly dependable and convenient symptom or test" (p. 445). (Here Quine speaks of properties, even though he wants to stay away from them!)

Extensionality may seem to be a rather esoteric technical virtue, but it cannot be denied that it can save us from certain ambiguities and obscurities. However, extensionality is by no means a guarantee of intelligibility. In predicate logic, there is no restriction on the predicates. Their application can be quite problematic, as e.g. in the case of propositional attitudes. It is desirable to have objective critera of application, preferably in terms of intersubjectively observable phenomena. Moreover, the observable phenomena must be relevant. For example, Quine says that "[t]he neat behavioral measure of a subjective probability is the minimum acceptable odds at a wager" (p. 445). This familiar idea may be acceptable in simple games, but it is perhaps not a relevant measure of degree of belief in cases where where it is uncertain whether the outcome will become evident in the foreseeable future.

This new, and probably last, book by W. V. Quine contains a lot of valuable material. The previously published papers are well chosen and the previously unpublished ones are interesting additions to Quine's work. The collection is clearly useful to Quine scholars, even if it does not add much to what they know already. Unfortunately, there are several misprints; the most irritating of these is that "prepositional" is often used instead of instead of "propositional" (what, e.g., is a "prepositional attitude"?).

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