

Willard Van Orman Quine



- Born 1908, Ohio; died 2000, Massachusetts
 - BA with major in mathematics, honors in mathematical philosophy from Oberlin (1930)
 - PhD in philosophy on Russell & Whitehead's philosophy of mathematics from Harvard (1932)
 - Spent his career at Harvard, retiring in 1978
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- Major figure in philosophical logic, philosophy of language, metaphysics and epistemology

Some key contributions

- Quine was heavily influenced by the logical positivists (he visited Vienna in the 1930s)
- He shared their empiricism and high regard for science
- He famously defended a form of **philosophical naturalism** (aims & methods of philosophy continuous with those of science)
- He was also well-known for criticising the use of numerous ordinary concepts that he found confused and unclear ('*quine*, v.: To deny resolutely the existence or importance of something real or significant.')
- Our primary source for today, his influential and controversial 'Two Dogmas of Empiricism' (Quine 1951) is a case in point
- For more on Quine's work, I recommend Hylton (2007, 2014)

Willard Van Orman Quine (ctd)

- A nice quote from a bio in the NY Times (<http://goo.gl/fY1Icq>):
'Mr. Quine never wrote on a computer, always preferring the 1927 Remington typewriter that he first used for his doctoral thesis. Because that project contained so many special symbols, he had to have the machine adjusted by removing the second period, the second comma and the question mark. 'You don't miss the question mark?' a reporter once asked him. 'Well, you see,' he replied, 'I deal in certainties.'

Overview of 'Two Dogmas'

- The two familiar dogmas of empiricism:
 - (I) There is 'some fundamental cleavage between truths which are analytic, or grounded in meanings independently of matters of fact, and truth which are synthetic, or grounded in fact'
 - (II) 'each meaningful statement is equivalent to some logical construct upon terms which refer to immediate experience'
- Quine argues that both are 'ill-founded'

Kant's proposals

- Two proposals in Kant:
 - (1) **Containment**: An analytic statement is one that 'attributes to its subject no more than is already conceptually contained in the subject'
 - (2) **Self-contradiction of negation**: An analytic statement is one whose negation is self-contradictory
- Quine's complaints:
 - (1) The notion of 'containment' is unhelpfully metaphorical
 - (2) The notion of being 'self-contradictory' is no clearer than that of being 'analytic'

AGAINST DOGMA I

Meanings

- Another proposal:
 - Truth by virtue of meaning alone**: An analytic statement is one that is 'true by virtue of meanings and independently of fact.'
- Quine's complaint: The notion of 'meaning' is not clear
- Two notions that *are* clear but cannot give us 'meanings':
 - **Denotation/reference** of singular terms (the things in the world that the terms 'pick out')
(e.g.: meaning of 'the author of *Waverley*' ≠ meaning of 'the author of *Ivanhoe*')
 - **Extension** of predicate adjectives (the set of things in the world to which the relevant property can be truthfully predicated)
(e.g. meaning of 'chordate' ≠ meaning of 'rhenate')

Synonymy

- In Quine's opinion, 'meanings' will only be acceptable entities to the extent that their **identity criteria** can be pinned down
- This means clarifying when two meanings count as the same and when they don't: clarifying relations of **synonymy**
- This concept, in addition, may be all that is needed to define analyticity
- Indeed, Frege proposed:
 - An analytic statement is one that is either
 - (i) a logical truth, true under any uniform substitution of non-logical terms (e.g. 'No non-married man is married')
 - (ii) a statement that can be turned into (i) by substitution of synonyms (e.g. 'No bachelor is married')

Synonymy (ctd)

- Quine thinks that the notion of a logical truth is unproblematic
- But he thinks that the second class of analytic truths may be problematic because 'synonymy' seems no clearer or less problematic than 'analyticity'
- Can we give a satisfactory account of synonymy that doesn't appeal to analyticity?

Interchangeability

- Perhaps we can explain synonymy in terms of **interchangeability**?
- Proposal:
 - An expression *A* is synonymous with an expression *B* iff *A* can be substituted for *B* in all linguistic environments (except within quotes) *salva veritate*, that is, without changing truth value
- Need for qualification about quotation:
 - "Bachelor' has less than ten letters' (true)
 - "Unmarried man' has less than ten letters' (false)
- Is this adequate?

Definitions

- How about appealing to **definitions**?
- For example, we might say: 'bachelor' is synonymous with 'unmarried man' because it is defined as 'unmarried man'
- Quine: The existence of *some* definitions can explain the existence of *some* would-be relations of synonymy
- He has in mind **stipulative** definitions ('the explicitly conventional introduction of novel notations for purposes of sheer abbreviation')
- But not all terms that have synonyms admit such definitions
- How about **dictionary** definitions (given by the lexicographer)?
- Quine: these merely report prior synonymy relations, rather than account for their existence

Problems for interchangeability

- Quine (a) notes that the proposal requires relativisation to a language and (b) claims that it yields the wrong results when relativised to some but the right result when relativised to others
- Suppose we relativise to a fragment of English, limited to proper names, predicates, quantifiers ('some', 'any', etc.) and the connectives of propositional logic ('and', 'or', etc.)
- This is an **extensional** (antonym: **intensional**) language: substitution of co-extensional predicates preserves truth value
- Upshot: If we relativise to this language, co-extensional predicates (e.g. 'is a chordate' and 'is a renate') automatically come out as synonymous, when they shouldn't
- Interchangeability s.v. is then *not* sufficient for synonymy

Problems for interchangeability (ctd)

- Suppose instead that we relativize to an intensional language, like English, that contains the construction ‘It is necessary that...’
- Arguably, interchangeability s.v. *is* then sufficient for synonymy
- In particular, co-extensional predicates (e.g. ‘is a chordate’ and ‘is a renate’) need no longer come out as synonymous
 - ‘It is necessary that any chordate is a chordate.’ (true)
 - ‘It is necessary that any chordate is a renate.’ (false)
- All good?

Problems for interchangeability (ctd)

- In other words:
 - The definition will only work when completed by the requirement that the relevant language contain a propositional operator that yields a true sentence iff the embedded proposition is analytic
 - So we can’t non-circularly define analyticity in terms of synonymy
- This ends Quine’s failed quest to find a clear, independent way of demarcating the analytic from the synthetic
- He concludes: ‘That there is such a distinction to be drawn at all is an unempirical dogma of empiricists, a metaphysical article of faith.’

Problems for interchangeability (ctd)

- Quine thinks not:
 - ‘The condition of interchangeability *salva veritate* varies in its force with variations in the richness of the language at hand. [It is sufficiently strong when relativised to] a language rich enough to contain the adverb ‘necessarily’, this adverb being so construed as to yield truth when and only when applied to an analytic statement. But can we condone a language which contains such an adverb? Does the adverb really make sense? To suppose that it does is to suppose that we have already made satisfactory sense of ‘analytic’. Then what are we so hard at work on right now?’

Soames on the circularity argument

- Soames notes that defining synonymy in terms of substitutivity s.v. inside the scope of ‘It is necessary that...’ probably wasn’t a good idea in the first place
- Indeed, it appears to *still* generate too many synonyms:
 - (1) ‘It is a necessary truth that all and only **equilateral polygons** are **equiangular polygons**’
 - (2) ‘It is a necessary truth that **2¹⁰ = 1024**’
- (1) and (2) are both true but the expressions in bold are not synonymous

Soames on the circularity argument (ctd)

- Soames suggests instead that we consider interchangeability s.v. within the scope of such constructions as
 - 'S knows that...'
 - 'S believes that...'
- This seems plausible and handles the problem of 'equilateral polygons' vs 'equiangular polygons' and ' 2^{10} ' vs '1024'
- But this plausibility highlights the fact that judgments of necessity (or a priority) aren't necessarily underpinned by judgments of synonymy
- In which case, the project of trying to explain necessity and a priority in terms of analyticity will collapse

A concern for Quine? (ctd)

- In response, Grice and Strawson (1956) argued that the sense of indecision persists when we replace 'analytic' with 'true', yielding:
 - "Everything that is green is extended [in space] is true."
- But 'true' is a term that Quine is (and presumably should be) perfectly happy with

A concern for Quine?

- Grant Quine for sake of argument that no non-circular definition of analyticity is forthcoming
- What entitles him to infer from this that endorsing an analytic/synthetic distinction is 'a metaphysical article of faith'?
- We surely needn't require of *all* our terms that they be independently definable, right?
- Is there a *special* concern here? Quine seems to suggest so:
 - 'I do not know whether the statement 'Everything that is green is extended [in space]' is analytic. Now does my indecision over this example really betray...an incomplete grasp of the 'meanings' of 'green' and 'extended'? I think not. The trouble is not with 'green' or 'extended', but with 'analytic.'

AGAINST DOGMA II

From Dogma II to Dogma I

- In section V of his paper, Quine turns to the 2nd dogma, which, if correct, would seem to salvage the 1st
- Indeed, verificationism yields the following account of synonymy:
 - Two sentences are synonymous iff they would be verified (confirmed) / falsified (disconfirmed) by the same experiences
- This could then be used to provide the following account of analyticity:
 - A sentence is analytic iff it is synonymous with logical truth (i.e. iff it is verified 'no matter what')

Holism and Dogma II

- Quine's principal reason for rejecting the dogma: single statements aren't verifiable or falsifiable, *in isolation*
- He tells us:
 - '[O]ur statements about the external world face the tribunal of sense experience not individually but only as a corporate body.'
- Example: What sensory experiences would (dis)confirm that there are centaurs (rather than that we are, say, hallucinating)?
- Upshot:
 - The unit of confirmation (and hence, according to Quine, of meaning) is not the individual statement, but the theory as a whole

Rejecting Dogma II

- In the section in which this tenet is discussed (section V), Quine appears to offer 2 objections
- First, he seems to reject the 2nd dogma on the grounds that it entails the 1st and that the latter has been established to be false:
 - 'But I hope we are now impressed with how stubbornly the distinction between analytic and synthetic has resisted any straightforward drawing.'
- Second, he draws attention to the poor track record verificationists have had in spelling out their proposal in detail:
 - 'I am impressed also...with how baffling the problem has always been of arriving at any explicit theory of the empirical confirmation of a synthetic statement.'

Holism and Dogma II

- It's worth quoting him at some length here:
 - '[T]otal science is like a field of force whose boundary conditions are experience. A conflict with experience at the periphery occasions readjustments in the interior of the field...Having re-evaluated one statement we must re-evaluate some others, whether they be statements logically connected with the first or whether they be the statements of logical connections themselves. But the total field is so undetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to re-evaluate in the light of any single contrary experience. No particular experiences are linked with any particular statements in the interior of the field, except indirectly through considerations of equilibrium affecting the field as a whole.'

Holism and Dogma I

- But this picture, doesn't just, according to him, undermine the second dogma; the *first* has to go too:

'If this view is right...it becomes folly to seek a boundary between synthetic statements, which hold contingently on experience, and analytic statements which hold come what may. Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision. Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and the shift whereby Kepler superseded Ptolemy, or Einstein Newton, or Darwin Aristotle?'

A concern for Quine?

- Quine takes the laws of logic & maths to be revisable
- But such revisions are nevertheless supposed to be **principled**
- In particular, Quine thinks they should take place just in case doing so would increase the predictive power of the whole theory
- But say we judge that dropping law *L* would increase predictive power. Do it follow that we ought to drop *L*?
- It seems that this judgment itself could be revised...
- Seemingly (Wright 1986):
 - Either some judgements are not revisable after all or our revisions are have to be ultimately unprincipled

Holism and Dogma I (ctd)

- Like Mill and unlike Ayer (see Lecture 5), Quine denies that the claims of logic and mathematics are established as being necessarily or certainly true
- In the final pages of 'Two Dogmas', he explains how he thinks that such claims are justified
- Unlike Mill, Quine does not take them to be justified by a process of inductive generalisation
- Rather he takes them to be justified to the extent that they are key elements in a scientific theory that allows us to generate true predictions about our experiences

Next week: Wittgenstein's *Investigations*

- Required reading:
 - Soames, S. *AoM*, Introduction to Volume and Chs 1 & 2
- Recommended reading:
 - Candlish, S. and Wrisley, G. 2014: Private Language. In E.N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy (Fall 2014 Edition)*.
 - Lycan, W. 2000: *The Philosophy of Language: A Contemporary Introduction (Second Edition)*. London & New York: Routledge. Ch. 6.
 - Wittgenstein, L. 1953: *Philosophical Investigations*. Translated by G. E. M. Anscombe, Oxford: Blackwell, 3rd edition, 1967. §§1, §32, §§37-40, §65-70, §§82-85, §§90-92 (conception of meaning as use) and §§244-271 (Private Language Argument).

References

- Grice, P. and P. Strawson 1956: In Defense of a Dogma, *Philosophical Review* LXV .
- Hylton, P. 2007: *Quine*. London and New York: Routledge.
- Hylton, P. 2014: Willard van Orman Quine. In E.N. Zalta (ed.) *The Stanford Encyclopedia of Philosophy (Fall 2014 Edition)*.
- Wright, C. 1986. Inventing Logical Necessity. In Jeremy Butterfield (ed.), *Language, Mind and Logic*.