

# Quine

## Ontological Relativity

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## The story so far

- ▶ *Indeterminacy of Translation*: there are no facts in virtue of which one translation of an alien sentence into English is correct.
- ▶ *Inscrutability of Reference*: there are no facts in virtue of which one assignment of reference to an alien word is correct.
- ▶ Some translations/ assignments of reference will be more *convenient*.
- ▶ But this does nothing to suggest that there is a *fact of the matter*.

# Talk outline

On what there is

Our language

Ontological relativity

## 'On what there is'

- ▶ The Quinean approach to ontology has become standard.
- ▶ He introduced the approach in 'On what there is' (1948).
- ▶ Stephen Yablo summarises the paper's importance:

*Ontology the progressive research program (not to be confused with ontology the swapping of hunches about what exists) is usually traced back to Quine's 1948 paper 'On What There Is'. According to Quine in that paper, the ontological problem can be stated in three words – 'what is there?' – and answered in one: 'everything'.*

*('Does ontology rest on a mistake?', p. 229)*

# Abstract objects

- ▶ We often use sentences whose truth depends on the existence of abstract objects.
- ▶ But we may not believe in abstract objects
- ▶ What to do?
- ▶ Quine gives 3 options:
  - (1) stop using the problematic expressions, e.g. glints
  - (2) start believing in the entities, e.g. sets
  - (3) paraphrase the commitment away, e.g. properties

# Sets

- ▶ At first, Quine subscribed to Harvard *nominalism*: there are no abstract objects.
- ▶ This included numbers, sets, ordered  $n$ -tuples, functions, properties and relations.
- ▶ He came to believe that sets are *indispensable* to science.
- ▶ Other mathematical objects can be defined in terms of sets.

# Properties

- ▶ Quine always wanted to reject the existence of properties.
- ▶ Why?
  - ▶ They have unclear identity conditions.  
(‘No entity without identity’)
  - ▶ We can’t use extensionality.
  - ▶ We could use modality? Quine hates that.
  - ▶ Analyticity? Quine hates that.

# Paraphrase

- ▶ Nothing we truly say is committed to properties.
- ▶ Case 1: Predicates, e.g. 'The sunset is red'
- ▶ Solution: predicates refer to *sets*
- ▶ Case 2: Abstract singular terms, e.g. 'Humility is a virtue'
- ▶ Solution: paraphrase as 'humble persons are virtuous'
- ▶ Case 3: Quantification over properties, e.g. 'She has the same virtues as her mother'
- ▶ Solution: the quantification is over sets

# Paraphrase

- ▶ Do these paraphrases really mean the same thing?
- ▶ Is the method available *generally*?
- ▶ Even in simpler cases, we may have worries.
- ▶ Consider ‘Humility is a virtue’
- ▶ For Quine, ‘Humility’ picks out the set of humble people and ‘is a virtue’ says of each member that it is virtuous.
- ▶ But suppose that – accidentally – the humble people are just the tall people.
- ▶ Then ‘Tallness is a virtue’ will be similarly true.

# Ontological commitment

- ▶ Let's consider Quine's project more generally.
- ▶ First, his project has a *descriptive* component.
- ▶ If we want to know the ontological commitments of a given theory  $T$ , we do the following:
  1. Formalise  $T$  in the language of first-order logic
  2. Paraphrase away any singular terms in the Russellian way
  3. Observe the entities over which the result existentially quantifies

## To be is to be the value of a variable

- ▶ The theory is committed to exactly those entities over which it existentially quantifies.

*A theory is committed to those and only those entities to which the bound variables of the theory must be capable of referring in order that the affirmations made in the theory be true.*

*(Quine 1948, p. 33)*

- ▶ Hence 'to be is to be the value of a variable'.

## Best theories

- ▶ Then comes the prescriptive part.
- ▶ We must decide of competing scientific theories which is the best.
- ▶ The criteria include: predictive power, explanatory strength, simplicity, elegance, fruitfulness, etc.
- ▶ The entities that exist are those existentially quantified over in this best theory.
- ▶ This is Quine's *metaontology*: it doesn't tell us what exists, but provides a method for deciding this question.
- ▶ Quine views this approach as continuous with science.

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## Radical translation begins at home

- ▶ §1 of 'Ontological Relativity' (1968) summarises themes from *Word and Object*.
- ▶ §2 moves into more challenging territory.
- ▶ Quine leaves *radical interpretation* and turns to our home language.
- ▶ Do *Indeterminacy of Translation* and *Inscrutability of Reference* apply here?
- ▶ On the face of it, they do.
- ▶ But what might be special about the home language?

## Radical translation begins at home

*if there really is no fact of the matter, then the inscrutability of reference can be brought even closer to home than the neighbour's case; we can apply it to ourselves. ... We seem to be manoeuvring ourselves into the absurd position that there is no difference of any terms, interlinguistic or intralinguistic, objective or subjective, between referring to rabbit parts or stages. ... Surely this is absurd, for it would imply that there is no difference between the rabbit and each of its parts or stages. ... Reference would seem now to become nonsense not just in radical translation but at home.*

## Radical translation begins at home

- ▶ The inscrutability of reference is *much* more troubling applied to ourselves.
- ▶ There is no fact that my word 'rabbit' applies to rabbits.
- ▶ And there's nothing special about 'rabbit'.
- ▶ We end up with a semantic scepticism.
- ▶ Unlike other sorts of scepticism, this seems *absurd*.

# Disquotation

- ▶ Quine thinks there is a tension here.
- ▶ First, he is clear that reference *in the home language* is constrained by *disquotation*:
  - '*x*' refers to *x*.
  - 'Kanye' refers to Kanye.
- ▶ He thinks analogous principles constrain *truth* and *truth of*:
  - '*x*' is *true* iff *x*
  - 'Snow is white' is *true* iff snow is white.
  - '*X*' is *true of* every *X* and nothing else.
  - 'Rabbit' is *true of* every rabbit and nothing else.

# Disquotation

- ▶ In our home language, we *acquiesce in our mother tongue*.
- ▶ When we discuss meaning, reference, truth, etc, we *semantically ascend* to a metalanguage.
- ▶ The metalanguage is usually taken to be an extension of the object language.
- ▶ As such, *homophonic* translation is possible:
  - ▶ 'Rabbit' refers to rabbits.
  - ▶ 'There is a rabbit' means that there is a rabbit.

# Disquotation

- ▶ That homophonic translation is useful is no mystery: we learn by imitation and feedback.
- ▶ Homophonic translation is implicit in language learning.
- ▶ To do otherwise would hurt communication.
- ▶ We will sometimes translate heterophonically, but this is an exception.
- ▶ Quine's examples are 'cool' and 'square'.

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# Immanent and transcendent relations

- ▶ In *Philosophy of Logic*, Quine distinguishes two sorts of predicate:
  - ▶ **Immanent** a predicate defined for a particular language
  - ▶ **Transcendent** a predicate defined for language in general
- ▶ The predicate 'word' is transcendent.
- ▶ The predicate 'true-in- $\mathcal{L}$ ' is immanent.

# Home language

- ▶ Within our language, we can define immanent notions of reference:
  1. 'x' refers to  $x$
  2. 'X' is true of every  $X$  and nothing else
- ▶ We can *try* to define a transcendental notion:

'x' transcendentially refers to  $x$  iff its translation into our home language immanently refers to that thing
- ▶ Indeterminacy of translation scuppers this sort of definition.

## Relative transcendent reference

- ▶ We could define a *relativized* transcendent notion of reference:

Given a translation manual  $M$  from alien language  $\mathcal{L}$  into our language, 'x' in  $\mathcal{L}$  transcendentally refers to  $x$  relative to  $M$  iff  $M$  maps  $x$  into something in our language that immanently refers to  $x$ .

- ▶ This allows a term to refer to different objects relative to different manuals.
- ▶ The transcendent notion of reference is of course relative to a manual.

## A more concrete example

- ▶ We are at home in our language.
- ▶ Our translation manual is the privileged *homophonic* one.
- ▶ Quine comes along with his ingenious permutation arguments.
- ▶ We of course don't change our translation manual.
- ▶ What we realise is that our translation is *relative* to a manual.

## A more concrete example

- ▶ We realise that it is meaningless to ask whether 'rabbit' refers to rabbits, or to rabbit stages, *transcendentally*.
- ▶ We must ask relative to a translation manual.
- ▶ Relative to this manual, the question has sense.
- ▶ And, in the homophonic manual, it receives an easy answer.

# Regress

- ▶ Problem: how do we make sense of the translation manual?
- ▶ It is *metalinguistic*.
- ▶ So does it make sense only relative to a *metametalanguage*?
- ▶ Are we here launched on a regress?

# Analogies

- ▶ Quine compares the situation to position or velocity.
- ▶ We now know that talk of *absolute* position or velocity is mistaken.
- ▶ We can only make sense of these notions *relative* to a frame of reference.
- ▶ In practice, Quine says, we end the regress by pointing: we mean *that* frame of reference.
- ▶ In *linguistic* practice, we take words at face value, acquiescing in the mother tongue.

# Analogies

- ▶ In these cases, we reject any absolute talk of position or velocity.
- ▶ Parallel question, parallel answer: we should reject any absolute talk of reference.

*The relativistic thesis to which we have come is this, to repeat: it makes no sense to say what the objects of a theory are, beyond saying how to interpret or reinterpret that theory in another. (OR, p. 50)*

# Problem

- ▶ A theory is a deductively closed set of sentences.
- ▶ These sentences are fully interpreted.
- ▶ But then the objects are settled.
- ▶ Quine: theories can only be fully interpreted *relative to* a background theory.

# Best theories

- ▶ We can now state *ontological relativity*

**Ontology** What exists is what falls in the range of the quantifiers in a first-order formalisation of best scientific theory.

**Relativism** The sentences of theories only have sense relative to a background theory.

**Ontological Relativity** What exists is a relative matter.