

## W.V. Quine's How-To Manual for Ontology

1. **Willard Van Orman Quine:** Quine was the foremost analytic philosopher of the fifties and sixties, and among the most important and influential philosophers of the twentieth century. He worked on a broad range of topics, including metaphysics, epistemology, philosophy of language, philosophy of mathematics, and philosophy of mind.
2. **Quine's 3 Tasks:**  
Quine's overall aim is to specify the right methods for ontology: a **how-to manual** for determining what there is. Quine's methods are to be **humble**, taking at face value the results of serious investigation into what there is.

Quine doesn't tell us until the end what the structure of his paper is. Here's what he says:

In earlier pages I undertook to show that some common arguments in favor of certain ontologies are fallacious. Further, I advanced an explicit standard whereby to decide what the ontological commitments of a theory are. But the question what ontology actually to adopt still stands open, and the obvious counsel is tolerance and an experimental spirit. (pp. 11-2)

Quine here identifies three aims for his paper:

- (a) **Show what's wrong with a certain argument**
- (b) **Provide a method for determining the "ontological commitments" of a given theory**

[**ASK**]: What does Quine mean by "ontological commitments"?

[**ANSWER**]: the *ontological commitments* of a theory are those claims about what there is that the theory endorses or requires. So: Quine's going to tell us **how to determine**, given a theory, what it **says** there is.

[**EXAMPLES**]:

- i. The ontological commitments of **physics** include that there is lots of stuff that we can't directly observe: atoms, quarks, spacetime, black holes, *etc.*

- ii. The ontological commitments of **arithmetic** include that there are infinitely many prime numbers.
- iii. The ontological commitments of **sociology** include that there are social institutions.

[**TERMINOLOGY**]: An **ontology**: a theory about what there is.

(c) **Provide a method for ontology:**

That is, try to show how to go about answering the question of which ontology is correct. Quine's also going to tell us **how to determine** what there is.

3. **Quine vs. the Semantic Argument:** Recall:

*The Semantic Argument:*

- (1) There is no Santa Claus.
- (2) Santa Claus does not exist.

- (a) If (1) is meaningful, then it is true only if there is an individual that "Santa Claus" is used to talk about that does not have being.
- (b) "Santa Claus" is used to talk about Santa Claus.

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- (c) If (1) is meaningful, then it is true only if there is an individual that is Santa Claus and that does not have being.
  - (d) Santa Claus has being if and only if there is an individual that is Santa Claus.

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- (e) if (1) is meaningful, then it is false.

(a) Quine argues against two different proponents of the Semantic Argument:

- **McX**: holds that Pegasus is **an idea** in people's minds.
- **Wyman**: holds that Pegasus is not a psychological entity, but instead a non-psychological, **nonactual** thing (for our purposes we will say: **nonexistent** thing).

Quine criticizes McX's view:

McX never confuses the Parthenon with the Parthenon-idea. The Parthenon is physical; the Parthenon-idea is mental (according anyway to McX's version of ideas, and I have no better to offer). The Parthenon is visible; the Parthenon-idea is invisible. We cannot easily imagine two things more unlike, and less liable to confusion, than the Parthenon and the Parthenon-idea. But when we shift from the Parthenon to Pegasus, the confusion sets in. . . (pp.4-5)

[ASK]: For differences between J.D. Vance and the **idea** of J.D. Vance.

**Quine's argument:** If there is any such thing as Pegasus, it bears the same relation to the Pegasus-idea as the Parthenon does to the Parthenon-idea. [BLACKBOARD]: **: Pegasus:the Pegasus-idea as Parthenon:Parthenon-idea.** But the Parthenon and its idea are vastly different. So, if there is any such thing as Pegasus, it not the same as the Pegasus-idea.

- (b) Recall that Wyman's position is that things like Pegasus have Being, but are nonexistent. Quine's objections include:
- i. The **implausibility** of the claim that there is such a thing as Pegasus. (Compare with Santa Claus, Hamlet); and
  - ii. The apparent **impossibility** (on pain of contradiction) of there being such a thing as **the round square**

But he also adds a new argument, **the argument from indistinguishability:**

Wyman's slum of [nonexistents] is a breeding ground for disorderly elements. Take, for instance, the [nonexistent] fat man in that doorway; and again, the [nonexistent] bald man in the doorway. Are they the same man, or two [nonexistent] men? How do we decide? How many [nonexistent] men are there in that doorway? Are there more [nonexistent] thin ones than fat ones? [...] These elements are well-nigh incorrigible. (p. 5, col. 2)

This is more of a **mess of lots of different arguments** than a single, clean line of reasoning. (Notice for instance,

the **intrusion of epistemology** when Quine asks, “How do we decide?”). The objection seems to be:

**Quine’s Lament** Wyman has no good way to explain what makes the nonexistent fat man in the doorway either the same as or different from the nonexistent bald man in the doorway.

Thus claiming either sameness or difference seems arbitrary and unmotivated.

[NOTICE]: Quine’s Lament presents a **homework problem**, rather than an out-and-out objection, for Wyman and his supporters. The homework problem is: **say under what conditions a nonexistent thing  $x$  and a nonexistent thing  $y$  are the same** (and under what conditions they are different). There are philosophers who have undertaken to solve this homework problem. I point you to Terry Parsons, “Referring to Nonexistent Objects”.

- (c) Quine for the most part **outsources** his criticism of the Semantic Argument to Bertrand Russell, “On Denoting”. He endorses Russell’s response to the Semantic Argument when the expression you slot in for ‘A’ is a **definite description**. Consider the example:

(3) The author of *Waverly* was a poet.

Quine says:

[I]n Russell’s translation, ‘Something wrote *Waverly* and was a poet and nothing else wrote *Waverly*’, the burden of objective reference which had been put upon the descriptive phrase is now taken over by words of the kind that logicians call bound variables, variables of quantification: namely, words like ‘something’, ‘nothing’, ‘everything’. These words, far from purporting to be names specifically of the author of *Waverly*, do not purport to be names at all; they refer to entities generally, with a kind of studied ambiguity peculiar to themselves. **[What in the world does this mean?]**  
(p. 6)

Quine here introduces one bit of crucial **terminology**:

A **variable** (alt.: **bound variable**, **variable of quantification**) is a word which, like “something”, “nothing”, and “everything”, is used to generalize over entities, rather than to talk about some particular entity.

[This diverges somewhat from what logicians call ‘variables’, but it’s close enough for present purposes.]

So: for **definite descriptions**, Quine’s answer is essentially the same as Russell’s: though they appear to refer to particular things, sentences containing definite descriptions serve instead to generalize over all things of a certain kind. Thus, the first premise of the Semantic Argument, which in this case holds that “the  $\phi$  is not”, if meaningful, requires for its truth that there be something to which ‘the  $\phi$ ’ refers, is simply false.

Russell’s gambit for expressions which, like ‘Pegasus’ and ‘Santa Claus’, appear to be names. Russell claims that these are really **definite descriptions in disguise**. So, Russell argues, the same rebuttal applies to them as to ‘the author of **Waverly**’.

[For the case of

(4) Pegasus is not.

, Quine suggests

(5) The winged horse that was captured by Bellerophon is not.

Notice that ‘**Bellerophon**’ needs **paraphrase** too, since he’s as mythical as Pegasus. And the paraphrase we choose **had better not contain ‘Pegasus’!**]

Quine considers a problem: What if **no definite description seems adequate** to capture the import, *e.g.*, of ‘Pegasus’: No translation of (2) would present itself. Here’s Quine’s proposal:

<p>If the notion of Pegasus had been so obscure or so basic a one that no pat translation into a descriptive phrase had offered itself along familiar lines, we could still have availed ourselves of the following artificial and trivial-seeming device: we could have appealed to the <i>ex hypothesi</i> unanalyzable, irreducible attribute of <i>being Pegasus</i>, adopting, for its expression, the verb ‘is-Pegasus’ or ‘pegasizes’. The noun ‘Pegasus’ could then be treated as derivative, and identified after all with a description: ‘the thing that is-Pegasus’, ‘the thing that pegasizes’. (p. 7, col. 1)</p>
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The proposal is that we have as a fall-back

(6) The thing that is-Pegasus is not  
as a paraphrase of (2), if no other definite description will  
serve.

**PROBLEM:** I suspect that this is just a logician’s trick,  
and doesn’t solve the underlying problem.

(7) This [cupping empty hands] is a cute, little, brown one.  
This sentence seems meaningless in the sense that there  
doesn’t seem to be any claim made: the speaker cannot in  
principle be understood. Further, the claim

(8) There is no such thing as this thing here [cupping  
empty hands]

seems **either false or meaningless**. Now suppose Quine  
offered the following **paraphrase** of (5):

(9) The individual that is-this-thing-here [cupping empty  
hands] is not.

Does this help?

But someone who thinks ‘Pegasus’ is not analyzable in  
terms of some ordinary definite description might well hold  
that ‘Pegasus’ and ‘this’ behave similarly in this respect:  
they are both what Russell calls ‘**names in the strict,  
philosophical sense**’.

#### 4. Quine’s method for determining the ontological commitments of a given theory:

[**RECALL**]: the ontological commitments of a theory are those  
claims about what there is that the theory endorses or requires.

Does *nothing* we may say commit us to the assumption of  
universals or other entities which we may find unwelcome?  
[...] We can very easily involve ourselves in ontological  
commitments by saying, for example, that *there is some-  
thing* (bound variable) which red houses and sunsets have  
in common; or that *there is something* which is a prime  
number over a million. But this is, essentially, the *only* way  
we can involve ourselves in ontological commitments: by  
our use of bound variables. (p. 9, col. 1)

To be assumed as an entity is, purely and simply, to be  
reckoned as the value of a variable. (p. 9, col. 1)

- (a) **TERMINOLOGY:** A **value** of a variable (*e.g.*, a value of the variable ‘something’) is a thing that the variable **generalizes over**.

[**EXAMPLE**]: If I say

(10) Something is bothering me

my generalization is true in a wide variety of cases: what’s bothering me could be a toothache, a friend, a shrinking ice sheet, a space shuttle, or what have you. Each of these things is a **value of my variable** ‘something’.

- (b) **Contrast:**

**Wyman:** A theory is committed to the being of anything for which it uses a name or description.

**Quine:** A theory is committed only to the being of those things which have to be among the things generalized over by ‘something’, ‘everything’, *etc.*, in order for the theory to be true.

- (c) How does this look **in practice**? Suppose as part of our theory of physics we claim:

(11) Some atoms have only one proton.

This implies that **there are atoms** and **there are protons**.

**Application:** physics is ontologically committed to the existence of numbers, because it uses a mathematical theory (arithmetic) which says that there are infinitely many numbers.

- (d) **Possible Trouble:** Suppose as part of our theory of history we claim:

(12) Titus Andronicus killed his son for the sake of Rome.

[**ASK**]: What is the Russell-Quine analysis of this sentence?

(13) There is at least one sake of Rome; there are no more than one sake of Rome; and every sake of Rome is such that Titus Andronicus killed his son for it.

If (11) (and so the sentence (10) it analyzes) is to be true, there must be at least one sake. Our theory of history is thereby ontologically committed to **sakes**. (And likewise to **behalfs**.)

- (e) Quine is justifiably suspicious of the idea that, in addition to people, institutions, cities, nations, *etc.*, there are also **all the sakes of those things**. And he suggests a way of getting out of such commitments:

[W]hen we say that some zoological species are cross-fertile, we are committing ourselves to recognizing as entities the several species themselves, abstract though they are. We remain so committed at least until we devise some way of so paraphrasing the statement as to show that the seeming reference to species on the part of our bound variable was an avoidable manner of speaking. (p. 9, col. 2)

- (f) This gives us a **method for avoiding ontological commitments** without denying truths like (10):

**Paring by paraphrase** if you think there are no  $\phi$ 's (*e.g.*, no sakes, no behalves, no species) but the truths of some theory you hold seem to say that there are  $\phi$ 's, try to paraphrase the claims to eliminate the apparent commitment to  $\phi$ 's.

We might paraphrase away apparent commitment to sakes, for instance, by suggesting

(14) Titus Andronicus killed his son for Rome as a paraphrase of (8). You say, in effect, **“I know it looks like I’m talking about the sakes of things. But whenever it looks that way, I’m really just talking about the things themselves.”**

5. **Quine’s Method for Metaphysics:** How do we determine what there is?

Our acceptance of an ontology is, I think, similar in principle to our acceptance of a scientific theory, say a system of physics: we adopt, at least insofar as we are reasonable, the simplest conceptual scheme [*i.e.*, theory] into which the disordered fragments of raw experience can be fitted and arranged. (p. 10, col. 2)

6. **Natural Science is king!:** Natural science is a formalization of our attempts to make sense of our experience. Quine is

suggesting that we should lift our ontology off only what is required by a complete **science of everything**.

7. **Simplicity rules!**: [EXAMPLE]: epicycles.
8. **Objects that we don't directly observe get in by the back door**: we should believe in mathematical objects because we should believe in mathematicized physics.
9. **The simplicity of the whole theory is what matters**
10. **In practice**: we should pare by paraphrase anything we can.
11. **A worry**: Church on misogynistic ontologies.