W.V.O “Van” QUINE (1908-2000)

The Great Philosophers
Trinity College Dublin
Lecture Series (Autumn 2021)

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Moral Philosophy (1837) -
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An tOllamh
Fealsúnacht mhorálta (1837)-
Roinn na Fealsúnachta |
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Part I

Genealogy
Genealogy (I): Personal

The (Mathematical and Logical Turn)

Gottlob Frege (invents logic for the 20th century, 1879)

Rudolf Carnap (born 1891) is one of Frege’s last students (c.1914)

Quine (1923) (Harvard PhD) “re-writes” Principia Mathematica (Russell and Whitehead)

Carnap (born 1891) becomes Quine’s mentor

Carnap invites Quine to participate in the Vienna Circle

(other prominent members/associates … Popper, Godel, Mach, von Mises).

The mission of the Vienna Circle was to revamp and constrain empiricist philosophy in light of the 20th century sciences (logical and natural).
Genealogy (II): Empiricism

18th Century Classical Empiricism (Locke, Berkeley and Hume)
19th Century Empiricism (John Stuart Mill, Ernst Mach)
Early 20th Century Empiricism (The Vienna Circle … “Logical Positivism” ….)
Late 20th Century Empiricism (Quine)

Two Empiricist Maxims

All knowledge is empirical knowledge: it is derived from and dependent upon the operation of the senses.

The content of all we say and think is empirical content.
THE MURDER OF PROFESSOR SCHLICK
THE RISE AND FALL OF THE VIENNA CIRCLE
DAVID EDMONDS
Genealogy (III): Pragmatism

Late 19th Century “American” Pragmatism
(Charles Pierce, William James, John Dewey)

A Pragmatist Maxim

"Consider the practical effects of the objects of your conception. Then, your conception of those effects is the whole of your conception of the object."

[C.S. Pierce].
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Part II

Big Ideas
Metaphysics

Physicalism

All of being is what our best physical theories allow for.

Notably this includes not only physical entities but also the “abstract” objects of mathematics.

[Quine is a Platonist rather than a Nominalist about mathematical objects.]
Metaphysics

Property “Nominalism”

Everything that exists is an object (a particular)
No properties (no “universals” in addition to particulars). Reality consists in the physical and mathematical objects and how these things are.
With Ockham, there are no entities corresponding to our predicates (“is blue”, “is negatively charged”). [Quine is a Nominalist rather than a Platonist about mathematical objects.]
Epistemology

Naturalism

Our theory of knowledge is doubly constrained by the natural sciences:

What they explain about us (and how they explain it)
By “meta-scientific” reflection on the successful methods of the natural sciences.
There is no “a priori” knowledge
Although all knowledge is derived from sensory experience, it is an empirical (scientific) discovery that knowledge is made possible by innate (endogenous) mechanisms.

The classical empiricist conception of the mind as a \textit{tabula rasa} is shown false by natural science.
The proper unit (locus) of what we can know and what we can have evidence for is not the single sentence but rather a Total Theory (the entire network of an individual’s beliefs).

When experience proves recalcitrant (does not fit our belief system) we always have options as to how we make adjustments in response. Scientific rationality often affords more than one legitimate adjustment.
Although all knowledge is derived from sensory experience, it is an empirical (scientific) discovery that knowledge is made possible by innate (endogenous) mechanisms.

The classical empiricist conception of the mind as a *tabula rasa* is shown false by natural science.
It is the Total Theory that is the proper unit of “meaning”: not its sentence-by-sentence elements. (This follows from conformational holism.) Accordingly, we must reject two “Dogmas” of previous empiricism.
Philosophy of Language

Semantic Holism

Accordingly, we must reject two “Dogmas” of (ALL) previous empiricism.

1. The Analytic/Synthetic Distinction

2. Reduction of sentence-meaning to sensory experience.
1. The Analytic/Synthetic Distinction (Rejected!)
   - All vixens are foxes
     (Analytic?)
   - All vixens are evolved from Caniformus Canina
     (Synthetic?)
1. The Analytic/Synthetic Distinction (Rejected!)

It is not the case that there is a determinate distinction within the sentences in our belief system into: (a) those true in virtue of matters of empirical fact and (b) those true in virtue of meanings alone.

That every sentence of the form “P or not-P” is true, is just as much a matter of scientific discovery as it is a decision about what the logical words are to mean.
Reduction of sentence-meaning to sensory experience. (Rejected!)

For any meaningful sentence “There is a red apple in front of me” there is a set of experiences that would confirm it and a set of experiences that would disconfirm it. The confirming set of experiences (the verification conditions) is to be identified as the meaning of the sentence.
Philosophy of Language
Semantic Holism

1. Reduction of sentence-meaning to sensory experience.
   (Rejected!)
   “There is a red apple in front of me”
   The confirming set of experiences (the verification conditions) is to be identified as the meaning of the sentence ??
   No. Because confirmation is holistic, that claim is false.
Philosophy of Language

Behaviourism

The entire data set for language learning is the observation of linguistic behaviour in physical and social contexts.

There can be no more to meaning than what best fits these data.

This leaves meaning in a state of radical indeterminacy. There is often no fact of the matter about what sub-sentential expressions (words) mean.
Philosophy of Language

Behaviourism

Quine (in *Word and Object* 1960) famously assimilates the position of the human learning a (first) language to that of an a linguistic anthropologist who is attempting to translate the language of a previously unknown linguistic community.

[This leaves meaning in a state of radical indeterminacy. There is often no fact of the matter about what subsentential expressions (words) mean.]
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Part III

Ethos:
No First Philosophy
No “First Philosophy”

There was a time when the efforts of humans to gain knowledge and make progress did not give (emerging) science a privileged position.

The various methods of enquiry described by (say) Aristotle were all (pragmatically) worth a go.

Rational reflection on the natures of things
Consultation of the sentiments
Rational explanations of why thins are as they are etc.
No “First Philosophy”

There was a time when the efforts of humans to gain knowledge and make progress did not give (emerging) science a privileged position.

As long as that situation persisted, it was natural (and perhaps even justified) to think of philosophy as having a privileged position in enquiry. Philosophy (metaphysics) could trump science, or at least had to be consulted, before scientific theories (practices, approaches) could be intellectually endorsed.
No “First Philosophy”

There was a time when the efforts of humans to gain knowledge and make progress did not give (emerging) science a privileged position.

Pragmatic appraisal, however, destroys that notion.

Post-enlightenment (experimentally based and mathematically informed) natural science is a historic game-changer.

That is the paradigm of what counts as knowledge and how it is acquired.
No “First Philosophy”

No more First Philosophy (no more Philosophy first!)

Post-enlightenment natural science is the paradigm of what counts as knowledge and how it is acquired.

There is no rational space left for a “first philosophy” that seeks to “appraise” or “correct” or (even) “justify” established and outstandingly successful scientific methods.
No “First Philosophy”

No more First Philosophy (no more Philosophy first!)

There is no rational space left for a “first philosophy” that seeks to “appraise” or “correct” or (even) “justify” established and outstandingly successful scientific methods.

Insofar as it aims to be a part of COGNITIVE PROGRESS* all that is left to theoretical philosophy (metaphysics, epistemology etc.) is to act as the most abstract and general part of science.
No “First Philosophy”

No more First Philosophy (no more Philosophy first!)

Insofar as it aims to be a part of COGNITIVE PROGRESS* all that is left to theoretical philosophy (metaphysics, epistemology etc.) is to act as the most abstract and general part of science.

Theoretical philosophy is part of meta-science: the part of science that takes science itself (theory construction, theory choice etc.) as its subject-matter
No “First Philosophy”

Insofar as it aims to be a part of COGNITIVE PROGRESS* all that is left to theoretical philosophy (metaphysics, epistemology etc.) is to act as the most abstract and general part of science.

It is important to emphasize that this does not deem all other parts of philosophy to be worthless. It is simply to say that whatever value that has is not to be assimilated to the acquisition of knowledge.
No “First Philosophy”

No more First Philosophy (no more Philosophy first!)

It is important to emphasize that this does not deem all other parts of philosophy to be worthless. It is simply to say that whatever value that has is not to be assimilated to the acquisition of knowledge.

This might include intellectually satisfying outcomes such as explanation and understanding. But these stand in indirect relations to knowledge.
Part IV

A Case Study: The Quinean Explication of Metaphysics
We are (perforce) Charitable Interpreters and Sense-Making animals.

What were they getting at? versus What did they mean?

The Rounding Out of Minimal Theories
Metaphysics Explicated

(Ancient, Medieval ... pre-Kant ... then German Idealism ....)

There is an intellectual but non-scientific discipline in good-standing that legitimately addresses questions about the nature of reality.

This discipline has its own methods (analysis, a priori reasoning, rational intuition ...) and its own results (the discovery of explanatory connections in the world that science “presupposes” but does not directly address ...).
This project provokes (in the 20th century) two extreme reactions. The project is reactionary and cognitively regressive. It is the historic task of contemporary philosophy to bury it. (Logical Positivism)

The (Aristotelian) project is to be recovered from the unjust criticisms of the narrow and prejudiced empiricist and positivist traditions, rejuvenated by the possibilities of applying within it the logical and mathematical techniques that the 20th Century affords us. (Analytic Metaphysics)
Metaphysics Explicated

The Classical Metaphysical Project

This project is neither to be buried nor unreservedly praised: it is to be explicated.

(Quine)
Metaphysics Explicated

The Classical Metaphysical Project

This project is neither to be buried nor unreservedly praised: it is to be explicated. Classical metaphysics (historically) is a proto-scientific project.

From our own perspective (that of contemporary post-Enlightenment science) we can see what was right with the project and what was wrong with it.

What was right about it was that it formulated and posed many a good and general question about the nature of reality. (Although we cannot make sense of all.)

What was wrong with it was the conception of what kind of intellectual efforts would be (indeed, are) required to provide answers to these questions.
The “Fundamentalist” Tradition in classical metaphysics poses questions such as the following.

What are the ultimate elements of Being in which all of Being consists.

What is the basis of all change, such that nothing changes unless there is change in these fundamental respects?

Is reality fundamentally composed of objects and properties or objects alone?

Do any entities exist while not existing in space and time?
Metaphysics Explicated

The Classical Metaphysical Project

What are the ultimate elements of Being in which all of Being consists.
What is the basis of all change, such that nothing changes unless there is change in these fundamental respects?
Is reality fundamentally composed of objects and properties or objects alone?
Do any entities exist while not existing in space and time?
These questions can be understood and addressed insofar as we can map them onto questions of and about our best Total Theory.
That theory is scientific.
And the mapping process is Explication.
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When we explicate, it is an exercise in Charitable Interpretation. We are trying to make the best of what our predecessors are getting it. There will be no facts about what they really meant. And we can often tell various different stories between which there is nothing to choose.
Metaphysics Explicated

The Classical Metaphysical Project

When we explicate, it is an exercise in Charitable Interpretation. We are trying to make the best of what our predecessors are getting it. There will be no facts about what they really meant. And we can often tell various different stories between which there is nothing to choose.

This is standard practice in the History of Science

Examples: “phlogiston”, “weight” electron” ........
Questions of (classical) Fundamentalist Metaphysics are to be mapped onto those of and about our best and most general theory of Scientific Cosmology (fundamental physics).

That theory is of course, a work in progress (since there is no consistent unification of what we take to be our best theory of space/time/gravity and our best theory of mechanics/electrodynamics. But suppose .........
Questions of (classical) Fundamentalist Metaphysics are to be mapped onto those of and about our best and most general theory of Scientific Cosmology (fundamental physics).

What Quine has in mind is, in fact, not exactly, the formulations of physical theories that are used in calculation and prediction.
The Einstein Field Equations
\[ G = \text{Ric} - \frac{1}{2} g S \]

The Born Rule
If the system is in a state \( \Psi \), then the probability \( P(a = \lambda_i | \Psi) \) that the eigenvalue \( \lambda_i \) of \( a \) is found when \( a \) is measured is
\[ P(a = \lambda_i | \Psi) = |(ei, \Psi)|^2. \]
Quine has in mind logically explicit versions of these on which quantification is explicit …

\[ \forall x \ldots \exists y \]

It is these CANONICAL formulations that metaphysically telling. It is these sentences that express what fundamental being consists.
I conclude with two conclusions that Quine draws from this

The first is his Mathematical Platonism

The Einstein Field Equations involve terms for Tensors
The Born Rule involves Probability Measures

Ultimately these are expressed canonically in the notation of set theory. We cannot formulate such theories without some such language.
Thus we are committed to believing in the existence of mathematical entities.
I conclude with two conclusions that Quine draws from this:

The second is his Modal Skepticism.

No such theories deploy MODAL language:
- necessity
- possibility
- essence
- potential
- causation
- law

So whatever role that kind of talk is playing in science it is not telling us that there is any real modality in the world.
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END