# Logical Positivism and the Verification Principle Lecture 1

1A Meaning

Verificationism

Annie Bosse

- Will make slides available on Moodle
- Won't leave time at the end of each lecture for questions. If you have questions - especially clarificatory ones - raise your hand to let me know
- Annie Bosse - ab2436@cam.ac.uk
- Reading list at the end of these lectures

Guide to the lectures
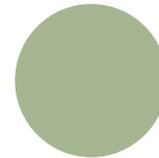
Preview: Verificationism

- Synthetic sentences have to be empirically verifiable in order to be meaningful.

    - 'Empirically verifiable' = responsive to empirical evidence

- Important school of thought in 20th century philosophy of language, but also lives on, in slightly different form, in philosophy of language today.

Lecture plan

1. LOGICAL POSITIVISM AND THE VERIFICATION PRINCIPLE

2. MORE PROBLEMS WITH THE VERIFICATION PRINCPLE

3. DUMMETT'S VERIFICATIONISM

4. QUINE AND VERIFICATION

Logical Positivists: Vienna circle

- Group of scientists and mathematicians
- Variable membership, including:
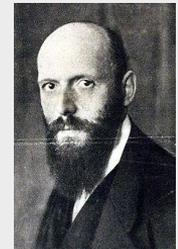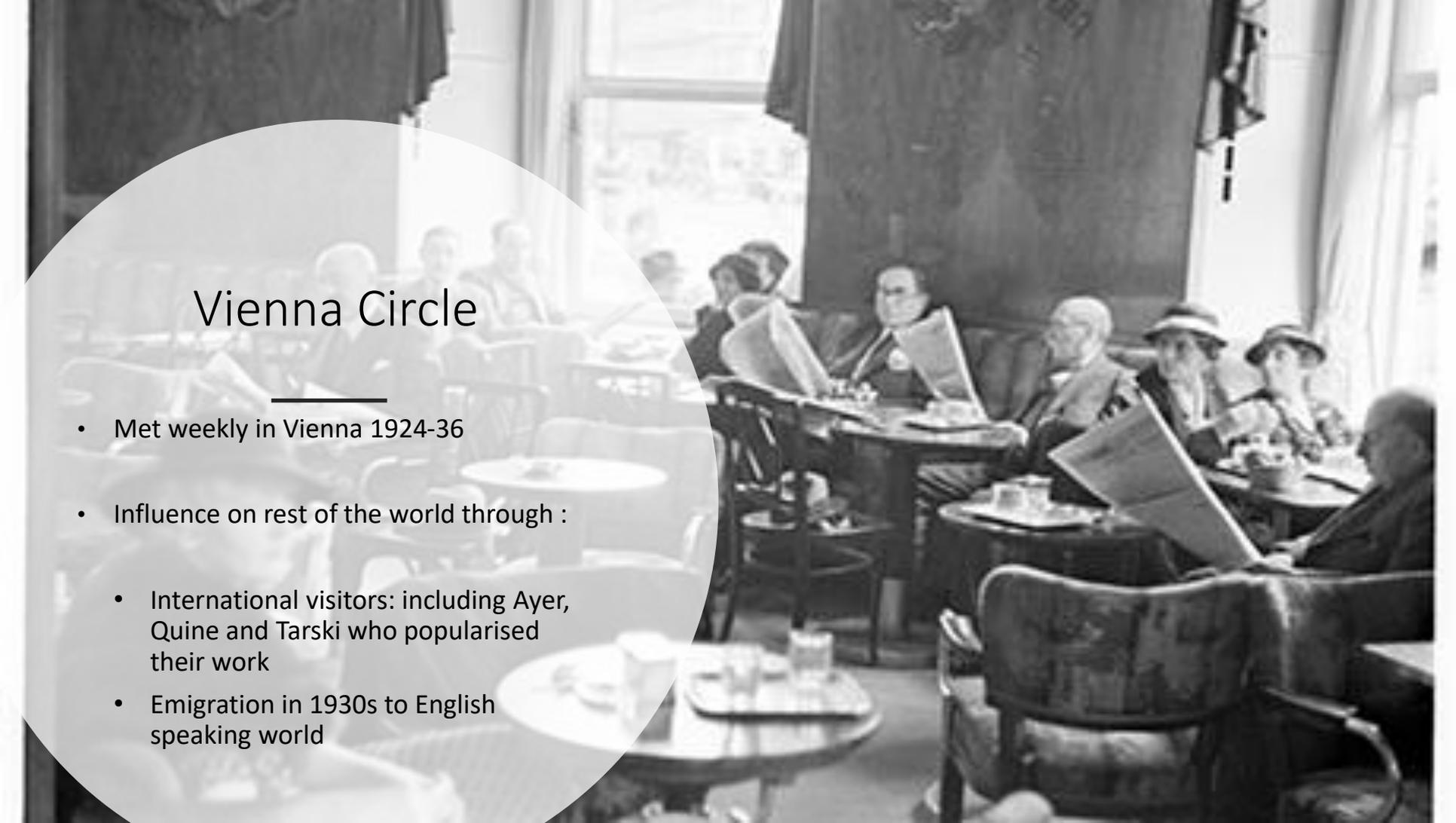
Moritz Schlick

Rudolf Carnap

Kurt Gödel

Hans Hahn

Olga Hahn-Neurath

Otto Neurath

Vienna Circle

- Met weekly in Vienna 1924-36

- Influence on rest of the world through :

  - International visitors: including Ayer, Quine and Tarski who popularised their work

  - Emigration in 1930s to English speaking world

Logical Positivism: the motivations

The Logical Positivists deeply admired the natural sciences

The success of natural sciences, they thought, exemplified the potential of rigorous inquiry for both intellectual and social ends
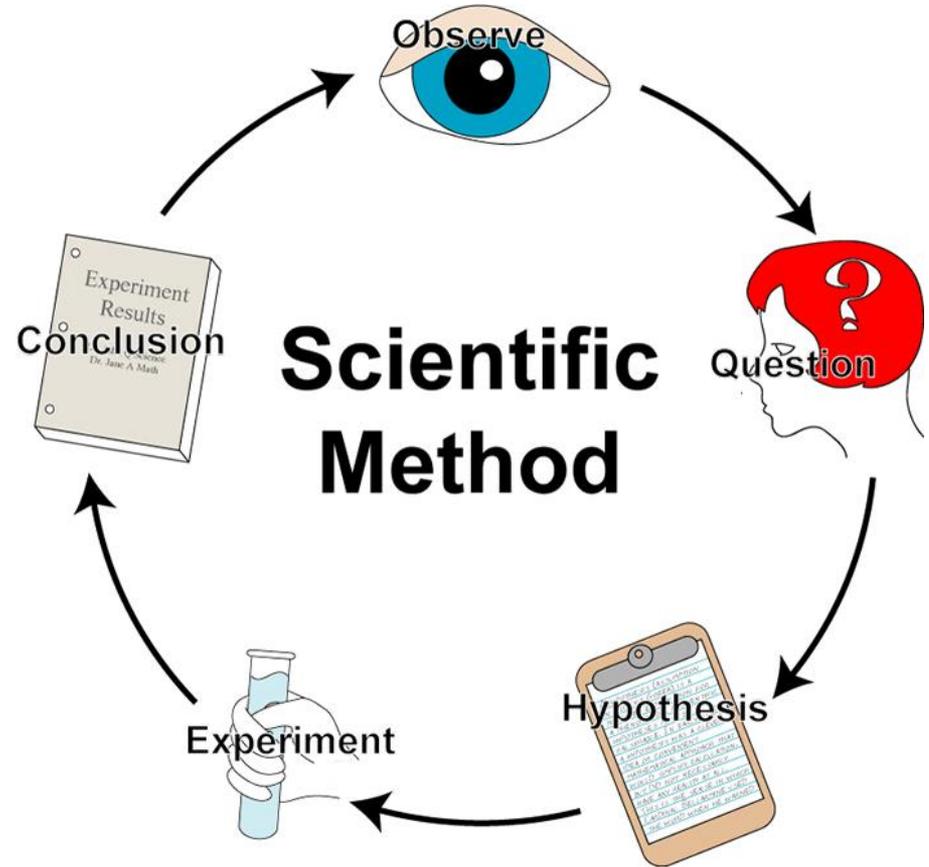
Improving philosophical methodology

Logical Positivists were suspicious of many areas of philosophy, including metaphysics, aesthetics and ethics

Aim: To improve philosophy by questioning typical statements and underlying methodology of these subdisciplines.

Hume's fork

"If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames: for it can contain nothing but sophistry and illusion."

Hume, 1748, An Enquiry Concerning Human Understanding
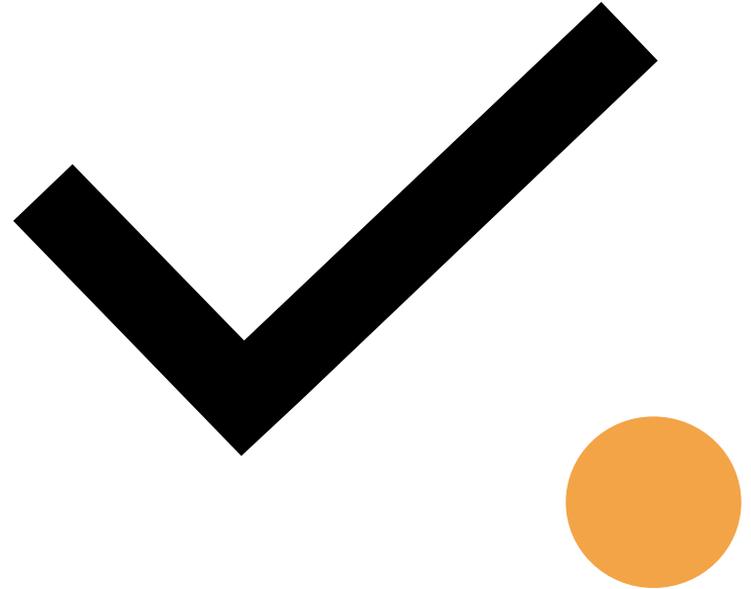
From Hume's Fork to Verificationism

- Vienna Circle thought that the source of Hume's suspicions was that the statements involved - statements about God, the self, ethical judgements or others - were **meaningless.**

- "one cannot overthrow a system of transcendent metaphysics merely by criticizing the way in which it comes into being. What is required is rather a criticism of the nature of the actual statements which comprise it." Ayer (1946)

- This is where the verification principle comes in: tells you whether a given statement is meaningful.
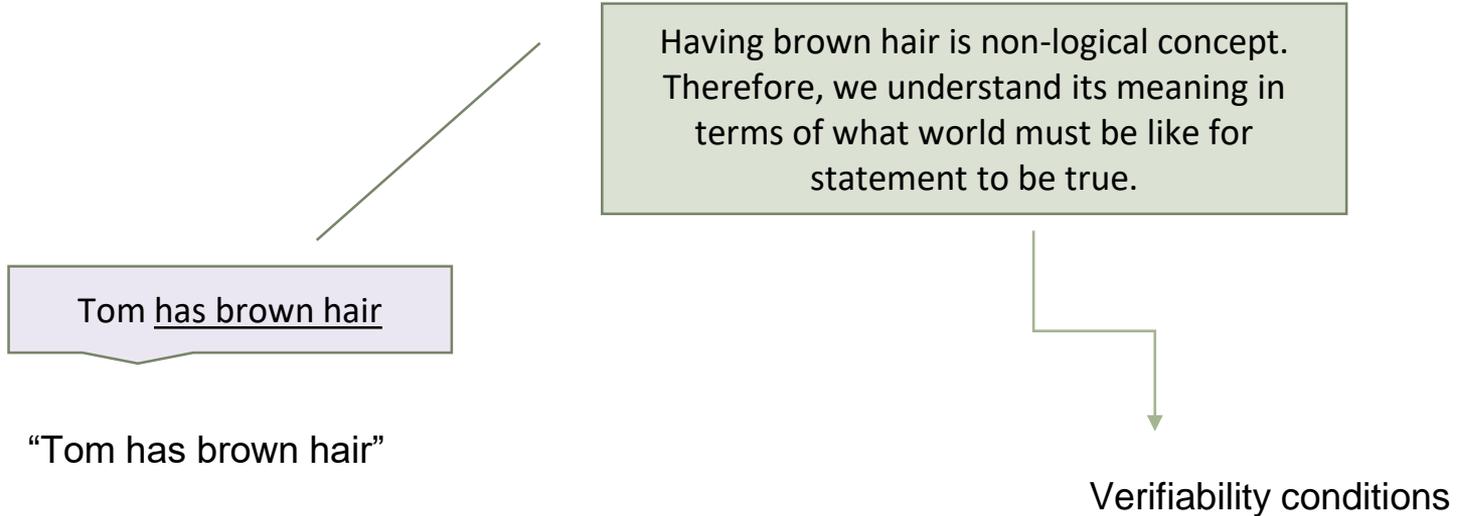
Verification principle

A synthetic statement is meaningful iff it is empirically verifiable.

- Not concerned with analytic statements, those that are true in virtue of their meaning alone
- Only non-contradictory synthetic statements as contradictory ones can never be verified

Question: Theory of meaning vs theory of meaningfulness (See Uebel)

Empiricism & verification principle

Tom has brown hair

"Tom has brown hair"

Having brown hair is non-logical concept. Therefore, we understand its meaning in terms of what world must be like for statement to be true.

Verifiability conditions

Preview

- Either **too strong** and rules out fine statements or **too liberal** and doesn't rule out all the dodgy ones.

- Other objections too, including what status the verification principle itself has, but these require careful exegetical examination and so we will ignore them. (See Uebel)

Strong version

A synthetic statement is meaningful iff it can, in practice, be conclusively verified.

'in practice':

- statements about the past

Hume sneezed at 9.30am on 2nd March 1772

So usually liberalised to 'in principle' where this is understood as logically possible

Strong version

A synthetic statement is meaningful iff it can, in principle, be conclusively verified.

'conclusively verified':

- A statement S is conclusively verifiable iff there is some finite, consistent set O of observation statements such that O logically entails S

(See Soames for precise formulations)

Interlude: Observation sentences

• An observation statement is one that could be used to record an observation. Observation statements assert that specifically mentioned observable objects have, or lack specific observable characteristics.

• *The room is cold, This glass is full, The dog is barking*

• More complications lurking (See Hacking)

Problems with strong version

A synthetic statement is meaningful iff it can, in principle, be conclusively verified.

Universal generalisations:

- All mammals have three middle ear bones

No finite, consistent set of observation sentences will ever logically entail a universal generalisation. See Hume's Problem of Induction.

Problems with strong version

That the strong verification principle rules out synthetic universal generalisations is especially bad because it's exactly these statements that articulate those scientific theories the logical positivists held up as an example of meaningful inquiry.
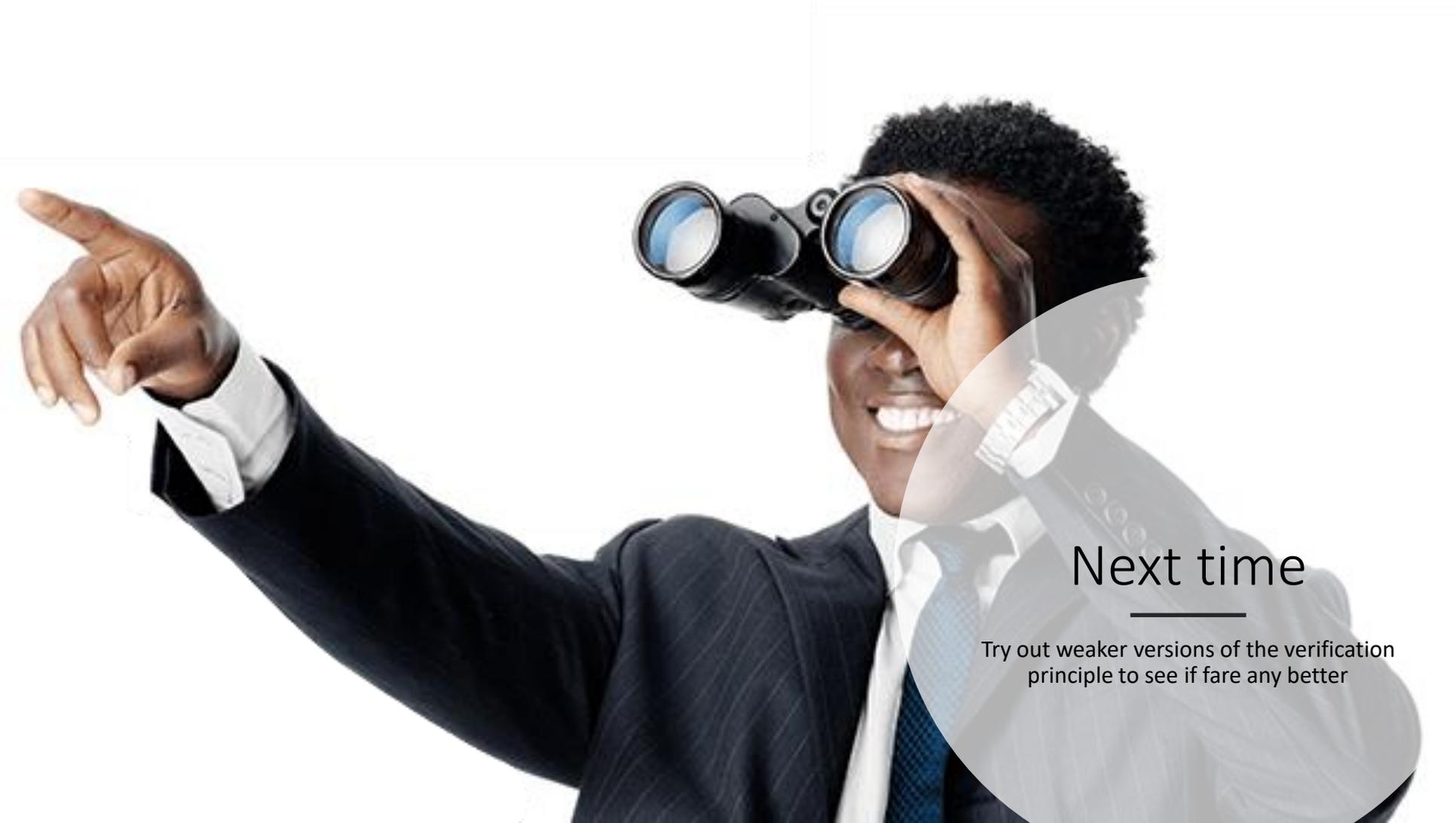
Next time

Try out weaker versions of the verification principle to see if fare any better

Reading

- Ayer, A. J. (1936). *Language, Truth, and Logic*. London: V. Gollancz.

- Misak, Cheryl, Verificationism: Its History and Prospects (London: Routledge, 1995), especially ch. 2.

- Hacking, Ian, Why Does Language Matter to Philosophy? (Cambridge: Cambridge University Press, 1975), ch. 9 'A.J. Ayer's verification' (pp. 93102). Also available online at: http://doi.org/10. 1017/CBO9780511627873.010.

- Soames, Scott, Philosophical Analysis in the Twentieth Century. Vol. 1. The Dawn of Analysis (Princeton, NJ: Princeton University Press, 2003), ch. 13. Available at https://www.degruyter.com/view/product/458905

- Uebel, Thomas, Verificationism and (Some of) its Discontents. Journal for the History of Analytical Philosophy Vol 7(4)