The Rise and Fall of the Empiricist Criterion of Meaning

Seminar 11

PHIL2120 Topics in Analytic Philosophy

7 December 2012

Admin

Required reading for this seminar:

30 November: Soames Ch 13

Optional Reading: Godfrey Smith, *Theory and Reality* Ch 2

14 December: No seminar

Essay 2 is due 8 Jan 5pm, submit by email to danm@hku.hk

Definitions

S is **analytically true** iff S is **true** in virtue of what S means

S is **analytically false** iff S is **false** in virtue of what S means

S is **synthetic** iff S is neither analytically true or analytically false

Logical positivist doctrines 1

For any sentence S,

AM1)S is analytically true iff S is necessary

AM2) S is analytically false iff S is impossible

AM3) S is meaningful and synthetic iff S is contingent

Logical positivist doctrines 2

For any sentence S,

AK1) S is analytically true iff S is a priori knowable

AK2) S is analytically false iff S is a priori knowable to be false

AK3=VCM)S is meaningful and synthetic iff S is testable,

where S is testable iff it is in principle verifiable as true or false by means of observation

Logical positivist doctrines 3

E1) How a priori knowledge is possible can be explained in terms of analyticity

E2) How we can know that certain propositions are necessary can be explained in terms of analyticity

Last week we discussed reasons to deny E1 and E2.

The verificationist criterion of meaning

The verificationist criterion of meaning is (AK3=VCM)

Rationale for the verificationist criterion: For a sentence to be meaningful its truth value must make some potential to our sensory experiences: it must make a difference to us somehow (motivated by content empiricism)

What is it for a sentence to be testable?

In order for the verificationist criterion to be acceptable, we need to have a clear account of what it is for a sentence to be “in principle verifiable as true or false by means of observation”, or “testable” for short.

To investigate whether such an account can be given, we need the notion of an observation sentence.

Observation sentences

Def: An observation sentence A is a sentence that describes how things are represented to be by a possible perceptual or sensory experience.

Examples of observation sentences: ‘a is red’, ‘b is next to c’

Attempt 1

Attempt 1: S is testable iff there is a finite consistent set O of observation sentences such that O logically entails S

Def: A set O of sentences logically entails a sentence S iff the conjunction of the sentences in O logically entails S

Problem with attempt 1

(1) All swans are white

Suppose (for simplicity) that sentences of the form ‘Sa’ and ‘Wa’ are observational sentences, where ‘S’ symbolises ‘is a swan’ and ‘W’ symbolises ‘is white’.

Then no finite consistent set of such sentences can logically entail (1).

Hence, under attempt 1, VCM falsely classifies (1) as meaningless

Attempt 2

Attempt 2: S is testable iff there is a finite consistent set O of observation sentences such that O logically entails the falsehood of S

Problem with attempt 2

(2) There is a blue swan

No finite consistent set of observations sentences can logically entail the falsehood of (2).

Hence, under attempt 2, VCM falsely classifies (2) as meaningless

Attempt 3

Attempt 3: S is testable iff there is a finite consistent set of observation sentences such that either O logically entails S or O logically entails the falsehood of S

Ayer discusses this attempt, but rejects it, in Language, Truth and Logic

Problem 1 with attempt 3

(3) For every man, there is a woman who loves him

There is no consistent set of observation sentences that logically entails (3) or logically entails the falsehood of (3). (See Soames p 280)

Hence, under attempt 3, VCM falsely classifies (3) as meaningless

Problem 2 with attempt 3

(4) The surface is being bombarded by electrons

Scientists don't start from observations and deduce (4).

Rather they combine (4) with the rest of their scientific theories (including theories about their experimental apparatus and observational sentences describing experimental conditions) to derive further observational sentences.

Problem 2 with attempt 3 (cont)

If these further observational sentences turn out to be true, their whole theory is to some extent confirmed; while if they turn out false, the whole theory needs to be modified

It follows from this that there is no consistent set of observation sentences that logically entails (4) or logically entails the falsehood of (4).

Attempt 4 (Endorsed by Ayer in LTL 1936)

Attempt 4: S is testable iff S, by itself, or in conjunction with some other sentences P, Q, R… logically entails some observation sentence O that is not entailed by P, Q, R… alone

Idea: What makes a synthetic sentence true is not that there are some possible observations that prove it to be true or false, but only that there are some possible observations that are relevant to determining whether it is true or false.

Problem with attempt 4

Result: For any synthetic sentence S, there is an observation sentence O such that O logically follows from S and 'S→O', but does not follow from 'S→O' alone. (See Soames p285 for proof)

It follows from this result that, under attempt 4, VCM classifies every synthetic sentence as meaningful, even those that are nonsense!!

Argument that VCM self-refuting

P1) VCM isn't testable by observations

P2) VCM isn't analytically true or false

P3) Hence, according to itself, VCM is meaningless!!

P4) Hence, VCM is not true

Response 1

(*) S is true in virtue of its meaning iff, necessarily, if it has the meaning it actually has, then it is true

It follows from (*) that any necessary truth is analytically true.

Response: Since (*) is true, and VCM is necessarily true, VCM is analytic

Problem with response 1

If this response works, then the response can also be used to argue that the ethical and metaphysical claims positivists want to claim are meaningless are analytic, and hence meaningful according to VCM.

Logical positivists would reject (*) as an account of analyticity, and instead endorse something like (**).

(**) S is analytically true iff its truth logically follows from its meanings.

Two upshots

i) Given the logical positivists conception of analyticity, it is no longer so obvious that every necessary sentence is analytically true

ii) We (non-logical-positivists) might defend VCM by rejecting the logical positivist conception of analyticity.

Response 2

VCM is analytic since we can stipulate it to be true.

Problem: But then we have just stipulated a new meaning for ‘meaning’ and VCM becomes uninteresting.

See Carnap *Philosophy and Logical Syntax* (1935) for a more sophisticated proposal along these lines.