

### Verificationism: Schlick, Reichenbach

**GENERAL REMARKS ON LOGICAL POSITIVISM.** We can identify two major trends in logical positivism: the idea that philosophy's proper task is the study of meaning and the idea that much traditional philosophy is confusion and nonsense. So the question becomes: how do we determine the meaning of a proposition  $p$ ? Suggestion: we determine the meaning of  $p$  by using the principle of verification—that is, by indicating the circumstances when  $p$  is true. Thus comes the verification theory of meaning (VTM). The problem with many a traditional philosopher was that they queried the truth of  $p$  without first understanding clearly what  $p$  meant. And more: sometimes they queried the truth of a proposition which had no determinate meaning.

**UNANSWERABLE QUESTIONS.** Schlick's selection offers a helpful preview of the approach taken by VTM and of its significance for general philosophy. We have to distinguish between two kinds of unanswerable questions. Some questions are *empirically impossible* to answer. Examples include, 'What was Homer's weight at birth?', 'Is there a piece of silver on Mars?' Within this category Schlick is careful to distinguish those that are merely *technically impossible* to answer (silver on Mars) and those that are *nomically impossible* to answer. Questions about the past may belong to that second category, since a law of nature, rather than our imperfect human capabilities, may prohibit us from travelling to the past. Nevertheless, Schlick believes, we can conceive of a situation where the laws of nature are different. We can then give a coherent description of what it would take to verify Homer's weight at birth.

*Question 1.* Do we have to give a description of time travel to make questions about the past meaningful?

Things are different with the questions that are *logically impossible* to answer. 'What is the nature of time?', 'What is existence?' belong to this category. They are the sort of questions asked by philosophers. They cannot be answered, because their meaning is not sufficiently, or not at all, elucidated. This is because they give us no indication of the way the answer is supposed to be found. There is no description of the verification procedure associated with these questions. Hence they are meaningless. And hence there are no genuine (i.e. meaningful) questions that are logically impossible to answer.

**BASIC ELEMENTS OF VTM.** In Reichenbach's selection we find a mature statement of VTM. In Hume's and Mach's vein, we begin with observation sentences (Reichenbach calls them 'direct sentences'). Next, we must introduce sentences about unobservables ('indirect sentences'). They will include universal generalisations: 'For all  $x$ ,  $x$  is  $F$ .' Then a question arises: how to connect between the two? We cannot say that direct sentences should be deduced from indirect ones: we assign meaning to generalisations on the basis of observation sentences! So better say that indirect sentences are inductively inferred from direct ones.

*Example 2.* The proposition 'Jim has five coins in his pocket' is meaningful, since we can describe the circumstance in which it is true—namely, when Jim has five coins in his pocket—though it may practically be difficult to conduct this verification procedure.

*Example 3.* The proposition 'The world consists of monads' is not subject to verification, and thus meaningless. So are the other propositions of traditional metaphysics.

*Question 4.* Which of the following propositions are meaningful, according to the principle of verification?

- (1) 'Gravity acts on every physical object in the universe.'
- (2) 'Nothing in the universe can exceed the speed of light.'
- (3) 'Brad Pitt is courageous.'
- (4) 'Cannibalism is a crime.'
- (5) 'Gold is the best investment asset.'
- (6) 'Paper is flammable.'
- (7) 'This mobile phone is fragile.'

**THE PROBLEM OF INDUCTION.** One novel element in Reichenbach's discussion is the link between induction and convention. The problem is: we begin with evidence about observables. So we cannot construct an inductive inference whose conclusion will be a statement about unobservables. If I have observed the sun rising in the past, I cannot draw conclusions about the sun rising in the future. What is missing is the premiss that the future will resemble the past. This is nothing but Hume's classical problem.

**THE PLACE OF CONVENTION.** Reichenbach offers a 'solution': we postulate the similarity between observables and unobservables. That is, we state that observables obey the same physical laws as unobservables. While for observables, physical laws (including the law of causality!) are empirical, for unobservables they are true by fiat. And so, the problem of realism is eliminated through conventions.

Another interesting claim Reichenbach makes is that unobservables are no less real than observables. Let us try to elaborate on this a bit ...