Verificationism, Part IA: Meaning.

Lecture II, *More Detail on Verificationism*, 10th November. Christopher J. Masterman (cm789@cam.ac.uk, christophermasterman.com)

Last week we outlined verificationism—a radical empiricist view which holds that meaningful sentences and verifiability are intimately connected. A lot of our statement of verificationism was vague. This week we'll look at some ways of trying to the view precise, particularly the notion of verifiability.

Before we begin, we should make it clear that the verifiability criterion **does not apply to analytic statements**—claims true in virtue of meaning. For instance, we saw last week that the claims of mathematics were taken to be analytic. We'll look in more detail at analytic claims next week. This week we focus on verifiability and how it can work as a criterion of meaning of non-analytic, or *synthetic* statements.

1. Making Verifiability Precise: Observation

1.1. Very abstractly, verificationism ties the meaningfulness of some sentence S to the some relation between S and observation. But what are we counting as observation, or an observation statement? What observation statements could be about was contested early on. Central to this debate was whether observation statements should include only one of the following two categories of statements.

1. Sense-Data: Statements which are only about one's own sense data.

2. Perceivable Entities: Statements which are about all perceivable objects.

A. J. Ayer in *LTL* thought observation statements conformed to (1.) and took the line from Russell that material objects are logical constructions out of sense-data. But this is problematic. On this view, any statement about material objects (and, similarly, other conscious beings) are really about my own sense data and absolutely nothing more. 'The table is brown' is *about* my own sense-data and nothing more.

1.2. Soames (2003: 276) suggests a liberal and informal characterisation of observations statements. 'An observation statement is one that could be used to record the result of some possible observation.' For example, statements like 'The book is green', 'The whiteboard is white', or 'The cup is empty'. This leaves some questions open: *who* is doing the observing? *how* are they observing? But we put these to one side.

2. Making Verifiability Precise: Conclusive Verifiability and Falsifiability

2.1. Now, for verifiability. Last week, we noted that verifiability isn't best framed in terms of conclusive verification—rather the question is whether possible experience is *relevant to the truth* of a sentence. It's worth now saying a little bit more about why verificationism in terms of *conclusive* verifiability is problematic.

Conclusive Verifiability: A statement *S* is conclusively verifiable iff there is some finite, consistent series $O_1, ..., O_n$ of observation statements such that $O_1, ..., O_n$ jointly logically entail *S*.

The verifiability criterion of meaning then becomes: *S* is meaningful iff *S* is conclusively verifiable.

2.2. This criterion of meaning is problematic because *universal generalisations* are not conclusively verifiable and so, by this criterion, are meaningless. For instance, 'All swans are white' is not entailed by any finite set of observation sentences. 'All swans are white' is, of course, false; but it's not *meaningless*.

2.3. Universal generalisations like this are *falsifiable* by observation. We define conclusively falsifiable:

Conclusive Falsifiability: A statement *S* is conclusively falsifiable iff there is some finite, consistent series $O_1, ..., O_n$ of observation statements such that $O_1, ..., O_n$ jointly logically entail $\neg S$.

What, then, of the criterion of meaning: *S* is meaningful iff *S* is conclusively falsifiable? This runs into a similar problem. *S* is conclusively falsifiable iff $\neg S$ is conclusively verifiable. But we know that universal generalisations are not conclusively verifiable and so their negations are not conclusively falsifiable. Many negations of universal generalisations are meaningful: any claim of the form 'At least one *A* is a *B*'.

2.4. One thought would be to *disjoin* conclusive verifiability and falsifiability. This results in the following criterion: *S* is meaningful iff *S* is *either* conclusively verifiable or conclusively falsifiable. This, again, doesn't work. Consider a claim like 'For every substance, there is a solvent' ($\forall x(Sx \rightarrow \exists yDxy)$), where Dxy is read as 'x dissolves in y'). This statement is *neither* conclusively verifiable nor conclusively falsifiable.

- **Not Conclusively Verifiable:** $\forall x(Sx \rightarrow \exists yDxy)$ is a universal generalisation and so no finite series of observation statements jointly entail it.
- **Not Conclusively Falsifiable:** The statement $\forall x(Sx \rightarrow \exists yDxy)$ is falsifiable iff its negation is verifiable. The negation of $\forall x(Sx \rightarrow \exists yDxy)$ is $\exists x(Sx \land \forall y \neg Dxy)$. This is not verifiable since it contains $\forall y \neg Dxy$.

3. Making Verifiability Precise: Weak Verifiability.

3.1. The core problem with each of these precise definitions of verifiability is that they appealed to *conclusive* verifiability or *conclusive* falsifiability. Instead, it looks like we should formulate our criterion in terms of *weak* verifiability. A. J. Ayer talks about observations being *relevant* (Ayer, 1936: 38–39):

Accordingly, we fall back on the weaker sense of verification. We say that the question that must be asked about any putative statement of fact is not, *Would any observations make its truth of falsehood logically certain*? but simply, *Would any observations be relevant to the determination of its truth or falsehood*?

How do we make this notion of relevance precise? Ayer's proposal was to take relevance of S to observation to mean that S entails (either alone, or in conjunction with certain other premises P, Q and R) some observation statement O which is not entailed by P, Q and R alone.

3.2. The immediate problem is that this is far too liberal a notion since it places no constraints on the extra premises P, Q, and R. For instance, 'The Absolute is lazy' is a *classic* metaphysical claim which the verificationists wish to deny is meaningful. Yet, from the premise (The Absolute is lazy $\rightarrow O$), where O is an observation statement, we conclude O. Thus, 'The Absolute is lazy' is weakly verifiable. In fact, any claim is weakly verifiable: the verifiability criterion given in terms of weak verifiability is simply trivial.

References

Ayer, A. J. (1936). Language, Truth, and Logic.

Soames, Scott (2003). Philosophical Analysis in the Twentieth Century, Volume 1: The Dawn of Analysis. Princeton University Press.