Realism and Idealism
Antirealism

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29/10/15

Antirealism

- Last week, we considered two of Michael Dummett's most celebrated arguments against realism: the acquisition argument and the manifestation argument.
- This week, we'll consider antirealism as a positive position.
- Again, we'll take Dummett as our guide.
- Let's begin by thinking about how the antirealist would reply to the acquisition and manifestation arguments.

Acquisition and manifestation

- The acquisition and manifestation arguments both attempted to establish that the following – for some domain D – is false, by *reductio*:

    The sentences of D have verification-transcendent truth-conditions.

- So, for the antirealist, the sentences of D do not have verification-transcendent truth-conditions.

- So the truth-conditions must be verifiable.

- We can make room for this by analysing truth in terms of *warranted assertability*. For a sentence to be true is for it to be *assertable*.

- Truth-conditions are replaced by assertability-conditions.

Meaning, truth and use

- On the classical *truth-conditional* view, meaning is intimately related to truth.
- The meaning of a sentence is explained by its truth-conditions, and of a subsentential expression by its contribution to truth-conditions.
- For the antirealist *use-theoretic* view, truth is warranted assertability, so meaning is intimately linked to warranted assertability.
- The meaning of a sentence is explained by the circumstances under which its assertion is warranted, and of a subsentential expression by the conventions and regularities we internalize when learning the language.
- The former prioritizes how language latches onto the world; the latter onto the social communicative aspect of language.

Use

- The use-theoretic view is concerned with whether a speaker has fulfilled their obligations with respect to their audience.
- We must meet certain normative standards with our speech acts.
- The only standards for correct use are those recognizable by speakers, such as linguistic and perceptual cues.
- This approach is said to be much more *human*: traditional truth-conditional approaches pay no attention to either the speaker or the community.

More precisely

- This thought is captured in the famous Wittgensteinian slogan that *meaning is use*.
- Learning a language, on his view, is like learning how to play chess.
- There is nothing more to learn about the knight, that is relevant to the game, than how it is used.
- Similarly, there is nothing more to learn about an expression than how it is used.
- Crucially, the knight does not *stand for* anything; when we know its role, we know everything about it.

Ontological explosion

- *Traditionally, semantics has been denotational and representational, consisting in a homomorphic valuation from expressions to some range of objects. The approach risks ontological explosion, first by hypostatizing denotations for empty names, predicates, conjunctions, prepositions and so on ... then in seeking values for false propositions in the form of non-actual states of affairs. (Stephen Read, 'General-Elimination Harmony and the Meaning of the Logical Constants', p. 558)*

- *Meaning is use* has some obvious attractions: these expressions (along with e.g. abstract nouns and number terms) can have their meaning explained without thinking that they refer.

Use

- ▶ What sorts of aspects of *use* are we after?
- ▶ Understanding a sentence involves (at least):
    - i a capacity to discriminate a certain range or perceptual stimuli.
    - ii an appreciation of its logical powers.
    - iii an appreciation of the behavioural responses to linguistic acts performed by means of the sentence.
- ▶ Can we get these intuitions in any kind of order?

More precisely

- Dummett writes:

  Crudely expressed, there are always two aspects of the use of a given form of sentence: the conditions under which an utterance of that sentence is appropriate, which include, in the case of an assertoric sentence, what counts as an acceptable ground for asserting it; and the consequences of an utterance of it, which comprise both what the speaker commits himself to by the utterance and the appropriate response on the part of the hearer, including, in the case of assertion, what he is entitled to infer from it if he accepts it. (FPL, p. 396)

The two-aspect model of meaning

- The first sort of features of use correspond roughly to a verificationist theory of meaning: they concern the circumstances under which an assertion of a statement involving that expression is warranted.
- The second sort correspond roughly to a pragmatist theory of meaning. They represent what we can do with a sentence in virtue of asserting it.
- These two features are both crucial to meaning: it cannot be reduced to either.
- Dummett contends that any other putative aspects of meaning can be explained in terms of these two.

The two-aspect model of meaning

- On this theme, Dummett writes that

  Learning to use a statement of a given form involves ... learning two things: the conditions under which one is justified in making the statement; and what constitutes acceptance of it, i.e. the consequences of accepting it (FPL, p. 453)

- Robert Brandom expresses one way of making this thought more precise:

  What corresponds to an introduction rule for a propositional content is the set of sufficient conditions for asserting it, and what corresponds to an elimination rule is the set of necessary consequences of asserting it, that is, what follows from doing so. (Articulating Reasons, p. 63)

Inferentialism

- In the Brandom quote, we saw the verificationist aspect of meaning being linked to introduction rules. They represent the sufficient conditions for the use of an expression.
- And we saw the pragmatist aspect of meaning being linked to elimination rules. They represent the necessary consequences of the use of an expression.
- The view that the meaning of an expression is given by its introduction- and elimination-rules is known as *inferentialism*. It is a precisification of the thought that meaning is use.

Logical constants

- Talk of introduction- and elimination-rules puts us in mind of the way logical constants are expressed in a natural deduction system.

- E.g.

$$\frac{\phi \quad \psi}{\phi \wedge \psi} \wedge I \qquad \frac{\phi \wedge \psi}{\phi} \wedge E \qquad \frac{\phi \wedge \psi}{\psi} \wedge E$$

- For Dummett, the I-rule corresponds to the verificationist aspect of the meaning of '$\wedge$': it represents the grounds that hold when one is justified in asserting a conjunction.

- The E-rule corresponds to the pragmatist aspect of its meaning of '$\wedge$': it represents the consequences of asserting a conjunction.

Global and local inferentialism

- ▶ Inferentialism is peculiarly well-suited to treating the logical constants, which can be tidily divided into I- and E-rules.
- ▶ *Logical inferentialism* is a local form of inferentialism applied only to the logical constants.
- ▶ Antirealists like Dummett and Brandom, however, want a more global inferentialism.
- ▶ Outside of the logical constants, this will be a difficult task: the inputs and outputs will be messy, and often extra-linguistic.
- ▶ The inferentialist requires, however, that it is possible *in principle*.

Global inferentialism

- What is involved in a genuine grasp of the meaning of an expression is an awareness of at least its core inferential relations to other expressions.
- To know the meaning of the predicate 'is an elephant', for example, a speaker must know that, if Ian is an elephant, then Ian is a pachyderm.
- Inferentialism doesn't claim that inference *exhausts* meaning, but that inference is among the meaning-constituting core uses of an expression.
- Inferentialism comes in different strengths: it can seem more plausible for theoretical vocabulary than the observational outskirts of the Quinean web.

Molecularism and holism

- Plausibly,
  we cannot understand a sentence without understanding others.

  > *One could not understand the sentence 'That cow is lying down' unless one could also understand other sentences such as 'This cow is standing up', 'That horse is lying down', and so on. (Logical Basis, p. 222)*

- The *holist* believes that this interdependence spreads to all of language.

- The *molecularist* believes there are *semantic clusters* of interdependence, but that this doesn't spread to all of language.

The Context Principle

- What is the source of this interdependence?
- Frege famoulsy thought that it is only in the context of a sentence that a word has meaning.
- We understand words by understanding sentences containing them.
- We don't want to say that we must understand *all* sentences including a word, so we appeal to molecularism.

Harmony

- Molecularism is one motivation for Dummett's requirement of harmony.
- For a linguistic practice to be in good working order, Dummett argues, we should demand a 'certain consonance' (*Logical Basis*, p. 397) between the two aspects of meaning.
- Why? Assume our linguistic practice is in good working order and we introduce a novel expression into it.
- If the two aspects are not balanced, then we'll be able to make inferences that we would not have been in a position to make prior to the introduction of that expression.

Harmony

- Dummett's standard example is the perjorative 'Boche'.
- If we introduce 'Boche' into our language, we can infer from someone's being German to their being prone to cruelty (a consequence of the application of 'Boche').
- Without 'Boche', we would not have been able to argue from the I-principles governing 'German' to those of 'prone to cruelty'. In effect, 'Boche' alters the meanings of 'German' (by altering its E-principles) and of 'prone to cruelty' (by altering its I-principles).
- 'Boche' alters the meanings of other words, in a way that well-behaved language shouldn't.
- 'Boche' is therefore disharmonious. A linguistic practice including it is, for Dummett, 'defective'.

Harmony

- In the absence of harmony, new expressions risk disturbing otherwise successful linguistic practices.

- In this way, linguistic practices can be criticised:

  Our linguistic practice is no more sacrosanct, no more certain to achieve the ends at which it is aimed, no more immune to criticism or proposals for revision, than our social, political, or economic practice (Logical Basis, pp. 214–5)

- Harmony is needed for a Dummettian theory that

  aims at a systematic means of ascribing content to the expressions and sentences of the language, in terms of which accepted modes of operating with it (including the rules of inference observed) can be justified' (Logical Basis, p. 241)

Harmony

- Of course, applying inferentialism to language generally is a daunting task. And it is unclear whether a notion of harmony to complement global inferentialism is possible.
- For this reason, discussion tends to focus on the logical fragment of natural language: if inferentialism can't work there, then the project of applying it more widely is hopeless.
- And a notion of harmony is needed: remember 'tonk':

$$\frac{\phi}{\phi tonk\psi} \ tonk\mathrm{I} \qquad \frac{\phi tonk\psi}{\psi} \ tonk\mathrm{E}$$

Local peaks

- There are various formal tests for harmony. A popular one involves *levelling of local peaks*.
- Let a local peak with respect to some candidate logical constant $ in a proof of a conclusion, C, from a set of premises, Γ, occur where $ is introduced and *immediately* eliminated.
- The inference rules for $ are in GE harmony if there is a reduction procedure by which all local peaks with respect to $ can be eliminated.

Local peaks

- Consider, for example, the following proof in which & is introduced and then eliminated:

$$\frac{\dfrac{\vdots \quad \vdots}{A \quad B}}{\dfrac{A\&B}{A}} \begin{array}{l} \&\ \mathrm{I} \\[4pt] \&\ \mathrm{E} \end{array}$$

- This local peak with respect to & can straightforwardly be eliminated:

$$\begin{array}{c} \vdots \\ A \end{array}$$

Problem: identity

- There are many logical constants which we want to be harmonious but don't straightforwardly pass the test.
- Consider the case of identity:

$$\overline{a = a} =I \qquad \frac{a = b \quad A(a)}{A(a/b)} =E$$

- It is not obvious how to apply the test here.
- Stephen Read (2004, 2014) suggests a different I-rule:

$$\frac{\begin{array}{c}[Fa]\\ \vdots\\ Fb\end{array}}{a = b} =I'$$

- Here, F must not appear in the collateral premises.

Problem: identity

- A local peak with Read's rules would be:

$$\frac{\dfrac{\begin{array}{c}[Fa]\\ \vdots\\ Fb\end{array}}{a = b}=\mathrm{I}' \quad Fa}{Fb}=\mathrm{E}$$

- This reduces in the obvious way:

$$\begin{array}{c}\vdots\\ Fa\\ \vdots\\ Fb\end{array}$$

Problem: identity

- But – shameless plug – in my 'Harmonious rules for identity' (2015), I argue as follows.
- When would the new rule actually allow a derivation of $a = b$ for distinct a and b? Only when we already have identity or a contradiction amongst the collateral premises.
- But then it's precisely as strong as the old rule.
- And that's an embarrassment for inferentialism: if two expressions are alike logically, they should be alike with respect to harmony.
- And identity is an important expression: the inferentialist needs it to draw a term/ predicate distinction.

Problem: morality

- ▶ Let's finally consider some more general worries for Dummett-style antirealism.

- ▶ First, it seems peculiarly well-suited to the debate about mathematical realism, where we have a precise notion of an effectively decidable procedure. But is it so plausible about e.g. morality?

- ▶ Is the realism debate in ethics really about bivalence? Not obviously: many error theorists (e.g. Mackie, Joyce) are happy to assert bivalence over moral discourse. Every moral sentence is either true or false; in particular, there are no moral facts so they are all false.

- ▶ More generally, many charge Dummett with changing the subject. The debate about external world realism is often intended as metaphysical/ ontological. Phenomenalists deny the existence of matter: they are not straightforwardly taking a stance on bivalence.

Scepticism

- An appealing aspect of Dummett's proposal is the potential answer it offers to the sceptic.
- The sceptic generally calls into question our knowledge of something we ordinarily take ourselves to know.
- The sceptic takes some statement S and argues that the best evidence we have for S is equally compatible with the falsity of S.
- There is an assumption here, however, that warranted assertibility and truth come apart.
- When we *identify* truth with assertibility, this gap closes.

Taking stock

- At root, Dummett holds that realism is best understood as a debate about bivalence.
- Over domains where we have no effectively decidable procedure for the truth-value of sentences, we should not assert bivalence. We should be intuitionists.
- Indeed, in light of the acquistion and manifestation arguments, we should reconstrue truth-conditions as assertability-conditions.
- This is motivated by the thought that meaning is use.
- This slogan gets spelt out in the two-aspect model of meaning. This in turn gets characterised in inferentialist terms, using I-principles, E-principles and the demand for harmony.
- These are slippery notions, even in the domain of logic.
- This package of views is Dummett's way of understanding antirealism.

Understanding Dummett

- ▶ It's important not to overstate how radical Dummett's views are.
- ▶ There are two points to bear in mind here:

> *I viewed my proposal, and still continue to view it, as a research programme, not the platform of a new philosophical party. ... I did not conceive myself as proposing for consideration, let alone sustaining, any precise thesis, to be accepted or rejected. I saw the matter, rather, as the posing of a question how far, and in what contexts, a certain generic line could be pushed, where the answers 'No distance at all' and 'In no contexts whatever' could not be credibly maintained, and the answers 'To the bitter end' and 'In all conceivable contexts' were almost as unlikely to be right. ('Realism and Anti-Realism', p. 464)*