Lectures 10.4 and 10.5

Dummett on Realism and Anti-Realism

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Pre-lecture reading:

Dummett, M. (1973), 'The Philosophical Basis of Intuitionistic Logic', in *Truth and Other Enigmas* (Cambridge, MA: Harvard University Press).

Additional reading:

Dummett, M. (1973), 'Truth', in his *Truth and Other Enigmas* (Cambridge, MA: Harvard University Press).

Miller, A. (2001), 'Michael Dummett', in *A Companion to Analytic Philosophy* (Oxford: Blackwell).

Wright, C. (1993), Introduction to *Realism, Meaning and Truth*, 2nd ed. (Oxford: Blackwell).

A. An Intuitive View

1. The sentence 'James II suffered a migraine on the afternoon of his 32nd birthday' is true iff James II suffered a migraine on the afternoon of his 32nd birthday.
2. Whether or not James II suffered a migraine on the afternoon of his 32nd birthday is something that we do not know, and maybe even cannot know.
3. That is, we do not know, and maybe cannot know, whether or not the truth conditions of the sentence obtain.
4. Nevertheless, they either obtain or they do not; the sentence is either true or false.
5. This, even though we do not know, and maybe cannot know, whether or not the truth conditions obtain, and so whether or not the sentence is true.
6. In this sense, the truth conditions of sentences are potentially 'verification transcendent' or 'epistemically unconstrained', or 'unverifiable'.

Dummett calls this *realism*. Realism, according to Dummett, is a view about the nature of the truth conditions of the sentences of a certain domain of discourse, D (e.g. English, or mathematics, or string theory, or fragments of these). We have, according to Dummett:

Realism: The truth conditions of sentences of D can be unverifiable (i.e. can be such that we cannot know whether or not they obtain). (This is an intuitive view)

Anti-Realism: The truth conditions of sentences of D cannot be unverifiable (i.e. cannot be such that we cannot know whether or not they obtain. (This is a counterintuitive view)

Note: There are a lot of 'can's here, and this might lead to misunderstanding. I will rely on us having a sufficiently good grasp on what is being claimed.

Note: Both accept that the sentences of D have truth conditions. This may not be so for some domains D: e.g. moral discourse, discourse about the future (some think that sentences in these domains do not have truth conditions).

Note: According to Dummett, realism is a view about the nature of truth conditions, rather than a view about the existence or non-existence of certain entities (e.g. numbers, quarks). Why is this 'realism'? Crispin Wright suggests because it's the view that "Our thought aspires to reflect a reality whose character is entirely independent of us and our cognitive operations."

Note: Frege seems to have been a realist in this sense: "[Thoughts] can be true without being grasped by a thinker." (see his 'The Thought').

It is helpful to consider some more examples:

(a) ‘Every even number greater than 2 is the sum of two primes.’ (Goldbach’s Conjecture)
(b) ‘Everything just doubled in size.’
(c) ‘There is a planet in our solar system whose existence we cannot establish.’
(d) ‘The colour spectrum is inverted for women.’

Goldbach’s Conjecture is true iff every even number greater than 2 is the sum of two primes. We do not know whether or not this truth condition obtains - we do not know that it does, because we have no proof of the conjecture; we do not know that it does not, because we have found no counterexample (in mathematics, proof and counterexample are the only paths to knowledge). Moreover, it is possible that we *cannot* know whether or not this truth condition obtains - it may true be unprovably true (so there is no proof, and no counterexample).

As for (b), (c) and (d), it seems very plausible that we can never know whether or not the truth conditions of these sentences obtain.

B. Dummett’s Challenges

As intuitive as realism is, Dummett has forcefully challenged it. He challenges realism to give a plausible account of linguistic understanding. His challenge comes mainly via two arguments: the *acquisition* argument, and the *manifestation* argument.

The acquisition argument (see, for example, his ‘Truth’):

1. Suppose that we understand the sentences of D.
2. Suppose that some sentences of D have unverifiable truth conditions.
3. Since to understand a sentence is to know its truth conditions,
4. it follows from 1 and 3 that we know the truth conditions of the sentences of D.
5. Now, if we know the truth conditions of the sentences of D then it was possible for us to acquire that knowledge.
6. So from 4 and 5 it follows that it was possible for us to acquire knowledge of the truth conditions of the sentences of D.
7. But since some of those truth conditions are unverifiable, it was possible for us to acquire knowledge of unverifiable truth conditions.
8. But it is *not* possible for us to acquire knowledge of unverifiable truth conditions: a contradiction.

The key step here is 8, and it needs fleshing out.

Step 8:

> It is really more of a challenge to explain how we can do it. How might we acquire knowledge of the truth conditions of ‘There is a planet in our solar system whose existence we cannot establish’? We cannot be given it ostensively by someone - that is, we cannot be *shown* conditions under which it is known to be true (compare this with ‘He is tall’). We cannot be given it descriptively, by being told that the sentence is true iff there is a planet in our solar system whose existence we cannot establish. For we cannot understand the description unless we already understand the sentence, but then we would already have the knowledge we are trying to acquire, and we still have no account of how we acquired it.

A couple of responses (well, questions in response):

(a) Is this a problem just for realists? How does anyone get the concept of a perfect circle?
(b) Can realists appeal to compositionality?

The manifestation argument (see, for example, his 'Basis'):

1. Suppose that we understand the sentences of D.
2. Suppose that some sentences of D have unverifiable truth conditions.
3. Since to understand a sentence is to know its truth conditions,
4. it follows from 1 and 3 that we know the truth conditions of the sentences of D.
5. Now, if we know the truth conditions of the sentences of D then this knowledge is manifest in our use of the sentences of D.
6. So from 4 and 5 it follows that our knowledge of the truth conditions of the sentences of D is manifest in our use of the sentences of D.
7. But since some of those truth conditions are unverifiable, our knowledge of unverifiable truth conditions is manifest in our use of the sentences of D.
8. But knowledge of unverifiable truth conditions is not manifest in our use of sentences of D: a contradiction.

The key steps here are 5 and 8, and both need fleshing out.

Step 5:

Dummett accepts Wittgenstein's claim that *meaning is use*: to understand an expression, to know its meaning, to know its truth conditions (if it's a sentence) is, in each case, to know *how to use* the expression. Learning a language is like learning how to play chess: in the latter case, there is nothing more to learn about the knight (at least nothing that is relevant to the game), for example, than how it is used (it does not, for example, *stand* for something); in the former case, there is nothing more to learn about an expression than how it is used (at least nothing that is relevant to meaning). Expressions are just pieces in a language game. Thus, there is nothing about the meaning of an expression that is not manifest in our use of it, just as there is nothing about the knight that is not manifest in our use of it in chess.

Step 8:

How might a person S manifest understanding of 'There is a planet in our solar system whose existence we cannot establish'. Ask the question this way: how could she demonstrate to us that she understands it? It is not enough for her to utter the sentence "'There is a planet in our solar system whose existence we cannot establish' is true iff there is a planet in our solar system whose existence we cannot establish", for this could be uttered by her even if she does not understand the sentence. No kind of verbal description will be good enough. Rather, she needs to demonstrate that she can recognise conditions in which it is true and in which it is false. But how can she do that if those truth conditions are unverifiable? For if they are then she *cannot* know whether or not they obtain, and we cannot know whether or not she is right. (Mention Wittgenstein passage?)

Note: This is really just a *challenge* to the realist to give good reason to think that we can have knowledge of truth conditions that are unverifiable.

C. Two Responses

Dummett takes his arguments to challenge the idea that the following are both true:

1. To understand a sentence is to know its truth conditions.
2. The truth conditions of a sentence can be unverifiable.

If we accept that these can't both be true, we can respond in at least the following two ways:

(a) Reject (1). Reject the idea that to understand a sentence is to know its truth conditions, and claim instead that it is, for example, to understand its *assertability* conditions. This is to replace truth by assertability as the central ingredient in a theory of meaning.

(b) Reject (2). Analyse truth in terms of assertability, and reject the idea that the truth conditions of a sentence can be unverifiable. For a sentence to be true is for it to be

assertible (and for it to be false is for it to not be assertible). This is to claim that *truth can be analysed* in terms of assertability, and thus, again, that assertability is, at bottom, the central ingredient in a theory of meaning (or that truth is the central ingredient only in a *weak* sense).

These both appeal to the *assertability* conditions of a sentence. Even if we can't know whether or not the *truth* conditions of 'There is a planet in our solar system whose existence we cannot establish' obtain, we can know whether or not its assertability conditions obtain: we know that they do not - the sentence is not assertible. This is the **key fact** about assertability conditions, and the reason why appeal to them meets Dummett's challenge. Note: both responses claim that assertability is the central ingredient in a theory of meaning.

Dummett (as far as I can tell!) opts for response (b). He thinks that truth should be analysed in terms of assertability, so that in actual fact there is no difference between assertability conditions and truth conditions, despite it being intuitive that there is. He rejects (2). He thus espouses **anti-realism**.

Note: The reasons for thinking that language is compositional still hold, and the anti-realist, if she accepts compositionality, needs an account of how the assertability conditions of a sentence are determined by its constituent structure and the assertability content of its constituents. Dummett thinks this can be done (intuitionistic logic proceeds in this spirit).

Note: Anti-realism has some counterintuitive consequences. For example, 'There is a planet in our solar system whose existence we cannot establish' is not assertible, and so is not true, and so it is false; but 'There is <u>not</u> a planet in our solar system whose existence we cannot establish' is not assertible, and so is not true, and so it is false too. So anti-realists cannot claim that every instance of the following schema is true:

(Schema 1) Either it is true that S, or it is true that it is not the case that S.

But they *can* claim that every instance of this schema is true:

(Schema 2) Either it is true that S, or it is false that S.

There is, according to the anti-realist, a difference between it being false that S, and it being true that it is not the case that S. Just because 'S' is not assertible, it does not follow that 'It is not the case that S' is assertible. This leads to other counterintuitive consequences too.

If the anti-realist is right, then classical logic declares as valid arguments which are actually invalid: they do not preserve assertability (and hence truth). (They do, if the realist is right about truth, but not if the anti-realist is). According to the anti-realist, it should be rejected in favour of *intuitionistic* logic, a system of logic that declares as valid just those arguments that preserve assertability (in maths: provability).

<u>D. Some Additional Terminology</u>

A sentence is *effectively decidable* if there is some procedure which we can carry out which will give us knowledge of whether or not the sentence is true. E.g. the following two sentences are both effectively decidable: '2365 + 1967 = 4332', and 'The queen had vegemite on toast for breakfast yesterday'. But the following two may not be (we don't know): 'James II had a migraine on the afternoon of his 32nd birthday', and 'Every even number greater than two is the sum of two primes'. Is being effectively decidable like having verifiable truth conditions?

In mathematics, assertability coincides with provability. A sentence of mathematics is assertible iff it is provable.