Reading notes on Dummett on Quantifiers

Peter Smith

July 7, 2011

Michael Dummett, Frege: Philosophy of Language, Duckworth, 1972. Ch. 2.

Dummett's great book, Frege: Philosophy of Language, is a modern classic. You ought to read a lot more than the second chapter! But this chapter is wonderfully insightful in explaining the significance of the quantifier/variable treatment of generality, and you should read it to get a sense of the depth of the ideas behind the design of **QL**.

Now, Dummett is often regarded as a particularly difficult-to-read writer. But not so. Or at least, not in this chapter, which is extremely clearly written. He does have one rather annoying habit though. He will cheerfully give us even a forty-page chapter (or longer) without a single section break. That can make it all seem unnecessarily daunting – and you can sometimes lose your bearings. So let me suggest a way of chunking up the chapter into bite-sized sections. As you'll see, the first part of the chapter, pp. 9–22 contains the core ideas.

- 1. Introduction (the problem of multiple generality) [p. 9, 'The discovery by Frege ...' to p. 10 '... we shall often be baffled to comprehend why he argued as he did.']
- 2. The fundamental insight 'sentences are constructed in a series of stages' [p. 10, 'A sentence, or, in most symbolisms a mathematical formula ...' to p. 12 '... on the corresponding forms when signs of generality are present.'] In natural languages, the sequence of stages by which a sentence is constructed is not always transparently revealed by the linear order of the resulting sentence.
- 3. The quantifier variable notation as a way of reflecting the fundamental insight [p. 12, 'Having gained this insight, ...' to p. 15 '... yielded precisely a sentence of this kind.'] 'The point of the new notation was to enable the constructional history of any sentence to be determined unambiguously.'
- 4. Complex predicates [p. 15 'In the course of this account ...' to p. 16 '... to form a sentence']
- 5. Comparing Frege with the standard modern treatment of the quantifiers [p. 16 'The account is not precisely the same ...' to p. 18 '... the whereabouts of the argument-place in the predicate.'] Don't worry if, at this stage, the full significance of Dummett's comments here isn't yet entirely clear.
- 6. A fundamental assumption underlying both the Fregean and modern stories about quantification [p. 18 'How plausible, then, is the assumption ...' to p. 19 '... Frege's discovery of quantification imposed upon him.']
- 7. Two lessons which Frege derived [p. 19 'The most general lesson ...' to 'p. 22 '... there can be little motive for rejecting it.'] Lesson 1: Frege's disrespect for natural language. Lesson 2: The importance of the step-by-step construction picture

(grounds a view – not explicitly endorsed by Frege but in a Fregean spirit – about what is and what isn't within the purview of logic properly so called).

Pause here at a first reading, and now re-read carefully up to this point.

All reasonably clear? OK: for a first introduction to the Fregean treatment of quantification, you could stop at this point. But you might like now to tackle the rest of the chapter:

- 8. Simple vs. complex predicates [p. 22 'We saw that ...' to p. 31 '... attached directly to the simple predicate.']
 - (a) pp. 22 23: 'In order to give a complete account of the structure of a language, it is necessary to describe the process whereby an atomic sentence is put together out of its parts as well as the various operations by means of which complex sentences may be constructed step by step from atomic ones.'
 - (b) pp. 23 (bottom) to p. 24: Atomic sentences.
 - (c) pp. 24 26: The idea of logical simplicity (Frege vs. Russell).
 - (d) pp. 26 (middle) 27 (near bottom): An aside on second-level operators don't worry about this!
 - (e) pp. 27 (bottom) 31 (top) Simple predicates (as might feature in atomic sentences) vs. complex predicates.
- 9. Complex predicates and the idea of predicates as 'incomplete' expressions [p. 31 'Now complex predicates ...' to p. 33, end.]

In summary, the first and most important to thing to grasp is the 'fundamental insight' and how it relates to the quantifier/variable notation. But it is well worth going on to try to understand at least the outlines of the point Dummett is making about simple vs. complex predicates.