USE OF THESES

This copy is supplied for purposes of private study and research only. Passages from the thesis may not be copied or closely paraphrased without the written consent of the author.
ANTI-REALISM: THE MANIFESTATION OF SEMANTIC KNOWLEDGE

by

CHRISTINA M. SLADE

Thesis submitted for the degree
of Doctor of Philosophy at the
Australian National University

January 1982
Except where otherwise acknowledged,

this thesis represents my own original work.

C.M. Slade
I am deeply indebted to my supervisor, Dr Peter Roeper, who has discussed the topics of this thesis with me over many years, and has given me unfailing support throughout its preparation. Professor J.J.C. Smart read an earlier version of the thesis, and I am very grateful for his comments. Huw Price has also read several versions of chapters of the thesis. I am thankful to him not only for hours of argument but also for encouragement over the last seven months. Professor Passmore's comments on the penultimate version were also most helpful.

The greatest philosophical debt of the inquiry is owed to the writings of Professor M.A.E. Dummett. His work first decided me to study philosophy and, although I disagree with him on some points, I am still convinced that his attitudes towards questions in the philosophy of language are illuminating.

I must also record my thanks to Hazel Gittins, Caroline Lancaster, Marcia Murphy, Avril Newcombe, Gwen Slade and Barbara Williams who have helped with the typing, and to Jean Norman who read the proofs of some chapters.
ABSTRACT

Realistic views are fashionable. In this thesis, I defend a view opposed to realism, which Dummett calls "anti-realism". My defence of anti-realism depends on the assumption that a theory of meaning should explain how speakers understand one another. The theory should therefore describe linguistic abilities in terms of communicable features of linguistic practice: those which are exhaustively manifest in use. I call this the manifestation argument.

In the first Chapter, I apply the manifestation argument not only to theories of meaning which yield specifications of the content of sentences of a language (I.2), but also to theories which aim primarily to define linguistic behaviour as a species of intentional activity (I.3). The manifestation argument tells against the realist assumption of verification transcendent truth: that there may be truths which speakers could never be in a position to verify (I.2.3, I.3.3). However, holistic theories are exempted from the anti-realist argument. Alternative characterisations of realism are also mentioned (I.4).

Dummett's theory of meaning is tailored to ensure that knowledge of meaning can be manifested. I endorse this account, with minor modifications (II.1-II.5). The revisionary consequences of the account are, I think, more extreme than Dummett supposes (II.6). Dummett takes Intuitionism in mathematics to be the paradigm of an anti-realist account of meaning (III.1-III.2). Two accounts of the meaning of the intuitionist logical constants are discussed. The first, which Dummett prefers, is in terms of canonical proof conditions (III.3-III.4); the second is an intuitionist analogue of a Tarski style truth definition (III.5). I argue that the former is required for justifying the intuitionist account, even though the latter adequately captures the intuitionist notion of truth.

Chapter IV concerns the motivation of the manifestation argument (IV.1). I discuss the acquisition argument for anti-realism used by Dummett; namely, that it must be possible to acquire a grasp of the meaning of a sentence of a language from experience of its use (IV.2). I suggest that the manifestation argument is prior to the acquisition argument. I argue that anti-realism need not be reductionist (IV.4), and that vagueness suggests a modification of the manifestation argument.

When intuitionism in mathematics provides the model of a theory of meaning for natural language, various notions of assertibility replace that of provability. Dummett considers conclusive verifiability (V.2) and falsifiability (V.3). Both fail to provide an acceptable account of negation, and do not allow for those assertions of natural language evidence for which is inconclusive (V.4). I take conditions of verification and falsification to determine meaning (V.5).

The intuitionist analogy is applied to time in Chapter VI. I discuss the analysis of temporal modification (VI.2), and argue that tensed sentences involve indexical reference to time (VI.3).
suggests a generalised anti-realism about spatial and personal indexicals, which I reject (VI.4). I also reject Dummett's treatment of tense-links, but endorse a modified anti-realism about time (VI.5).

I conclude with a discussion of holism. According to Dummett, holistic theories are objectionable because they are not molecular (VII.1). There are three strands in Dummett's notion of molecularity, and I discuss the role of each in rejecting varieties of holism (VII.2-VII.4). Dummett has doubts about anti-realist molecular theories which I dismiss, but I argue that the anti-realist cannot explain what I call 'radical' meaning change (VII.5).
TABLE OF CONTENTS

INTRODUCTION viii

CHAPTER I TWO TYPES OF THEORY OF MEANING 1
1. Linguistic Abilities 3
   1.1 The Manifestation of Linguistic Abilities 4
2. Content-Specifying Theories 6
   2.1 Developments of Frege's Theory 7
   2.2 A Theory of Force 13
   2.3 Realism and Manifestation in Fregean Theories 19
3. Conceptual Theories of Meaning 20
   3.1 Intention 21
   3.2 Convention 24
   3.3 Realism and Manifestation in Intentional Theories 30
4. Realism and Theories of Meaning 34
   4.1 Realism about Objects 34
   4.2 Bivalence 36
5. Conclusion 41

CHAPTER II EVIDENCE FOR A THEORY OF MEANING 43
1. Dummett's Reconciliation 44
2. Conventions of Behaviour 46
3. Assertion as the Central Linguistic Act 52
4. Conventions of Assertion 60
   4.1 From Correct Assertion to Truth Conditions 64
5. Bifurcation 68
6. The Origin of the Realistic Notion of Truth 76
7. Conclusion 85

CHAPTER III INTUITIONISM 87
1. Infinite Totalities 88
   1.1 Intuitionism and Quantification 90
   1.2 Intuitive Explanations of the Logical Constants 94
2. The Formalisation of Intuitionist Logic 97
   2.1 Semantics for Intuitionist Logic 100
3. Systems of Natural Deduction 102
4. Canonical Proof 110
   4.1 Grounds and Consequences 115
5. Disquotational Theories for Intuitionist Logic 118
6. Conclusion 123

CHAPTER IV MANIFESTATION, ACQUISITION AND REDUCTION 125
1. Manifestation 126
   1.1 Semantic Knowledge 127
   1.2 Implicit Knowledge 131
   1.3 Rule Following 137
2. Acquisition 142
   2.1 Analogy 144
   2.2 Success 148
   2.3 Syntactic Analogy 149
Each chapter, which is labelled with a Roman numeral, is divided into sections and subsections, labelled with Arabic numerals. I refer to sections of the essay using those numerals: thus I.1.1 refers to chapter I, section 1, subsection 1. When I refer to a section within a chapter, I omit the Roman numeral for that chapter: thus 1.1 in Chapter I refers to I.1.1.

I have adopted Dummett's (1977) use of $\land$, $\lor$, $\neg$, $\forall$, and $\exists$ for the intuitionist logical constants. Classical constants are $\land$, $\lor$, $\neg$, $( )$, and $\forall$. When I wish to allow both classical and intuitionist readings of the logical constants, I employ the intuitionist constants. I do so at III.3 and III.5. In Chapter V, I use the intuitionist constants for a variety of readings of the falsification calculus, and for a non-intuitionist negation. I do not think that the ambiguity causes confusion.
INTRODUCTION

It is not difficult to understand sentences in a language one knows. It is harder to explain in what understanding consists. One way of doing so is to describe what a speaker must know in order to understand sentences of a language. Theories of speakers' semantic knowledge have assumed that speakers know what would make sentences of a language true, or that speakers know what would justify the assertion of sentences of a language.

According to Dummett, the first of these alternatives is a characteristically realist account of meaning. He uses the "colourless term" (1978, p.145) anti-realism for the second. Dummett defends anti-realism on the grounds that an adequate account of speakers' abilities to understand one another must ensure that understanding is exhaustively manifest in their linguistic behaviour: a form of argument which I call 'the manifestation argument'. A realist supposes that sentences might be true although their assertion could not in principle be justified. In that case, Dummett argues, speakers could not manifest their understanding of those sentences.

Dummett draws the startling consequence that we must not only reject realism, but that we must also revise our classical logical practices. We cannot assume that every sentence is either true or false, for we might never be in a position either to justify the assertion of a sentence or show that it is false. Moreover, if we accept that a sentence is false just if its negation is true, we can no longer assume that either a sentence or its negation is true.
In this thesis, my aim is to examine the manifestation argument and its consequences. I shall defend anti-realism. Anti-realism must be distinguished from other theories which are opposed to realism. It differs from traditional idealism in so far as it is based on semantic, not epistemological, premisses. The anti-realist rejects the claim that there are truths which could not in principle be justified. Nevertheless, those truths which can in principle be justified are truths about the objective world. There should be no inclination to treat publically assessable truths as any less true of the world than the traditional realist would suppose.

Anti-realism is not intended to be a species of relativism. The anti-realist may admit that the truths a speaker can express are limited to those which could be justified in a language which he understands. But reality is not determined by the truths which a particular speaker, or group of speakers, can justify. The limitations on truth which the anti-realist sets are determined by the abilities of speakers of any language to justify their assertions. For example, the anti-realist rejects realism about the past because it is impossible to move at will into the past in order to justify past tensed assertions. Again, the anti-realist rejects a platonist interpretation of infinite totalities because we cannot scan an infinite totality in a finite time and justify assertions about it. Truth is relativised only to human limitations on assessing truth value, not to a particular language or society.

Logical positivism is more closely related to anti-realism than either idealism or relativism. Logical positivists, like the anti-realist, insist that it must be possible to verify or falsify meaningful assertions. However, the anti-realist differs from logical
positivists in allowing that a sentence may be meaningful, although there is no way guaranteed to verify or falsify it. A past tensed statement may not now be verifiable or falsifiable, but a verification or falsification might arise. In that case, the anti-realist regards the sentence as meaningful, but neither true nor false. The anti-realist does not require a reduction of meaningful sentences to those the truth value of which is guaranteed to be decidable.

Dummett first defended anti-realism of this type. Accordingly, a large part of this essay concerns the details of his views. In what follows, I shall indicate briefly how they relate to my own attitudes. Dummett employs the manifestation argument to reject realist accounts of the content of sentences of a language. In the first chapter, I suggest that the manifestation argument also applies to conventional and intentional theories of meaning. In that chapter, I also characterise theories of meaning according to whether they aim to provide a conceptual analysis of 'meaning' or to yield specifications of the content of sentences of a particular language.

This distinction enables me to discuss what is, I think, one of the most confusing aspects of Dummett's work. He argues that assertion, conceived of as a conventional activity, provides the evidence for a theory of meaning. I shall suggest that Dummett takes the conventions of linguistic behaviour to describe the concept of meaning, since those conventions are common to speakers of all languages. The assertibility conditions of sentences of a particular language determine their content. Although I disagree with Dummett on many of the details of an account of assertibility conditions, I think that his approach is essentially correct. The most crucial respect in which I differ from Dummett is that I think that truth is defined by
conditions under which assertions of any kind, including ethical and vague assertions, are correct. I argue that the notion of truth so defined must be used in the explanation of the assertibility conditions of complex sentences. Assertibility must, then, distribute over the logical constants. Dummett sometimes contests this claim.

My discussion of Dummett's extensive writings on Intuitionism is superficial, and is designed to emphasise those aspects of intuitionist logic which Dummett adopts for a theory of meaning for natural language. Dummett's rationale for intuitionism is that it ensures that knowledge of the meaning of sentences involving quantification over infinite domains is manifestable. Undecidability in mathematics arises solely from such quantification. In this regard, natural language differs from mathematics since atomic sentences of natural language may be undecidable.

Dummett draws analogies between a natural deduction system for intuitionist logic, and requirements on an account of the meaning of logically complex sentences in natural language. I agree with Dummett that canonical proof conditions for complex sentences, having properties analogous to introduction laws for constants in a natural deduction system, give the meaning of the intuitionist logical constants. However, I think, unlike Dummett, that the disquotational specifications given by an intuitionist analogue of a Tarski style theory do so too, although I agree with Dummett that the disquotational theory cannot justify intuitionist logic. I am chary of accepting a further analogy with natural deduction systems which Dummett proposes. He suggests that we can treat the grounds and consequences of sentences of natural language as resembling the introduction and elimination laws for logical constants, and as
Dummett generally presents the argument for anti-realism in terms of speakers' knowledge of meaning. This is how I have formulated the argument at the beginning of this introduction. But I shall argue in Chapter IV that this is a misleading way to express the manifestation argument. The manifestation argument is essentially an argument that semantic knowledge can be attributed to speakers only if it is manifested in their behaviour. It is not primarily an argument about knowledge of meaning. Furthermore, I think Dummett's claim that there is an alternative route to anti-realism based on considerations about how linguistic abilities are acquired is mistaken. I reject refutations of anti-realism which concentrate on the reductive character of anti-realism, and those which point to extension by analogy as a justification of our realistic practices.

In the fifth chapter, I discuss the application of the intuitionist analogy to natural language. I argue that there are insuperable difficulties with an intuitionist style negation in natural language. Dummett suggests an alternative falsificationist account of meaning for sentences of natural language, but the account of deducibility he adopts is unsatisfactory. I also reject probabilistic semantics for sentences of natural language, although the observation which motivates such semantics — that there are many sentences of natural language which can never be conclusively verified or falsified — is correct. I take conditions of verification and falsification to determine the meaning of sentences of natural language. Dummett rejects this account, but I think that his reasons are unconvincing. The account remedies the defects of an intuitionist style negation, and suggests how we might deal with assertions
evidence for which is essentially inconclusive.

Dummett takes the unusual view that the past may not be real while the present and finitely distant future are. He also claims that the content or meaning of sentences of a language must be relativised to a time. I argue that these two views are inconsistent. In Chapter VI, I endorse Dummett's anti-realism about the past, but reject the relativisation of meaning to time. In doing so, I adopt an analysis of tensed sentences which treats tense in terms of indexical reference to times. Dummett prefers to treat tensed sentences as involving temporal operators. His arguments for this analysis are not compelling.

Finally, I turn to Dummett's remarks about holism. These are again rather confusing. I attempt to disentangle the elements of his notion of molecularity. Molecularity is a property which Dummett thinks is desirable in a theory of meaning, and which holistic theories lack. A molecular theory has at least the three following properties: it yields determinate meanings for every sentence of a language, it yields publicly manifestable meanings for every sentence of the language and the meaning of every sentence can be expressed in terms of sentences no more complex than itself. By identifying these properties, I am able to determine which feature of molecularity various types of holism reject, and to employ arguments separately against them.

I think that Dummett's concern that an anti-realist molecular theory cannot explain the informativeness and necessity of deductive argument is baseless. But there are worse difficulties for anti-realism than Dummett recognises in accounting for the related phenomenon of the informativeness of technological change. Certain
technological changes so alter the procedures of determining truth value in a language that the anti-realist must treat them as changing the meaning of sentences in the language. This means that the anti-realist cannot explain such changes. Moreover, the anti-realist must admit, in this case, that truth is relativised to the means of determining truth value at a stage of scientific enquiry. So, despite my earlier remarks, anti-realism appears to be a species of relativism. I do not think that this is a bad thing, but it is certainly not a feature of anti-realism as Dummett advocates it.

I make no apology for concentrating as I have on Dummett's presentation of anti-realism. I am convinced that the manifestation argument is correct, and that it provides strong reasons for doubting our realist conceptions of the world. I would apologise for the tentative nature of my conclusions, were it not that I believe that tentative conclusions are the best that can be drawn.