PREFACE

In this thesis I have tried to answer Kant's question: "Are there any synthetic necessary truths?" by developing a theory of meaning within which the question can be stated clearly and given a decisive answer. However, I believe the theory is of more general interest than this, since although it is formulated so as to deal only with the connection between meaning and truth-conditions, it can be extended quite naturally to include kinds of meaning which have nothing to do with truth. This provides a framework for the classification of types of relations between meanings which treats relations between truth-conditions,
and, in particular, logical relations, as a special case. My belief in the wider applicability of what I say in the thesis is what explains the existence of many digressions, not immediately relevant to the main question. Some of these digressions are labelled as such by the word "note", or by their occurrence as footnotes or appendices (especially Appendix IV).

The main factor common to the theory developed within the thesis and its proposed extension is the acceptance of the existence of universals. The only kinds of universals explicitly described as such (chapters two, three and seven) are observable properties of material objects, but essentially the same concept of a universal is implicitly involved in the notion of a "technique" for discovering truth-values, illustrated in chapter five (5.3). A full characterization of this wider concept of a "universal" would require a detailed discussion of the points made by Wittgenstein (in Investigations and R.F.M) about the concept of "following a rule", in which he penetratingly criticizes his former beliefs. This thesis could be regarded as a first step in the process of patching up the Tractatus Logico Philosophicus so as to meet some of those criticisms. At any rate, the point I wish to make new is simply that the thesis is incomplete not only insofar as its further developments are hardly explored, but also, and more importantly, insofar as it rests on a basis which still requires a great deal of investigation. (This is hinted at in Appendix IV.8.a.)

It will be clear from what I have said that my main debts are to Kant and Wittgenstein: to the former for formulating the main question and providing what seems to me to be the right sort of answer, and to the latter for providing criticisms of the assumptions on which that answer is based which throw their exact nature into much sharper focus than ever before. (The reader may not find this latter debt evident.)

Now for some practical points. The order of development in the thesis is not the most clear and logical one possible, partly on account of the need for compression, and partly on account of the fact that new ideas kept coming even while the final draft was being written. (For example, a great deal of chapters two and three - especially 2.0 - is intended to forestall objections to chapter seven, and ought, ideally, to be preceded first by chapter seven and then the objections. But that would have made the thesis much longer.) For this reason the text is sprinkled with cross-references either in parenthesis or in footnotes, as an aid to clarity. It is hoped, however, that most of them can be ignored,
especially when they occur in footnotes, except when the reader has forgotten an earlier definition or argument.

iii

Finally, I should like to thank my supervisor, Mr. D. F. Pears, for showing so much patience, and for criticisms without which this thesis would have been far more confused and obscure than it is.

Page iv

Contents

Note all these parts/chapters are available as downloadable PDF

PART ONE: SOME PRELIMINARIES

Chapter one: Introduction 1
  1.A. The problems 1
  1.B. Methodological remarks 5
  1.C. The programme 13

PART TWO: MEANING AND TRUTH

Chapter two: Propositions and meanings 18
  2.A. Criteria of identity 18
  2.B. General facts about language 24
  2.C. Universals and strict criteria 38
  2.D. The independence of universals 50

Chapter three: Semantic rules 63
  Introduction 63
  3.A. F-words 64
  3.B. Logical syntheses 70
  3.C. How properties explain 83
  3.D. Non-logical syntheses 93
  3.E. Concluding remarks and qualifications 102

Chapter four: Semantic rules and living languages 107
  4.A. Indefiniteness 107
  4.B. Ordinary language works 117
  4.C. Purely verbal rules 125

Chapter five: Logical form and logical truth 129
  Introduction 129
  5.A. Logic and syntax 130
  5.B. Logical techniques 144
  5.C. Logical Truth 166
  5.D. Some generalisations 176
5.E. Conclusions and qualifications 181

Page v

PART THREE: MEANING AND NECESSARY TRUTH

Chapter six: Analytic propositions 194
  6.A. Introduction 194
  6.B. Some unsatisfactory accounts of the distinction 199
  6.C. Identifying relations between meanings 217
  6.D. Indefiniteness of meaning 229
  6.E. Knowledge of analytic truth 236
  6.F. Concluding remarks 249

Chapter seven: Kinds of necessary truth 260
  Introduction 260
  7.A. Possibility 261
  7.B. Necessity 272
  7.C. Synthetic necessary connections 283
  7.D. Informal proofs 294
  7.E. Additional remarks 319

Chapter eight: Concluding summary 329

APPENDICES 335

(NOTE: the table of contents here expands the one in the thesis, by including abstracts, as does the table on my web site.)

I. Singular referring expressions 335
II. Confusions of formal logicians 340

This appendix presents arguments against the view that a natural language must include a formal system, and that logic is just a matter of syntax. One of the key points, also made by Frege, is that semantics cannot emerge from syntax alone: we also need to take account of the functions of the symbols used, not just their form.

III. Implicit knowledge 357

This appendix gives examples of several kinds of implicit knowledge, including allowing for the deployment of implicit knowledge to be unreliable sometimes (Compare Chomsky's Competence/Performance distinction, 1965). The ability to do logic and mathematics, as well as many other kinds of things, depends on the use of implicit knowledge, which can be very difficult to make explicit. (At that point I knew nothing about the young science of AI which was beginning to provide new techniques for articulating implicit knowledge.)

IV. Philosophical analysis 372

The ideas about implicit knowledge in Appendix III are used in
Appendix IV to explain some of the puzzling features of the activity of conceptual analysis (disagreeing with R.M. Hare's explanation). This leads to further discussion of the nature of philosophical analysis and the claim that it cannot be concerned merely with properties of concepts: it must also be concerned with the world those concepts are used to describe, which may support different sets of concepts.

NOTE added 9 Feb 2014:
This theme was taken up again many years later in my paper distinguishing logical topography from logical geography in http://www.cs.bham.ac.uk/research/projects/cosy/papers/#dp0703

V. Further examples
VI. Apriori knowledge

Bibliography

END OF TABLE OF CONTENTS

[Transcribed from digitised PDF 10 Feb 2014. Some errors may remain.]
[Please send corrections to a.sloman @ cs.bham.ac.uk]