

CONTENTS

PREFACE.....	ix
CHAPTER 1. ASPECTS OF PARADOX.....	1
1.1. The liar and its variants	1
1.2. Propositions and truth-values	5
1.2.1. No proposition expressed	6
1.2.2. Lack of truth-value	9
1.3. The problem in a formal setting.....	12
1.4. Tarski and Kripke	16
1.5. The project	20
CHAPTER 2. AGAINST CLASSICAL LOGIC	23
2.1. Different treatments of the paradoxes.....	23
2.2. The first argument against classical logic	26
2.3. The second argument against classical logic.....	30
2.4. Variants of the arguments	37
2.4.1. No set of truths	37
2.4.2. Another paradox?	38
2.4.3. Propositions again.....	40
2.4.4. Quantifying into quotation	41
CHAPTER 3. AMBIGUITY AND INDEXICALITY	45
3.1. Ambiguity.....	45
3.1.1. The Tarskian hierarchy again.....	45
3.1.2. Shifts of meaning	47
3.2. The contextual approach to the liar.....	50
3.2.1. The three-stage reasoning about sentence-types	50
3.2.2. The three-stage reasoning about sentence-tokens	56
CHAPTER 4. A PROPOSITIONAL THEORY OF TRUTH.....	69
4.1. What kind of logic?	69
4.1.1. Avoiding contradiction.....	69
4.1.2. Espousing and abandoning principles.....	71

4.1.3.	Avoiding substructuralism	75
4.2.	A propositional logic	79
4.3.	The theory of truth	93
4.4.	Strengthening the logic	100
CHAPTER 5.	PROVING CENTRAL THEOREM 1	107
5.1.	Preliminaries	107
5.1.1.	Appropriate classes	107
5.1.2.	C -insertable classes	109
5.1.3.	The rule (Con)	111
5.1.4.	Extending a class	112
5.2.	Two theorems	113
5.3.	Proof of Central Theorem 1	124
5.4.	Concluding remarks	129
CHAPTER 6.	TRUTH AND DETERMINACY	131
6.1.	The concept of determinacy	131
6.2.	A logic of determinacy	133
6.2.1.	More operators	139
6.3.	A theory of truth with the determinacy operator	141
6.4.	Proving Central Theorems 2 and 3	146
6.4.1.	Central Theorem 2	146
6.4.2.	Central Theorem 3	148
6.5.	Trying to explain the failure of classical logic	162
CHAPTER 7.	A FIRST-ORDER LOGIC AND THEORY OF TRUTH	173
7.1.	The logic	173
7.1.1.	What kind of first-order logic?	173
7.1.2.	Adorned wffs, frames and codesignation	175
7.1.3.	Models _* and models	179
7.1.4.	Validities and invalidities	187
7.2.	A first-order theory of truth	195
CHAPTER 8.	PROVING CENTRAL THEOREM 4	207
8.1.	A problem	207
8.2.	Preliminaries	209
8.2.1.	C -implying and C -equivalence	209
8.2.2.	Acceptable adorned conditionals	212
8.2.3.	The rules (Con) and (Uni)	217
8.2.4.	Extensions	218
8.3.	Two theorems again	219
8.4.	Parallel formulae	232
8.5.	Constructing a sequence of models	237
8.6.	Reaching Central Theorem 4	248

CONTENTS

vii

CHAPTER 9. ANOTHER FIRST-ORDER THEORY OF TRUTH	255
9.1. Syntax and arithmetic	255
9.2. A new language	259
9.3. Syntactic definitions	261
9.4. The new theory of truth	279
9.5. Proving Central Theorem 5	285
CHAPTER 10. TRUTH IN DIFFERENT NON-CLASSICAL LOGICS	295
10.1. Field saving truth	295
10.1.1. Revising Kripke	295
10.1.2. Equivalentents and non-contradiction	299
10.1.3. Other differences from Field	307
10.2. Tennant's core logic	308
10.3. Zardini's substructuralism	310
10.4. And Ripley's substructuralism	321
AFTERWORD	327
REFERENCES	329
INDEX	337