

Contents

Preface xi

1 About This Book 1

- 1.1 What Is It About? 1
- 1.2 What Is It Not About? 5
- 1.3 For Whom Is It Intended? 6
- 1.4 How Is It Structured? 7
- 1.5 Note on Technicality and Notation 8

2 Axiomatic Theories of Truth 11

- 2.1 Pilate's Question 11
- 2.2 Essence and Function 14
- 2.3 Tarski's Distress 19
- 2.4 The Framework 22
- 2.5 Soundness and Strength 24

3 On the Shoulders of Giants 27

- 3.1 Introduction 27
- 3.2 Coding in the Language of Peano Arithmetic 28
- 3.3 The Diagonal Lemma 29
- 3.4 Metatheorems 31
 - 3.4.1 The First Incompleteness Theorem 31
 - 3.4.2 The Second Incompleteness Theorem 32
 - 3.4.3 The Completeness Theorem 34
 - 3.4.4 The Undefinability Theorem 35
- 3.5 More Strengthenings 36
 - 3.5.1 The Extended Diagonal Lemma 36
 - 3.5.2 The Naive Theory of Truth 37
 - 3.5.3 The Paradox of the Knower 39
- 3.6 Bounded Truth Predicates 41
 - 3.6.1 Complexity Classes of Arithmetical Formulae 41
 - 3.6.2 True Equations 42
 - 3.6.3 Defining Bounded Truth Predicates 43
- 3.7 Simplify, Simplify 44

4	The Disquotational Theory	47
4.1	Tarski on Defining Truth	47
4.2	The Disquotational Theory of Truth	49
4.3	The Soundness of the Disquotational Theory	51
4.4	Climbing Tarski's Ladder	53
4.5	The Uniformity of the Concept of Truth	55
4.6	Contextual Theories of Truth	56
5	Deflationism	59
5.1	The Unbearable Lightness of Truth	59
5.2	Commitments of Deflationist Theories	60
5.2.1	The Meaning of the Concept of Truth	61
5.2.2	The Function of the Concept of Truth	63
5.2.3	Truth as a Logico-Linguistic Notion	65
5.3	Foreign Tongues	66
6	The Compositional Theory	69
6.1	Clouds on the Horizon	69
6.2	The Compositional Theory of Truth	71
6.3	Truth and Satisfaction	73
6.4	The Power of Truth	74
7	Conservativeness and Deflationism	79
7.1	Defining Conservativeness	79
7.2	Conservative Over What?	81
7.2.1	Conservativeness Over Logic	81
7.2.2	Conservativeness Over Arithmetic	82
7.2.3	Conservativeness Over Empirical Science and Metaphysics	85
7.3	Truth and Epistemology	86
7.4	Truth and Meaning	91
7.5	Deflating Arithmetical Nonconservativeness	92
7.6	Substantiality and Irreducibility	94
7.6.1	Reducibility and Interpretability	94
7.6.2	A Conservative but Noninterpretable Truth Theory	95
7.6.3	Disquotationalism Revisited	97
7.7	A Serious Game	99
8	Maximizing Classical Compositionality	103
8.1	Typed and Untyped Theories	103
8.2	The Friedman–Sheard Theory	104
8.3	The Revision Theory of Truth	105
8.4	Probing the Friedman–Sheard Theory	107
8.5	Is the Friedman–Sheard Theory Sound?	111
8.6	A Somewhat Frivolous Game	113
8.6.1	Subsystems of Second-Order Arithmetic	113
8.6.2	The Strength of <i>FS</i>	114
8.6.3	The Weakness of <i>FS</i>	115

9	Kripke's Theory Axiomatized	117
9.1	Kripke's Semantical Theory of Truth	117
9.1.1	Constructing Models for Self-Referential Truth	117
9.1.2	Properties and Variations	120
9.2	Kripke–Feferman	124
9.3	The Inner Logic of <i>KF</i>	126
9.4	A Conservative Type-Free Theory	130
9.5	Partial Kripke–Feferman	132
9.5.1	Restricted Conditionalization	132
9.5.2	Partial Arithmetic and Determinate Truths	133
9.5.3	The Truth Rules	134
9.6	Analysis and Evaluation	135
9.6.1	Naturalness	135
9.6.2	Methodology	136
9.6.3	Soundness	137
9.6.4	Strength	138
10	Truth and Philosophy	141
10.1	Strong Theories of Truth	141
10.2	Inferential Deflationism	143
10.2.1	Truth and Logical Notions	143
10.2.2	Silence	144
10.2.3	A Concept Without an Essence	146
10.3	How Truth Rules Are Used	148
10.3.1	Truth in the Foundations of Mathematics	148
10.3.2	Truth in Philosophy	150
10.4	A Last Look at Deflationism	150
	Bibliography	153
	Glossary	159
	Author Index	161
	Subject Index	163