

Table of Contents

PREFACE	7
PART I LOGIC AND THE LIAR PARADOX	15
Chapter 1 THE LIAR AND ITS KIND	17
1.1 The concept of a paradox	18
1.2 The Liar paradox	22
1.3 Liar cycles and Yablo's paradox	25
1.4 Church's paradox	27
1.5 Curry's paradox	28
1.6 The history of the Liar paradox	32
1.7 Set theory and Cantor's diagonal argument	34
1.8 Semantic and set theoretic paradoxes	38
1.9 Just a joke?	41
1.10 The question of formality	43
Chapter 2 INFORMAL LOGIC AND THE LIAR REASONING	45
2.1 Informal logic	46
2.2 The naïve truth principle	48
2.3 Truth, falsity, and negation	50
2.4 Informal variants of the basic Liar reasoning	53
2.5 The extended Liar reasoning	57
2.6 The phenomenon of Revenge	60
2.7 The Reflective problem (a. k. a. the Son of the Liar)	61
2.8 The Problem of Expressibility	62
2.9 Recurrence of the Reflective problem	64
2.10 Revenge, Reflection, Expressibility	65
Chapter 3 FORMAL LOGIC AND TARSKI'S LEGACY	67
3.1 Formal logic: Language and calculus	68
3.2 The Tarskian truth schema	78
3.3 Classical logic	85
3.4 The background theory of a language	88
3.5 Formal variants of the basic Liar reasoning	91
3.6 The Diagonal Lemma and Tarski's Theorem	98
3.7 Tarski's condition of paradoxicality	104
3.8 Contagious inconsistency	106
3.9 Metaphysical inconsistency	110

PART II	SEMANTICS AND THE LIAR PARADOX	117
Chapter 4	MEANING, SEMANTICS, AND REDUCTIONISM	119
4.1	‘Semantics’ and the theory of meaning	120
4.2	A Fregean framework for semantics and metaphysics	122
4.3	Theoretical semantics	127
4.4	Extensional semantics (a. k. a. classical model theory)	131
4.5	Intensional semantics (a. k. a. possible world semantics)	135
4.6	Rigidity and direct reference in intensional semantics	136
4.7	Two-dimensional semantics	140
4.8	Two reductionist programs	153
Chapter 5	SINGULAR TERMS AND THE SPECTRUM OF LIAR SENTENCES	159
5.1	Reference and self-reference	159
5.2	Names, descriptions, and indexicals	161
5.3	‘This sentence’ is sententially indexical.	178
5.4	The full spectrum of Liar sentences	179
5.5	Quotation	183
5.6	Quotation and the irreflexivity of proper parthood	191
5.7	Formal quotation and the well-foundedness of syntax	192
Chapter 6	IS THERE A GÖDELIAN LIAR SENTENCE?	203
6.1	The Quinean and the Smullyanesque variant of the Liar paradox	204
6.2	The Gödelian construction of a self-referential sentence	212
6.3	The semantics of Gödelian reference	220
6.4	Is there a Gödelian variant of the Liar paradox?	228
PART III	THE METAPHYSICS OF EXPRESSIONS AND THE LIAR PARADOX	233
Chapter 7	HOW CAN THE LIAR PARADOX BE SOLVED?	235
7.1	What we have learned	235
7.2	Desiderata for a solution to the Liar paradox	238
7.3	Reductio ad absurdum and paradox	242
7.4	The Liar paradox is as yet unsolved.	244
7.5	The spectrum of modern approaches to the Liar paradox	246
7.6	The limits of semantic contextualism	251

Chapter 8	THE CHANGING WORLD OF EXPRESSIONS	255
8.1	Semantic sentences as primary truth bearers	257
8.2	The distinctness of an expression and its basis	263
8.3	Grounding, ontological dependence, and coincidence	265
8.4	Social ontology	269
8.5	Expressions as qua objects	270
8.6	An example by Kit Fine	274
8.7	The contextualist ontology of expressions and the internal stance	276
Chapter 9	LANGUAGE IN A CHANGING WORLD	281
9.1	Tense logic and temporal context-sensitivity	282
9.2	Future objects: Contextual restrictions on reference	284
9.3	Past objects: Identifiability without existence	286
9.4	The modal logic of existence and identifiability	287
9.5	Future objects: Irreducibly conceptual talk	290
9.6	The logic of objectual and conceptual quantification	292
9.7	The irreducibility of sense and of concepts	296
9.8	Irreducible sense in the semantics of singular terms	297
9.9	‘The first child born a hundred years hence’	300
9.10	Reference, grounding, dependence, and accessibility	303
9.11	The flexibility of language	313
9.12	Metaphysico-Semantics	314
Chapter 10	CHANGEABLE TRUTH IN LANGUAGE AND WORLD	315
10.1	A dual framework	316
10.2	The role of the intensional semantics	319
10.3	The role of the two-dimensional semantics	326
10.4	The Tarskian equivalence	332
10.5	Overview of the dual framework	338
10.6	Criteria for truth and falsity in terms of two variable domains	340
10.7	The two domains in terms of existence and identifiability	343
10.8	Criteria for truth and falsity in terms of existence and identifiability	346
10.9	The Generalized Truth Equivalence	348
10.10	Different kinds of truth value gaps	358
10.11	Solution to the problem of existence without identifiability	365
10.12	Kaplan’s puzzle and the status of our solution	371

Chapter 11	A SELF-REFERENTIAL LANGUAGE AS ITS OWN CHANGING WORLD I: SUBSEQUENTIST METAPHYSICS	375
11.1	Overlap between language and world	376
11.2	Self-referential expressions	379
11.3	Some weird sentences	383
11.4	Names due to circular baptism?	386
11.5	Names due to circular definition?	388
11.6	The problem of ontological co-dependence	390
11.7	The problem of metaphysical ill-foundedness	392
11.8	From well-foundedness to subsequence	395
11.9	The problem of referential stickiness	398
11.10	The problem of semantic magicality	399
11.11	'This sentence' exhibits the four problems, too.	402
11.12	The principle of subsequence for directly referential expressions	410
11.13	Drawing the line in the right place	416
11.14	A social contract about ontology	420
Chapter 12	A SELF-REFERENTIAL LANGUAGE AS ITS OWN CHANGING WORLD II: SUBSEQUENTIST SEMANTICS	425
12.1	Some weird sentences	426
12.2	Objects that describe themselves?	430
12.3	From non-existence to non-identifiability	434
12.4	The aim of semantic uniformity	443
12.5	The problem of referential entanglement	449
12.6	'This sentence' exhibits referential entanglement, too.	457
12.7	The principle of subsequence for identifiability	461
12.8	Assigning contexts to inscriptions	481
12.9	Subsequentism	497
Chapter 13	SUBSEQUENTISM SOLVES THE LIAR PARADOX	503
13.1	Subsequentism and how it solves the Liar paradox	504
13.2	The Liar paradox in the dual framework of chapter 10	526
13.3	A plethora of paradoxical sentences?	545
13.4	Other paradoxes	573
13.5	Expressibility	580
13.6	Parting with tradition	621
LITERATURE	631