Beyond Concepts

Unicepts, Language, and Natural Information

Ruth Garrett Millikan



Contents

Part I. Unicepts

Introduction to Part I		
0.1 Overview	3	
0.2 Selection Processes	4	
0.3 Ontology and Language	6	
0.4 Unicepts and Unitrackers	7	
0.5 Organization and Method	9	
0.6 Acknowledgments	10	
1. A Clumpy World	11	
1.1 Overview	11	
1.2 Real Kinds	11	
1.3 Reproduction and Mass Production	15	
1.4 Historical Kinds	17	
1.5 Individuals	18	
1.6 Eternal Kinds	21	
1.7 Shapes and Divisions of Historical Kind Clumps	22	
1.8 Real Categories	24	
2. Direct Reference for Extensional Terms	27	
2.1 Overview	27	
2.2 Conventions of Language	27	
2.3 Following Precedent	30	
2.4 Direct Reference to Clumps	32	
2.5 Identifying through Language	34	
2.6 Real Definitions	35	
2.7 Names for Properties	36	
2.8 Boundaries and Slippage	37	
2.9 Communication with Names for Clumps and Peaks	39	
3. Introducing Unitrackers and Unicepts	42	
3.1 Overview	42	
3.2 Initial Examples of Unitracker Function	43	
3.3 Discarding Concepts	46	
3.4 Details on the Nature and Function of Unicepts	49	
3.5 Life Span and Growth of Unitrackers and Unicepts	51	
3.6 How Names Connect with Unicepts	52	
3.7 The Role of Language in Unicept Development	53	
3.8 On Modeling Unicepts	54	

vi contents

4.	Functions of Same-Tracking	56
	4.1 Overview	56
	4.2 Perceptual Constancy Mechanisms	56
	4.3 Self-Relative Location Trackers	59
	4.4 Object Constancy	60
	4.5 Same-Tracking for Application of Unicept Templates	61
	4.6 Practical Stuffs and Affording Unicepts	62
	4.7 Factic Unicepts: Substantive and Attributive	66
	4.8 Two Closing Remarks	68
5.	How Unicepts Get Their Referents	70
	5.1 Overview	70
	5.2 How Unicept Referents Are Fixed: The Quarry	70
	5.3 Two General Principles Concerning Functions	72
	5.4 Imprinting	74
	5.5 More General Mechanisms for Priming Unitrackers	75
	5.6 Some Mechanisms that Set Targets, Specifically, for	
	Affording Unicepts	76
	5.7 The Problem of Location-Detached Signs	77
	5.8 A Third General Principle: Proxy Functions	79
	5.9 Natural Epistemology for Substantive and Attributive Unicepts	80
6.	Misrepresentation, Redundancy, Equivocity, Emptiness	
	(and Swampman)	84
	6.1 Overview	84
	6.2 Failures of Biological Function	84
	6.3 False Beliefs	88
	6.4 Redundant Unitrackers and Fregean Senses	89
	6.5 Equivocepts	91
	6.6 Vacucepts	93
	6.7 How Unicepts Fit with Biosemantics	94
	6.8 Swampman	95
7.	Philosophical Analysis; Referents of Names: Theory Change;	
	Observation versus Theory; Theory of Mind	97
	7.1 Overview	97
	7.2 Philosophical Analysis	97
	7.3 Referents of Names	99
	7.4 Theory Change in Science	101
	7.5 Observation versus Theory	102
	7.6 "Theory of Mind"	103
P	art II. Infosigns, Intentional Signs, and	
	their Interpretation	
8	. Introduction to Part II	109
2	8.1 Overview	109

· --- - ·

	8.2 8.3	Infosigns and Natural Information Infosigns and Intentional Signs	109 111
	8.5 8.4	Interpreting Linguistic Signs	112
Q		icals and Selfsigns	114
9.		Overview	114
	9.2		114
	9.3	-	115
	9.4	Preliminary Examples of Selfsigning Components	117
	9.5	Indexicals and Demonstratives	120
	9.6	Addendum on Intensional Contexts	122
10.	An Anatomy of Signs		124
		Overview	. 124
	10.2	The Project	124
	10.3	Infosigns Are Always Articulate and Often Productive	125
	10.4	Equivocal Infosigns	127
	10.5	Infosign Systems and Families	128
	10.6	Variants and Invariants; Embedded Infosign Families	129
	10.7	A Taxonomy of Infosign Variables	131
	10.8	How a Language Is Put Together	136
11.	Infosi	igns and Natural Information	137
	11.1	Overview	137
	11.2	The Project	137
	11.3	Examples of Nonintentional Infosigns	139
	11.4	Causal Connections; Dretske on Natural Information	140
	11.5	Correlational Information	141
	11.6	The Reference Class Problem	143
	11.7	Addressing the Reference Class Problem	144
	11.8	Using Infosigns	147
	11.9	Correlations between Types of States of Affairs	149
	11.10	Infosign Strength and Response Strength	150
	11.11	Redundancy	151
		Metacorrelations	152
	11.13	Indirect Infosigns; Indirect Natural Information	153
12.	Inten	155	
	12.1	Overview	155
	12.2	The Project	155
	12.3	Intentional Infosigns	156
	12.4	Intentional Signs and Stabilizing Functions	159
	12.5	Pure and Impure Intentional Signs	160
	12.6	Entwining of Intentional Content and Nonintentional	
		Information	161
	12.7	Intentional Signs Used by Non-Human Animals	163
	12.8	Maps, Charts, Diagrams, Graphs	163

	12.9	Extending the Senses	164
	12.10	Inner Representations	165
13.	Ling	iistic Signs	167
	13.1	•	167
	13.2	The Topic	167
	13.3	-	170
	13.4	-	173
	13.5	Meta-Regularities and Extra-Semantic Infocontent	175
	13.6	Grice's Conversational Maxims	176
	13.7	Far-Side Pragmatic Meaning, or Semantic Meaning?	178
	13.8	Addendum: Gricean Temptations	181
14.	Perce	ption, Especially Perception through Language	184
	14.1	Overview	184
	14.2	The Project	184
	14.3	Perception as Sign Reading	185
	14.4	Attached and Detached Signs, with an aside on Animal Cognition	187
	14.5	Genuine Perception Thought of as Certain	190
	14.6	The Contents of Perceptual Experience	193
	14.7	Translating Linguistic Signs into Understanding	196
	14.8	Replies to Objections	198
15.	Mark	ers of Identity and Grounded Infosigns	204
	15.1	Overview	204
	15.2	Selfsigns of Identity: Duplicate Markers; Strawson Markers	204
	15.3	Anaphoric Signs of Identity	206
	15.4	Grounding as Indicating Identity	208
	15.5	Situated Signs; Counting up Signs	209
	15.6	Recognizing Identity: A Reminder	210
16.	Out-S	Side Pragmatics: Descriptions, Quantifiers, Directives	212
	16.1	Overview	212
	16.2	Three Kinds of Referent	212
	16.3	Functions of the Definite and Indefinite Articles	213
	16.4	Quantifiers, Possessives, and Proper Names	217
	16.5	Thumbnail Review of Basic Themes	218
Glo	ssary		221
	liograp	hy	227
Inde	•••	,	237

Index