Contents

Pre	Preface	
	PART I	
1.	Introduction	3
	Individual Representationalism A Different Standpoint	12 22
2.	Terminology: What the Questions Mean	30
	Representation Representation-as and Representational Content	30 34
	Representation Failure and Representation As Of	42
	Objectivity Particulars, Attributes, Properties, Relations, Kinds Resources and Conditions	46 54
	Constitutive Conditions and Natures	56 57
	Summary	59
3.	Anti-Individualism	61
	Anti-Individualism: What It Is	61
	General Grounds for Anti-Individualism	73
	Anti-Individualism Regarding Perception	82
	The Shape of Perceptual Psychology	87
	Perceptual Psychology Presupposes Anti-Individualism	98
	Perceptual Capacities Shared Across Species	101
	Individual Representationalism and Perceptual Psychology	103
	Perception and Concepts	104
	Anti-Individualism and Individual Representationalism	105
	PART II	
4.	Individual Representationalism in the Twentieth Century's	

4.	individual Representationalism in the Twentieth Century s	
	First Half	111
	Individual Representationalism in Psychology	112

viii Contents

	Individual Representationalism in Mainstream Philosophy Before the Mid-Twentieth Century Individual Representationalism in "Continental" Philosophy Before the Mid-Twentieth Century	115 129
5.	Individual Representationalism after Mid-Century: Preliminaries	137
	The Demise of Logical Positivism, Behaviorism, and Descriptivism	140
	Descriptivism and the Causal Picture of Reference	143
	Individual Representationalism and Anti-Individualism: Again	149
6.	Neo-Kantian Individual Representationalism: Strawson and Evans	154
	Kant	154
	Strawson—Two Projects	156
	Strawson on Kant	160
	Strawson on Solipsism	162
	Strawson on Feature Placing	163
	Strawson on Particular-Identification in Thought	171
	Strawson on Criteria for Representation	176
	Postlude: Strawson on Criteria in Identificational Reference	180
	Evans on Strawson	181
	Evans on Constraints on Objective Reference in Perception	184
	Evans on Demonstrative, Perceptual Thought	191
	Evans on Conditions for Representing Kinds and Particular Objects	194
	Evans on Spatial Representation in Thought	199
	Neo-Kantian Individual Representationalism: Summary	208
7.	Language Interpretation and Individual Representationalism:	
	Quine and Davidson	211
	Quine's Starting Point: The Argument from Default Neutrality	212
	Interlude: Evans's Critique of Quine on Referential Indeterminacy	216
	Communication and Evidence: Quine's Notion of the Empirical	223
	Before Objective Reference: The Pre-Individuative Stage	227
	Truth Conditions and Structure	230
	The Pre-Individuative Stage: Proximal Stimulation	
	and the Physical Environment	232
	Divided Reference: The Supplemental Linguistic Apparatus	235
	Quantification	238
	Further Elements in Quine's Individuative Apparatus	250
	The Basic Assumption	254
	Identity and Resemblance	260
	Davidson on Conditions for Objective Empirical Representation	264
	Davidson's Two Arguments	267
	Davidson on Belief	276

	Language-Centered Individual Representationalism: Summary A Retrospective on Individual Representationalism	281 283
PART III		
8.	Biological and Methodological Backgrounds	291
	Deflationary Conceptions of Representation; Biological	
	Function and Representational Function	292
	Representational Function and Natural Norms	308
	The Lower Border of Perception: Sensory Information	
	Registration and Perception	315
	Perception and the Environment: The 'Disjunction Problem'	319
	Primitive Agency	326
	Perceptual Psychology and the Distinction between	
	Sensory Information Registration and Perception	342
	Convergence	347
	Lightness Constancy	351
	Planar Slant from Planar Surface Texture	355
	Depth from Convexity of Image Regions	359
9.	Origins	367
	Perception as the Individual's	369
	Perception as Sensory	376
	Perception as Representation	379
	Perception as Objectification	396
	Perception as Objectification as Opposed to Perception	
	as Extraction of Form	416
	Phylogenetic Distribution of Perceptual Systems	419
	Examples of the Sensory-Registration/Perception Distinction	421
	Perception, Representation, Propositional Knowledge	430
10.	Origins of Some Representational Categories	437
	Perception and Body	437
	Body Representation as Originating in Perception	438
	Singular Applications in Perception of Bodies	450
	General Elements in Perception of Bodies: Conditions for	
	Body Attribution	454
	Perception of Body and Attribution of Solidity	
	and Generic Shape	465
	Perception and Origins of Mathematical Capacities	471
	Estimating Numerosity and Ratios of Aggregates	472
	Mathematical Tracking of Indexed Particulars	483
	The Two Mathematical Capacities	490
	Perception and Origins of Spatial Representation	492

x Contents

Beaconing	498
Path Integration	499
•	
Landmark Use	507
Map Use	509
Spatial Representation in Navigation by Jumping	
Spiders and Other Arthropods	514
Perception and Origins of Temporal Representation	518
Association, Computation, Representation	529
11. Glimpses Forward	532
The Epistemic Status of Constitutive Principles	
Governing Perception	532
The Upper Border of the Perceptual: Perception and	
Propositional Attitudes	537
Propositional Attitudes, Individual Representationalism, and	
Conceptualization of Perception	544
Origins, Levels, and Types of Objectivity	547
Bibliography	552
Author Index	
Subject Index	