

Contents

<i>List of Figures</i>	ix
<i>List of Tables</i>	x
<i>Foreword</i>	xi
<i>Preface</i>	xiii
<i>Acknowledgements</i>	xviii
Chapter 1 Theories of the Sign	1
Introduction	1
Thought and the sign in classical philosophy	3
Post-classicism: the Kantian turn	7
Modern signs: Peirce, Frege, Saussure	13
Formalism, structuralism and the semiotic enterprise	20
Chomsky and generative linguistics	23
Social life as semiosis: Mead, Bakhtin, Barthes	25
Chapter 2 The Dialectics of Representation	37
The conditions on representation	37
Representation and signification	43
Verisimilitude, truth, reference	52
Representation, re/cognition, relativity	58
Psychological concepts	65
Propositional attitudes	70
Chapter 3 Evolution and Development:	77
The Phylocultural Complex	
Darwin and the mind of the child	77
Freud: Ursprache and the unconscious	78
Piaget: from solipsism to structure	85
Vygotsky: language and the sociogenesis of reasoning	92
Ontogeny and phylogeny: beyond the paleomorphic metaphor	98
Chapter 4 Language, Mind and Nature	111
The modern syntheses	111
Neo-rationalism: from reflexology to representation	115
'Ecological' alternatives	127
Behaviour, representation and evolution	134

Neural networks in epigenetic development	143
Problems and perspectives	152
Chapter 5 Context: Background, Presupposition and Canonicity	164
Theoretical and practical reasoning	164
Background knowledge: inside or outside the whale?	168
Understanding utterances in context: the acquisition of spatial prepositions	183
Context, representation and social relations	203
Coda	205
<i>Bibliography</i>	209
<i>Name Index</i>	226
<i>Subject Index</i>	232

List of Figures

2.1 A representation?	39
3.1 The palaeomorphic metaphor: time as geology	101
4.1 Alternative paradigms in evolutionary and cognitive science	114
4.2 From reflexology to representation	123
4.3 Representation and adaptation in an epigenetic naturalist framework	142
5.1 Specific and general knowledge: the interaction of situational and personal specificity	167
5.2 Types of knowledge representation	181
5.3 Trial types for Experiment 1: initial configurations	189
5.4 Target and response (placement) cube in relation to constructed nest and stack arrays (Experiment 2: relative sizes)	196

List of Tables

5.1 Comprehension of <i>in</i> and <i>on</i> using cups as targets, by age group	190
5.2 Correct responses for each trial type, by age group	193
5.3 Canonically and motor difficulty effects by age group and trial type	193
5.4 Dependency relations between c-effect and m-effect, by age group	194
5.5 Comprehension of <i>in</i> and <i>on</i> using cubes as targets after playing a stacking game, by age group	197
5.6 Comprehension of <i>in</i> and <i>on</i> using cubes as targets after playing a nesting game, by age group	198
5.7 Correct and incorrect responses to <i>in</i> and <i>on</i> trials for stacking and nesting conditions, by age group	199
5.8 Error patterns by condition, trial type and combined age groups (Younger = Groups 1 and 2; Older = Groups 3,4,5)	200
5.9 Errors in stacking vs. nesting conditions	200