Contents

Preface ix

1.	On the Interaction of Perception and Memory in Reading W. K. Estes	1
	Provisional Characterization of the Interaction of Perception and Memory: The Hierarchical Filter Model 3 Evidence Bearing on the Model 6	
	Summary Remarks on Visual Processing in Reading 20 References 24	
2.	Neural Models with Cognitive Implications James A. Anderson	27
	Introduction 27 Theoretical Models 29 Abstraction 42	
	List-Scanning Experiments 55 Distinctive Features and Neural Models 64	
	References 86	
3.	A Pattern-Unit Model of Word Identification Neal F. Johnson	91
	Reading and the Unit of Information Processing 91 The Pattern-Unit 94	
	Some Illustrative Experiments 111	

	A Final Disclaimer 121 Conclusions 122 References 123	
4.	Automatic and Controlled Information Processing in Vision	
	Walter Schneider and Richard M. Shiffrin	127
	Introduction 127 A Search Paradigm for Observations of Automatic and Controlled Processing 128 The Development of Automatic Search, Perceptual Learning and Categorization 140	
	The Attention Demands of Controlled and Automatic	
	Processing 145	
	Some Supporting Results 146 Extensions of the Theory 147	
	Some Applications and Supporting Evidence for the Theory 149 Conclusions 151 References 152	
	and a limit for the same of	
5.	How Perception Really Developes: A View From Outside the Network	
	Eleanor J. Gibson	15!
	Trends in Perceptual Development 159	
	The Meaning of Words 167	
	Conclusion 170	
	References 171	
6.	Mechanisms for Pronouncing Printed Words: Use and Acquisition Jonathan Baron	17!
	EC abanin soltakari?	
	Analysis of the Possibilities 176	
	Pronouncing Words Aloud 179	
	Extracting Meaning 189	
	Learning the Orthography 204	
	Conclusions 213 References 215	
7.	Integrative Processes in Comprehension	

Using the Discourse Pointer in Writing 231

	References 240		
8.	Inferences in Comprehension Herbert H. Clark		
	The Given-New Contract 245 Varieties of Given-New Implicatures 248 Drawing Inferences 256 Conclusions 261 References 262		
9.	Understanding and Summarizing Brief Stories David E. Rumelhart		
	Introduction 265 A Comprehension Model 266 A Problem-Solving Schema for Stories 268 Summaries of Stories 277 Schemata and Story Recall 297 General Conclusions 302 References 302		
10.	Computer Simulation of a Language Acquisition System: A Second Report John R. Anderson		
	Purposes 305 LAS as a Language User 308 Basic Principles for Language Induction 320 Case History of Language Induction 344 Summary Evaluation of LAS 355 Conclusion 358 References 358		
Author Index 361 Subject Index 367			

Overview 239