Contents

Preface	ix
Preface	ix

Introduction xi

1.	Written Language	1
	Origins of Writing 1	
	The Emergence of True Writing 3	
	The Origins of English Spelling 5	
	Levels of Representation in Present-day English Spelling 6	
	The word level of representation 7	
	The morphemic level of representation 8	
	The phonemic level of representation 8	
	Summary of Chapter 1 9	
2.	Reading by Ear and by Eye	11
	Reading by Ear 11	
	Phonic Mediation Theory and Some Objections to It 15	
	Reading by Eye 16	
	The Rumelhart and McClelland model of direct visual word	
	recognition 17	
	Accessing meanings and pronunciations 21	
	Summary of Chapter 2 22	
3.	Routes and Options in Word Comprehension and Naming	25
	Evidence for Separate Visual and Auditory Word Recognition Systems 25	

.

The Role of Morphemes in Word Recognition and Production 26 Naming Words 27 27 Addressed and assembled pronunciations Routes to "assembled" pronunciations 29 30 Comprehending an assembled pronunciation The Final Model 31 Summary of Chapter 3 34 35 The Acquired Dyslexias 4. Varieties of Acquired Dyslexia 36 Visually based dyslexias 36 37 Phonological dyslexia 37 Reading without meaning Surface dyslexia 38 Deep dyslexia 41 General Issues 44 Summary of Chapter 4 45 48 5. Words in Combinations Eye Movements in Reading 48 The effective visual field 49 50 Reading rate and comprehension Comprehending Words in Combinations 50 The products of comprehension 52 The Role of Prior Context in Word Recognition 53 Routes to Reading Aloud 55 The Role of Sound in Reading 57 Summary of Chapter 5 59 6. Spelling and Writing 60 Planning to Write 60 Phonic Mediation of Spelling? 63 63 Homophones and irregular words Phonological dysgraphia 64 Addressed Spellings 64 Deep dysgraphia 65 Slips of the pen and addressed spellings 68 Patient R.D. 70 Toward a Composite Model for Addressed and Assembled Spellings 71 Analogies and correspondences in assembled spellings 72 Applying the Model 74 Spelling errors 74 Individual differences 75

76 Surface dysgraphia Amnestic dysgraphia 77 From Graphemes to Movements 78 The Relationship Between Writing and Reading 80 Simultaneous writing and reading 81 The Relationship Between Acquired Dyslexia and Acquired 82 Dysgraphia Patient R.G. 83 Letter-by-letter reading 83 Summary of Chapter 6 84 86 7. Learning to Read and Write Marsh, Friedman, Welch, and Desberg's Four-Stage Theory of Learning to Read 87 Stage One: Glance-and-guess 87 Stage Two: Sophisticated guessing 88 Stage Three: The acquisition of simple grapheme-phoneme correspondencies 89 Stage Four: The skilled reader 90 90 Similarities Between Young Readers and Acquired Surface Dyslexics Children's Use of Context in Reading 92 The Influence of Teaching Methods on the Acquisition of Reading Strategies 93 Learning to Write 95 How do children learn to spell? 96 Young spellers and surface dysgraphics 98 Teaching Reading and Writing 99 Linguistic awareness 101 103 Summary of Chapter 7 105 8. Developmental Dyslexia and Dysgraphia The Concept of Developmental Dyslexia 105 Is Dyslexia a Disease? 106 Unitary Explanations of Development Dyslexia 107 Unitary hypothesis 1: "Dyslexia is a perceptual disorder" 108 Unitary hypothesis 2: "Dyslexia is caused by faulty eye movements" 109 Unitary hypothesis 3: "Dyslexia is a disorder of short-term memory" 110 Developmental Dyslexia and the Left Cerebral Hemisphere 110 Comparing Developmental and Acquired Dyslexia 112 Is developmental dyslexia like acquired deep dyslexia? 113 Is developmental dyslexia like acquired surface dyslexia? 115

Developmental phonological dyslexia 117 Developmental letter-by-letter (spelling) dyslexia? 118 Hyperlexia 119 The Varieties of Developmental Dyslexia 120 Mitterer's (1982) division of poor readers into whole-word and recoding types 121 Boder's (1971; 1973) distinction between dyseidetic and dysphonetic dyslexics 121 The EXPECTED nature of individual differences among poor (and good) readers 122 Dyslexic Spelling and Writing 124 Teaching Dyslexics 127 Summary of Chapter 8 128 References 130

145

140

Author Index