

Contents

<i>List of Contributors</i>	<i>ix</i>
<i>Preface</i>	<i>xi</i>

PART I INTRODUCTION

1 Language and Information Processing

Dominic W. Massaro

I. Introduction	3
II. Information Processing	5
III. Auditory Information Processing	7
IV. Visual Information Processing	21
V. Conclusion	27
References	27

PART II SPEECH PERCEPTION

2 Articulatory and Acoustic Characteristics of Speech Sounds

Lucinda Wilder

I. Introduction	31
II. Production of Speech Sounds	33

III. General Acoustic Properties of Speech Sounds	36
IV. Articulation of Speech Sounds	43
V. Occurrence of Speech Sounds	46
VI. Vowel Phonemes of English	51
VII. Coarticulation	56
VIII. Consonant Phonemes of English	57
IX. Individual Differences	70
X. Distinctive Features	71
References	76
3 Acoustic Features in Speech Perception	
<i>Dominic W. Massaro</i>	
I. Introduction	77
II. Primary Recognition	78
III. Vowel Recognition	80
IV. Consonant Recognition	92
V. Conclusion	121
References	121
4 Preperceptual Images, Processing Time, and Perceptual Units in Speech Perception	
<i>Dominic W. Massaro</i>	
I. Introduction	125
II. Primary Recognition	125
III. Preperceptual Images and Processing Time	128
IV. Perceptual Units	137
V. Primary and Secondary Recognition	143
VI. Conclusion	149
References	149
5 Theories of Speech Perception	
<i>Kenneth R. Paap</i>	
I. Introduction	151
II. Summary of Information-Processing Analysis of Speech Perception	152
III. Descriptions of the Theories	153
IV. The Role of Linguistic Structure in Model Building	175
V. Summary	199
References	200
PART III READING	
6 Visual Features, Preperceptual Storage, and Processing Time in Reading	
<i>Dominic W. Massaro and Joseph Schuller</i>	
I. Introduction	207
II. Visual Features	210

III. Preperceptual Storage	231
IV. Processing Time	234
References	237

7 Primary and Secondary Recognition in Reading

Dominic W. Massaro

I. Introduction	241
II. Utilization of Redundancy	242
III. Phonological Mediation	260
IV. Nonmediated Models of Reading	273
V. Mediated Models of Reading	278
References	286

8 Reading Eye Movements from an Information-Processing Point of View

Wayne Shebilske

I. Introduction: Significance of Reading Eye Movements	291
II. Characteristics of Reading Eye Movements	292
III. Oculomotor Control During Reading	301
IV. Summary and Conclusion	308
References	309

PART IV PSYCHOLINGUISTICS

9 Linguistic Theory and Information Processing

Kenneth B. Solberg

I. Introduction	315
II. Linguistics and Psychology	316
III. Theories of Grammar	318
IV. Semantics and Syntax	331
V. Models of the Language User	344
VI. Summary	352
References	353

10 Word and Phrase Recognition in Speech Processing

Arthur Freund

I. Introduction	357
II. Word Recognition and Context	359
III. Acoustic Cues to Grammatical Structure	367
IV. Click Localization	374
V. Summary	386
References	387

II	An Analysis of Some Psychological Studies of Grammar: The Role of Generated Abstract Memory	
	<i>Joseph B. Hellige</i>	
I.	Introduction	391
II.	The Nature of Short-Term Memory (STM)	392
III.	The Psychological Reality of Constituent Structure	394
IV.	The Psychological Function of Certain Transformation Rules	413
V.	Summary	421
	References	422
	<i>Author Index</i>	425
	<i>Subject Index</i>	432