

Contents

Preface viii

PART I: INTRODUCTORY CONCEPTS

CHAPTER 1 ARTICULATION AND ACOUSTICS 1

- Speech Production 1
- Sound Waves 5
- Places of Articulatory Gestures 7
- The Oro-Nasal Process 13
- Manners of Articulation 13
- The Waveforms of Consonants 17
- The Articulation of Vowel Sounds 18
- The Sounds of Vowels 21
- Suprasegmentals 22
- Exercises 24

CHAPTER 2 PHONOLOGY AND PHONETIC TRANSCRIPTION 33

- The Transcription of Consonants 35
- The Transcription of Vowels 38
- Consonant and Vowel Charts 42
- Phonology 45
- Exercises 48
- Performance Exercises 52

PART II: ENGLISH PHONETICS

CHAPTER 3 THE CONSONANTS OF ENGLISH 55

- Stop Consonants 56
- Fricatives 64
- Affricates 66
- Nasals 66
- Approximants 67
- Overlapping Gestures 68
- Rules for English Consonant Allophones 71
- Diacritics 76
- Exercises 76
- Performance Exercises 81

CHAPTER 4 ENGLISH VOWELS 83

- Transcription and Phonetic Dictionaries 83
- Vowel Quality 85
- Unstressed Syllables 94
- Tense and Lax Vowels 95
- Rules for English Vowel Allophones 98
- Exercises 100
- Performance Exercises 104

CHAPTER 5 ENGLISH WORDS AND SENTENCES 107

- Words in Connected Speech 107
- Stress 110
- Degrees of Stress 111
- Sentence Stress 115
- Intonation 116
- Target Tones 124
- Exercises 128
- Performance Exercises 131

PART III: GENERAL PHONETICS

CHAPTER 6

AIRSTREAM MECHANISMS AND PHONATION TYPES 133

- Airstream Mechanisms* 133
- States of the Glottis* 143
- Voice Onset Time* 146
- Summary of Actions of the Glottis* 151
- Exercises* 152
- Performance Exercises* 155

CHAPTER 7

CONSONANTAL GESTURES 159

- Articulatory Targets* 159
- Types of Articulatory Gestures* 168
- Summary of Manners of Articulation* 175
- Exercises* 176
- Performance Exercises* 178

CHAPTER 8

ACOUSTIC PHONETICS 181

- Formants* 181
- Acoustic Analysis* 184
- Acoustics of Consonants* 191
- Interpreting Spectrograms* 197
- Individual Differences* 205
- Exercises* 208

CHAPTER 9

VOWELS AND VOWEL-LIKE ARTICULATIONS 211

- Cardinal Vowels* 211
- Secondary Cardinal Vowels* 216
- Vowels in Other Accents of English* 218
- Vowels in Other Languages* 221
- Advanced Tongue Root (ATR)* 223

Rhotacized Vowels 224

- Nasalization* 226
- Summary of Vowel Quality* 226
- Semivowels* 227
- Secondary Articulatory Gestures* 229
- Exercises* 231
- Performance Exercises* 233

CHAPTER 10

SYLLABLES AND SUPRASEGMENTAL FEATURES 237

- Syllables* 237
- Stress* 243
- Length* 244
- Rhythm* 245
- Intonation and Tone* 247
- Stress, Tone, and Pitch Accent Languages* 253
- Exercises* 254
- Performance Exercises* 256

CHAPTER 11

LINGUISTIC PHONETICS 259

- Controlling Articulatory Movements* 259
- The Balance between Phonetic Forces* 261
- The International Phonetic Alphabet* 264
- Feature Hierarchy* 268
- Phonological Features* 273
- Performance Exercises* 276

Further Reading 283

- Additional Resources* 287
- Glossary* 291
- Sources* 297
- Index* 303