

## CONTENTS

<i>Preface</i>	xiii
<b>1 Speech sounds and their production</b>	1
1.1 Organs and processes	1
1.1.1 The initiation process	1
1.1.2 The phonation process	2
1.1.3 The oro-nasal process	3
1.1.4 The articulation process	6
1.2 Articulation in detail	7
1.2.1 Consonants: places of articulation	9
1.2.2 Vowels	12
1.2.3 Manners of articulation	18
1.2.4 Approximants in detail: vowels revisited	22
1.3 Conclusion	26
Suggested reading to chapter 1	27
<b>2 Towards a sound system for English: consonant phonemes</b>	29
2.1 Phonetics and phonology, or how many speech sounds does English have?	29
2.2 Phones, phonemes and allophones	31
2.3 The consonant phonemes of English	33
2.3.1 The basic inventory	33
2.3.2 Some regional modifications	36
2.3.3 Phonemic transcription and information	37
2.3.4 The phonetic content of phonemes	39
Suggested reading to chapter 2	42
<b>3 Some vowel systems of English</b>	43
3.1 A choice of reference accents	43
3.2 Three inventories	44
3.2.1 The Southern British Standard vowel phonemes	44

Cambridge University Press

978-0-521-33603-1 - English Phonology: An Introduction

Heinz J. Giegerich

Table of Contents

[More information](#)*Contents*

3.2.2 The vowel phonemes of Scottish Standard English	45
3.2.3 The vowel phonemes of General American	47
<b>3.3 Three basic vowel systems</b>	<b>48</b>
3.3.1 Pairs of phonemes	48
3.3.2 England	51
3.3.3 Scotland	53
3.3.4 The United States	58
<b>3.4 Vowels and /r/</b>	<b>61</b>
3.4.1 Rhotic and nonrhotic accents	61
3.4.2 Scottish Standard English	63
3.4.3 General American	64
3.4.4 Received Pronunciation	65
<b>3.5 Unstressed and low-stressed syllables: schwa and some other vowels</b>	<b>66</b>
<b>3.6 Phonemic symbols and phonetic content</b>	<b>69</b>
<b>3.7 Appendix: Some more accents of English</b>	<b>75</b>
3.7.1 Australian, New Zealand and South African English	76
3.7.2 Hiberno-English: Southern and Northern	82
Suggested reading to chapter 3	87
<b>4 Phonological features, part 1: the classification of English vowel phonemes</b>	<b>89</b>
4.1 The role of features in phonology	89
<b>4.2 Phonological features and the basic vowel system</b>	<b>92</b>
4.2.1 Major classes: [Sonorant], [Continuant] and [Consonantal]	93
4.2.2 Pairs of vowels revisited: the feature [Tense]	95
4.2.3 Tenseness and length	99
4.2.4 Tongue-body features: [Back], [High] and [Low]	102
4.2.5 The feature [Round], and more on redundancy	107
Suggested reading to chapter 4	111
<b>5 Phonological features, part 2: the consonant system</b>	<b>112</b>
<b>5.1 Why new features?</b>	<b>112</b>
5.1.1 Excess of features	113
5.1.2 ‘Vowel features’ and ‘consonant features’	115
<b>5.2 Replacing place features: [Anterior], [Coronal] and [Strident]</b>	<b>116</b>
<b>5.3 [Round], [High], [Low] and [Back] revisited</b>	<b>119</b>
<b>5.4 Pairs of obstruents: [Voice] and [Tense]</b>	<b>121</b>

*Contents*

5.5 [Nasal] and [Lateral]	124
5.6 A final note on redundancy	126
Suggested reading to chapter 5	129
<b>6 Syllables</b>	130
6.1 Phonetic and phonological units	130
6.2 What is a syllable?	131
6.3 Some unanswered questions	134
6.4 The structure of monosyllabic words	137
6.4.1 The onset	138
6.4.2 The coda	139
6.4.3 The peak	140
6.4.4 The rhyme	143
6.4.5 Appendices	147
6.5 The syllable template and phonotactics	151
6.5.1 Onset phonotactics	153
6.5.2 Rhyme phonotactics	159
6.5.3 The peak: vowels and consonants revisited	164
6.6 The syllabification of polysyllabic words	167
6.7 Segments, X-positions and syllables	174
Suggested reading to chapter 6	178
<b>7 Word stress</b>	179
7.1 On the nature of stress	179
7.2 Stress and syllable structure	182
7.2.1 Final stress	183
7.2.2 Nonfinal stress	186
7.3 Stress and nonphonological structure	189
7.4 Stress and phonological structure: Metrical Phonology	193
7.4.1 The notation	193
7.4.2 Some generalisations	198
7.5 The (non-)predictability of English word stress	205
Suggested reading to chapter 7	207
<b>8 Phonetic representations: the realisations of phonemes</b>	208
8.1 The phonetic level of representation	208
8.2 Allophony: the principles	210
8.2.1 Complementary distribution of allophones: clear and dark [l]	211
8.2.2 Assimilation: optionality versus nonbinarity, and natural classes	213

Cambridge University Press

978-0-521-33603-1 - English Phonology: An Introduction

Heinz J. Giegerich

Table of Contents

[More information](#)*Contents*

8.2.3	Parallel distribution of allophones: unreleased stops	217
8.3	Allophony in the obstruent system	218
8.3.1	The allophony of voiceless stops: aspiration and glottalisation	219
8.3.2	Allophony of voiced obstruents: devoicing	222
8.3.3	Summary: phonetic correlates of the voicing opposition	223
8.3.4	Glottal stops, taps and some problems	225
8.4	Vowel length	227
8.4.1	Recapitulation	227
8.4.2	The Scottish Vowel-Length Rule	229
8.4.3	Vowel-length allophony	234
8.5	Rules, phonetic representations and binary features	235
8.5.1	The nonbinarity of phonetic representations	236
8.5.2	Rules, features and natural classes	238
8.6	Suspended contrast: the archiphoneme	241
	Suggested reading to chapter 8	248
<b>9</b>	<b>Phrases, sentences and the phonology of connected speech</b>	249
9.1	Stress beyond the single word	250
9.1.1	Phrasal stress	252
9.1.2	Compound stress	254
9.2	The phonology of rhythm	258
9.2.1	Stress-timing in English	258
9.2.2	Metrical structure and the foot	260
9.2.3	Eurhythmy: the rhythmic adjustment of stress patterns	272
9.3	Syllables in connected speech	279
9.3.1	Liaison	280
9.3.2	Some effects of liaison	281
9.4	Structure simplification in connected speech	284
9.4.1	Vowel reduction and weak forms	285
9.4.2	Reduction, elision, assimilation	287
	Suggested reading to chapter 9	290
<b>10</b>	<b>Representations and derivations</b>	291
10.1	On phonological theories	291
10.2	Increasing derivational power: Generative Phonology	297
10.2.1	The velar nasal: phoneme or sequence?	297
10.2.2	/r/ in nonrhotic accents: a partial analysis	301

*Contents*

10.2.3 The Vowel-Shift derivation	305
10.2.4 Constraining derivational power: free rides and derived environments	310
10.3 More on phonological representations	313
10.3.1 What is a segment?	313
10.3.2 Features and the X-tier	315
10.3.3 Do feature matrices have structure?	321
Suggested reading to chapter 10	323
<i>References</i>	325
<i>Index</i>	330