Cambridge University Press 978-1-108-41834-8 — Phonetics Ratree Wayland Index <u>More Information</u>

## Index

abdomen, 5 abstraction, 94 acoustic intensity, 47 acoustic phonetics, 1 acoustic variation, 233 active articulators, 7 Adam's apple, 5 adduction, 41 affricate, 86 airflow, 4, 35 airstream mechanisms, 35 aliasing, 147 amplitude, 118, 186 analog, 144 anticipatory (or regressive) coarticulation, 84 anti-formants, 189 antinode, 137 anvil, 200 aperiodic, 117 Arabic, 20 arbitrariness of the signs, 105 articulatory phonetics, 1 arytenoids, 5 aspirated, 96 basic allophone, 104 Bernoulli principle, 5 bilabial, 14 breath group, 67 broad phonetic transcription, 72, see also transcription bunched [1], 11 burst, 117 cardinal vowels, 27, see also vowels clicks, 39 closure, 182 coarticulation, 83 cochlea, 201 coda, 48-9 compress, 115 compression, 116 consonant length contrast, see also length constraint, 109 contextual variants, 83

contour tone languages, 62 contrastive, 103 contrastive focus, 59 coronals, 22 critical band theory, 213 critical period, 243 cut-off frequency, 163

declination, 65, 67 DFT, see discrete Fourier transformation diaphragm, 4 digitization, 145 dilate, 115 diphthong, 28, see vowels direct realism, 218, see speech perception theories discrete Fourier transformation, 159, see Fourier analysis distribution, 95 dorsals, 22 down-drift, 65 down-step, 65 duration, 173 ear canal, 200 eardrum, 200 Edward Sapir, 95 EGG, 261, see electroglottography ejectives, 37 electroglottograph (EGG) 261 electroglottography, 261

electrogiotography, 201
electrogiotography, 201
electropalatography (EPG), 257
EMMA, 269, see electromagnetic midsagittal articulography
endoscopes, 262
EPG, 257, see electropalatography
epiglottal, 21
equivalent rectangular bandwidth (ERB) scale, 213
ERB scale, 198, see equivalent rectangular bandwidth (ERB) scale
Ewe, 23
extrinsic normalization, see Vowel normalization

F0, 121, see also fundamental frequency falling intonation, 67, see also intonation

CAMBRIDGE

Cambridge University Press 978-1-108-41834-8 — Phonetics Ratree Wayland Index <u>More Information</u>

281

Index

fast Fourier transformation (FFT), 159, see Fourier analysis
Ferdinand de Saussure, 105
flexible endoscope, 264, see also endoscopes
formant, 140
formant frequency, 141, 169
formant transitions, 192
Fourier analysis, 121, 156
French, 19
frequency, 118
frequency response, 145
frequency spectrum, 152, see also spectrum
friction, 8
fundamental frequency, 121

geminates, 62 general auditory approach, 218 glides, 13 glottal stop, 21 glottalic egressive, 45 glottalic ingressive, 45 glottis, 5 Greek, 19

half-wavelength resonator, 133 hammer, 200 Hamming window, 160 hard palate, 11 harmonic, 118 harmonic components, 151 Hebrew, 19 helium, 136 Hungarian, 19

iambic foot, 56 Igbo, 38 implosives, 38 impressionistic phonetic transcription, 72, *see also* transcription in phase, 120 incus, 200 inner ear, *see also* auditory system interdental consonants, 15 intonation, 47 intonation phrase, 67 intrusive consonant, 86

## Japanese, 19

labialization, 23 lack of acoustic invariance, 231 Lao, 19 laryngeals, 22 laryngography, 261 larynx, 4 lax vowels, 30, *see also* vowels length, 47 linear predictive coding 162 linearity, 231 linearity or segmentation problem, 231 linguography, 256, see also palatography liquids, 13 LPC, 162, see linear predictive coding magnetic resonance imaging, 264 malleus, 200 manner of articulation, 185 McGurk effect, 240 mel scale, 212 mels, 19, 213, see also mel scale middle ear, see also auditory system modal voice, 42 monophthong, 28, see also vowels mora-timed, 57 morpheme, 106 morphophonemic rules, 106 motor theory, 218, see also speech perception theories MRI, 264, see also magnetic resonance imaging myoelastic-aerodynamic theory, 5 narrow phonetic transcription, 72, see also transcription narrow-band spectrogram, 153 nasal formant, 187 nasal murmur, 187 nasal vowels, 90 nasalization, 89 nasalized vowels, 90 natural classes, 100 node, 137 non-sibilant fricatives, 186 nuclear pitch accent, 60 nucleus, 48 Nyquist frequency, 147, see also sampling rate obstruents, 13 onset, 48 open syllable, 49 out of phase, 120 outer ear, see also auditory system oval window, 201 palatalization, 24

PAM, 244, *see* perceptual assimilation model particle movement, 116 passive articulators, 7 perceptual assimilation model, 244 perceptual reorganization, 243 period, 119, 140 periodic, 117 perseverative coarticulation, 84 PGG, 263, *see* photoglottography pharyngeal cavity, 4 CAMBRIDGE

Cambridge University Press 978-1-108-41834-8 — Phonetics Ratree Wayland Index <u>More Information</u>

## 282 Index

pharyngealization, 24 pharyngeals, 22 phase, 119 phonation, 5, 40 phoneme restoration effect, 241 phonemic coarticulation, 84 phonemic transcription, 72, see also transcription phoneticians, 1 phonological alternations, 106 phonologists, 1 phonotactics, 105 photoglottography, 263 pinna, 199 pitch, 212 pitch accent, 59 place theory, 203 point tracking, 260 predictability, 94 pressure, 116 pressure antinode, 137 pressure node, 137 prosodic features, 48 psychological reality of phoneme, 95 pure tone, 118 quantization, 146 quantization error, 149 quantization rate, 147 quarter-wavelength resonator, 134 radiation factor, 132 rarefaction, 116 r-colored vowels, 30, see also vowels register tone languages, 62 release bursts, 178 resonance, 126 resonance of the vocal tract, see also resonance resonant frequency, 127 respiratory system, 4 retroflex, 15 rhotacization, 90 rigid endoscope, 263, see also endoscopes rime, 48 rising intonation, 67, see also intonation

sampling, 146 sampling rate, 146, *see also* digitization sampling theorem, 147 schwa, 89 segmentation problem, 231 sibilant fricatives, 186 sine wave, 118, 140 sinusoidal pattern, 118 SLM, 244, *see* speech learning model sonorants, 13 Spanish, 19 spectrogram, 153 spectrograph, 152

spectrum, 151 speech learning model, 244 speech perception, 218 standing wave, 132 stapes, 200 static palatography, 256, see also palatography stirrup, 200, see stapes stress, 47 stress-timed, 57 surface forms, 99 suspicious pairs, 101 Swedish, 36 syllabic consonant, 49 syllable-timed, 57 sympathetic vibration, 127 Syrian Arabic, 24 tap, 9 tense vowels, 30, see also vowels Tiwi, 19 tone, 47 tone group, 67 tone sandhi, 65 tonic syllable, 60 tonotopic organization, 203 top-down information, 241 trachea, 5 transcription, 64 transients, 121 trill, 12 trochaic foot, 56 tube modeling, 135 tuning fork, 116, 126 tympanic membrane, 200 ultrasound, 267 underlying forms, 99 velaric egressive airstream, 40 velaric ingressive airstream, 39 velarization. 24 velum, 9, 89 vestibular system, 201 Vicon MX, 260 vocal fold contact area, 262 voice onset time (VOT), 192 VOT, 192, see voice onset time vowel length contrast, see also length vowel quadrilateral, 26 waveform, 140 wavelength, 140 white noise, 121 wide-band spectrogram, 154 windpipe, 5

zero-line crossing, 123, 161 Zulu, 15