

Contents

I Music Perception

1 Pitch: Perception and Neural Coding 3

Andrew J. Oxenham

2 Rhythm 33

Henkjan Honing and Fleur L. Bouwer

3 Perception and Cognition of Musical Timbre 71

Stephen McAdams and Kai Siedenburg

4 Pitch Combinations and Grouping 121

Frank A. Russo

5 Musical Intervals, Scales, and Tunings: Auditory Representations

and Neural Codes 149

Peter Cariani

II Music Cognition

6 Musical Expectancy 221

Edward W. Large and Ji Chul Kim

7 Musicality across the Lifespan 265

Sandra E. Trehub, Michael W. Weiss, and Laura K. Cirelli

8 Amusias and Other Disorders Affecting Musicality 305

Eve-Marie Quintin, Miriam Lense, and Mark Jude Tramo

9 Absolute Pitch 357

Daniel J. Levitin

III Evolutionary Bases of Music

- 10 Music and the Brain** 407
Stefan Koelsch
- 11 Evolutionary Music Cognition: Cross-Species Studies** 459
Aniruddh D. Patel
- 12 Music across Cultures** 503
William Forde Thompson, Yanan Sun, and Tom Fritz

IV Musical Training, Ability, and Performance

- 13 Improvisation: Experimental Considerations, Results, and Future Directions** 545
Malinda J. McPherson and Charles J. Limb
- 14 Music Training and Transfer Effects** 565
Lorna S. Jakobson and Lola L. Cuddy
- 15 Music and Movement** 609
Lucy M. McGarry, Avital Sternin, and Jessica A. Grahn
- 16 The Assessment of Musical Ability and Its Determinants** 641
Marcel Zentner and Bruno Gingras
- 17 Singing** 685
Annabel J. Cohen
- 18 Musicians in Action: Solo and Ensemble Performance** 751
Caroline Palmer and Rebecca Scheurich

V Musical Experiences in Everyday Life

- 19 Music and Emotion** 783
Renee Timmers and Psyche Loui
- 20 The Social Psychology of Music** 827
Peter Jason Rentfrow and David M. Greenberg
- 21 Music Therapy** 857
Shannon K. de L'Etoile and Edward A. Roth

Contributors 917

Index 919