

Contents

Foreword by Alan M. Wing	ix
Preface	xi
Part I	
Neural Perspectives	1
Chapter 1	
Predictive Timing under Temporal Uncertainty: The Time Derivative Model of the Conditioned Response	3
<i>John W. Moore, June-Seek Choi, and Darlene H. Brunzell</i>	
Chapter 2	
Sequencing and Timing Operations of the Basal Ganglia	35
<i>Deborah L. Harrington and Kathleen Y. Haaland</i>	
Chapter 3	
Interresponse Intervals in Continuation Tapping	63
<i>Charles E. Collyer and Russell M. Church</i>	
Chapter 4	
Touching Surfaces for Control, Not Support	89
<i>John J. Jeka</i>	
Part II	
Psychological Perspectives	107
Chapter 5	
The Perception of Segmentation in Sequences: Local Information Provides the Building Blocks for Global Structure	109
<i>Steven M. Boker and Michael Kubovy</i>	
Chapter 6	
Musical Motion in Perception and Performance	125
<i>Bruno H. Repp</i>	

Chapter 7		
Concurrent Processing during Sequenced Finger Tapping	145	
<i>Heather Jane Barnes</i>		
Chapter 8		
Memory Mixing in Duration Bisection	165	
<i>Trevor B. Penney, Lorraine G. Allan, Warren H. Meck, and John Gibbon</i>		
Chapter 9		
The Regulation of Contact in Rhythmic Tapping	195	
<i>Jonathan Vaughan, Tiffany R. Mattson, and David A. Rosenbaum</i>		
Part III		
Computational Perspectives	213	
Chapter 10		
Broadcast Theory of Timing	215	
<i>David A. Rosenbaum</i>		
Chapter 11		
Dynamics of Human Intersegmental Coordination: Theory and Research	237	
<i>Polemnia G. Amazeen, Eric L. Amazeen, and Michael T. Turvey</i>		
Chapter 12		
Constraints in the Emergence of Preferred Locomotory Patterns	261	
<i>Kenneth G. Holt</i>		
Chapter 13		
A Dynamical Model of the Coupling between Posture and Gait	293	
<i>Bruce A. Kay and William H. Warren, Jr.</i>		
Chapter 14		
Dynamics of Human Gait Transitions	323	
<i>Frederick J. Diedrich and William H. Warren, Jr.</i>		
Chapter 15		
A Computational Model for Repetitive Motion	345	
<i>Kjeldy Haugsjaa, Kamal Souccar, Christopher I. Connolly, and Roderic A. Grupen</i>		
Contributors	369	
Author Index	371	
Subject Index	381	