

# Contents

<b>Towards Behavioral Objects: A Twofold Approach for a System of Notation to Design and Implement Behaviors in Non-anthropomorphic Robotic Artifacts. . . . .</b>	<b>1</b>
Samuel Bianchini, Florent Levillain, Armando Menicacci, Emanuele Quinz and Elisabetta Zibetti	
<b>Laban Movement Analysis and Affective Movement Generation for Robots and Other Near-Living Creatures . . . . .</b>	<b>25</b>
Sarah Jane Burton, Ali-Akbar Samadani, Rob Gorbet and Dana Kulić	
<b>Approaches to the Representation of Human Movement: Notation, Animation and Motion Capture . . . . .</b>	<b>49</b>
Tom Calvert	
<b>The Problem of Recording Human Motion. . . . .</b>	<b>69</b>
Jacqueline Challet-Haas	
<b>MovEngine—Developing a Movement Language for 3D Visualization and Composition of Dance. . . . .</b>	<b>91</b>
Henner Drewes	
<b>Bayesian Approaches for Learning of Primitive-Based Compact Representations of Complex Human Activities . . . . .</b>	<b>117</b>
Dominik Endres, Enrico Chiovetto and Martin A. Giese	
<b>Beyond Watching: Action Understanding by Humans and Implications for Motion Planning by Interacting Robots . . . . .</b>	<b>139</b>
Gowrishankar Ganesh and Tsuyoshi Ikegami	
<b>Challenges for the Animation of Expressive Virtual Characters: The Standpoint of Sign Language and Theatrical Gestures . . . . .</b>	<b>169</b>
Sylvie Gibet, Pamela Carreno-Medrano and Pierre-Francois Marteau	

<b>Task Modelling for Reconstruction and Analysis of Folk Dances . . . . .</b>	<b>187</b>
Katsushi Ikeuchi, Yoshihiro Sato, Shin'ichiro Nakaoka, Shunsuke Kudoh, Takahiro Okamoto and Hauchin Hu	
<b>Dynamic Coordination Patterns in <i>Tango Argentino</i>: A Cross-Fertilization of Subjective Explication Methods and Motion Capture . . . . .</b>	<b>209</b>
Michael Kimmel and Emanuel Preuschl	
<b>Abstractions for Design-by-Humans of Heterogeneous Behaviors. . . . .</b>	<b>237</b>
Amy LaViers, Lin Bai, Masoud Bashiri, Gerald Heddy and Yu Sheng	
<b>Annotating Everyday Grasps in Action . . . . .</b>	<b>263</b>
Jia Liu, Fangxiaoyu Feng, Yuzuko C. Nakamura and Nancy S. Pollard	
<b>Laban Movement Analysis—Scaffolding Human Movement to Multiply Possibilities and Choices . . . . .</b>	<b>283</b>
Angela Loureiro de Souza	
<b>Benesh Movement Notation for Humanoid Robots? . . . . .</b>	<b>299</b>
Eliane Mirzabekiantz	
<b>The Origin of Dance: Evolutionary Significance on Ritualized Movements of Animals . . . . .</b>	<b>319</b>
Satoshi Oota	
<b>A Worked-Out Experience in Programming Humanoid Robots via the Kinetography Laban . . . . .</b>	<b>339</b>
Paolo Salaris, Naoko Abe and Jean-Paul Laumond	
<b>Using Dynamics to Recognize Human Motion . . . . .</b>	<b>361</b>
Gentiane Venture, Takumi Yabuki, Yuta Kinase, Alain Berthoz and Naoko Abe	
<b>The Effect of Gravity on Perceived Affective Quality of Robot Movement . . . . .</b>	<b>377</b>
Suzanne Weller, Joost Broekens and Gabriel A.D. Lopes	
<b>Applications for Recording and Generating Human Body Motion with Labanotation . . . . .</b>	<b>391</b>
Worawat Choensawat, Minako Nakamura and Kozaburo Hachimura	
<b>Human Motion Tracking by Robots. . . . .</b>	<b>417</b>
Katsu Yamane	



<http://www.springer.com/978-3-319-25737-2>

Dance Notations and Robot Motion

Laumond, J.-P.; Abe, N. (Eds.)

2016, X, 430 p., Hardcover

ISBN: 978-3-319-25737-2