

Contents

1	Introduction	1
	Gerd Gröbler and Elisabeth Hildt	
Part I Applications		
2	Brain–Computer Interfaces and Assistive Technology	7
	Rüdiger Rupp, Sonja C. Kleih, Robert Leeb, José del R. Millan, Andrea Kübler, and Gernot R. Müller-Putz	
3	Brain-Computer Interfaces and Diagnosis	39
	Camille Chatelle, Steven Laureys, and Quentin Noirhomme	
4	Brain-Computer Interfaces and Therapy	49
	Donatella Mattia and Marco Molinari	
Part II Stakeholders and Perspectives		
5	Brain-Computer Interfaces as an Emerging Assistive Technology (AT): The AT Professionals’ Perspective	63
	Evert-Jan Hoogerwerf, Lorenzo Desideri, Massimiliano Malavasi, Matteo Rimondini, and Mick Donegan	
6	Psychological Perspectives: Quality of Life and Motivation	77
	Sonja C. Kleih and Andrea Kübler	
7	Emerging BCI Opportunities from a Market Perspective	85
	Christoph Guger, Brendan Z. Allison, and Günter Edlinger	
8	Between Neuro-potentials and Aesthetic Perception. Pingo Ergo Sum	99
	Adi Hoesle	
9	My BCI Vision	109
	Sonja Balmer	

10	The Users' Perspective	115
	Various Authors	
11	Relatives' Report	127
Part III Reflections		
12	A Tour of Some Brain/Neuronal–Computer Interfaces	131
	Kevin Warwick	
13	Philosophical Reflections on Brain–Computer Interfaces	147
	Guglielmo Tamburrini	
14	Brain–Computer Interfaces and User Responsibility	163
	Fiachra O'Brolchain and Bert Gordijn	
15	On Human–Computer Interaction in Brain–Computer Interfaces . . .	183
	Gerd Gröbler and Elisabeth Hildt	
16	BCI and a User's Judgment of Agency	193
	Rutger Vlek, Jan-Philip van Acken, Evine Beursken, Linsey Roijendijk, and Pim Haselager	

Brain-Computer-Interfaces in their ethical, social and
cultural contexts

Grübler, G.; Hildt, E. (Eds.)

2014, VI, 202 p. 33 illus., Hardcover

ISBN: 978-94-017-8995-0