Cambridge University Press & Assessment 978-1-009-38666-1 — The Cambridge Handbook of the Law, Policy, and Regulation for Human–Robot Interaction Woodrow Barfield , Yueh-Hsuan Weng , Ugo Pagallo Table of Contents <u>More Information</u>

## Contents

List of Figures pa		<i>page</i> xi
List of Tables x		
List of Contributors xv		
Foreword		XXXV
	Hiroshi Ishiguro	
Preface xli		
	Woodrow Barfield, Yueh-Hsuan Weng, and Ugo Pagallo	
	PART I AN INTRODUCTION TO THE LAW, POLICY, AND REGULATION FOR HUMAN-ROBOT INTERACTION	
1	Introduction to the Law, Policy, and Regulation for Human–Robot Interaction Woodrow Barfield, Yueh-Hsuan Weng, and Ugo Pagallo	1 3
2	Anthropomorphism and Human–Robot Interaction Ricarda Wullenkord, Dimitri Lacroix, and Friederike Eyssel	17
3	Human–Robot Interaction: Implications for Law, Policy, and Regulation Woodrow Barfield and Thomas B. Sheridan	57
4	<b>Trust-Based Interfaces in Human–Robot Interaction: Context,</b> <b>Communication, and Information</b> Massimo Durante	70
5	Robots, Regulation, and the Changing Nature of Public Space Kristen Thomasen	84
6	Challenges of the Legal Protection of Human Lives in the Time of Anthropomorphic Robots Kamil Mamak	100
7	What Will Robot Laws Look Like? Considering Code, AI and Human Laws Zsolt Ződi	115

viii	Contents	
8	<b>Oversight Boards for Regulation of AI-Enabled Robots</b> Adam Douglas Hill	134
9	<b>Building a Smart Legal Ecosystem for Industry 5.0</b> Pompeu Casanovas	145
	PART II ISSUES AND CONCERNS FOR HUMAN-ROBOT INTERACTION	
10	I, Robot? Legal Personality for Robots and the Android Fallacy Simon Chesterman	173
11	"Legal Being": Going beyond the Debate of Legal Personhood for "Intelligent" Nonhumans Tatsuhiko Inatani	193
12	Robot Romance Margaret Ryznar	207
13	<b>Robot Natives: Future Design and Regulations for Baby Robot Interaction</b> Eduardo B. Sandoval, Mark Billinghurst, and Massimiliano (Max) Cappuccio	232
14	Should Social and Assistive Robots Integrated within Home- and Healthcare Services Be Universally Designed? Diana Saplacan Lindblom, Zada Pajalic, and Jim Torresen	252
15	<b>Regulating Emotional Artificial Intelligence in Cars</b> Lachlan Urquhart and Andrew McStay	288
16	Some Critical Thoughts on Anthropomorphic Social Robot Design Elisabeth Hildt	302
17	A Critical Analysis of Consent in Human–Robot Interaction Naomi Lintvedt	313
18	Rosie Is a Rental: What Thriving Interactive Robotics Could Mean for Our Society AJung Moon and Jimin Rhim	341
19	Bots against Bias: Critical Next Steps for Human–Robot Interaction Katie Seaborn	362
	PART III ETHICS, CULTURE, AND VALUES IMPACTED BY HUMAN-ROBOT INTERACTIONS	
20	Robot Ethics for Interaction with Humanoid, AI-Enabled, and Expressive Robots Jessica Barfield	393
21	The Ubuntu Robot: Toward a Relational Conceptual Framework for Intercultural Robotics Mark Coeckelbergh	408

Cambridge University Press & Assessment 978-1-009-38666-1 — The Cambridge Handbook of the Law, Policy, and Regulation for Human–Robot Interaction Woodrow Barfield , Yueh-Hsuan Weng , Ugo Pagallo Table of Contents <u>More Information</u>

	Contents	ix
22	Ethical, Legal, and Social Concerns in the Application of Social Robots in Religious Settings: A Case Study of the Catholic Robot SanTO Gabriele Trovato and Yueh-Hsuan Weng	421
23	Helpers for Helpers: Ethical and Legal Considerations for Long-term Care Robots Chih-hsiung Chen	434
<b>2</b> 4	<b>Ethical Design and Standardization for Robot Governance</b> Yueh-Hsuan Weng	447
25	Eight Recommendations for Ethical and Legal Assessments of Robotic Systems Interacting with Humans Thomas Burri, Markus Christen, Juliane Beck, and Daniel Trusilo	465
26	Cultural Differences in Social Robot Perception Kerstin Haring	484
27	Moral Interaction with Social Robots Takayuki Kanda	496
28	I'm Not Like the Others, I'm Your Friend: Toward an Ethics for AI in Behavioral Interventions and Choice Architectures Vivek Nallur and Ken Bell	509
29	<b>Personal Autonomy and Machine Autonomy in Human–Robot Interaction</b> Satoshi Narihara	522
30	Robots in a Civilized Society: Should Robots Be Taught to Adhere to Social Norms? Omri Rachum-Twaig and Ohad Somech	534
31	Racialization and Bias toward Humanoids Kumar Yogeeswaran and Christoph Bartneck	556
32	<b>Privacy Considerations for Socially Assistive Robots</b> Eduard Fosch-Villaronga, Hadassah Drukarch, and Bart Custers	573
33	<b>Privacy and Transparency in Human–Robot Interaction</b> Chih-hsing Ho	591
	PART IV LEGAL CHALLENGES FOR HUMAN-ROBOT INTERACTION	
34	<b>Robotic Torts</b> Alice Guerra, Francesco Parisi, Daniel Pi, and Levi Seidel	607
35	Limits of Criminal Law Regulation of Robotics: The Russian Federation Law Perspective Ildar R. Begishev	621

CAMBRIDGE

Cambridge University Press & Assessment 978-1-009-38666-1 — The Cambridge Handbook of the Law, Policy, and Regulation for Human–Robot Interaction
Woodrow Barfield , Yueh-Hsuan Weng , Ugo Pagallo
Table of Contents
More Information

Х	Contents	
36	Robot Criminal Liability Ying Hu	638
37	The Use of Artificial Intelligence in Criminal Proceedings with Robot Judges as a Different Dimension Seda Yağmur SÜMER	656
38	The First Amendment and Robots in the Virtual and Physical Worlds Marc Jonathan Blitz	675
39	Humanoid Robots and Consumer Law and Policy Mateja Durovic and Danai Skevi	702
40	Therapy without Therapists: Human–Robot Interaction under the EU Medical Device Regulation and the Artificial Intelligence Act Martin Ebers	724
41	A Legal Analysis of a Social Robot: The Appropriation of Ideas and Labor Juliya Kharitonova	753
4 <sup>2</sup>	Considering the Tax Policy Implications of Automation and AI-Enabled Robots Roberta F. Mann	769
43	Humanoid AI Systems for Healthcare in Outer Space: A New Generation of Opportunities and Legal Puzzles Ugo Pagallo	784
44	Ensuring Accountability for Robots and AI under Criminal Law Monika Simmler	798
45	Intelligent Industrial and Service Robots: A Discussion of International Human Rights Abbas Basiri	813
46	Concluding Thoughts on Future Directions in the Law, Policy, and Regulation for Human–Robot Interaction Woodrow Barfield, Yueh-Hsuan Weng, and Ugo Pagallo	831