

CONTENTS

Preface	<i>page</i>	xi
Acknowledgments		xvi
Table of Significant Codes, Restatements, and Statutes.		xviii
1 Why Autonomous Organizations?		1
1.1 Even if Software Can Buy a House, Why Would It Want To?		4
1.2 Algorithms in Conventional Legal Context		9
1.3 Modern Approaches to Software “Rights”		11
1.4 A Comment on “Rights” and “Personhood”.		14
1.5 Layout of the Book		15
2 The Legal Role of Algorithms.		18
2.1 Algorithm As Agreement		21
2.2 Algorithms As a Comprehensive Basis for Contract Formation		27
2.3 Dynamic Agreements.		34
2.4 The Unsuitability of Agency Law for Software		35
2.4.1 The Ambiguities of Agency Law As Applied to Algorithmic Agents		37
2.4.2 The Ambiguous Principals of Algorithmic Agents.		40
2.4.3 The Complexity of Liability in Agency Law.		43
3 In the Company of Robots		46
<i>The Creation of Autonomous Organizations</i>		
3.1 Background: Legal Personhood As “Legal Technology”.		47
3.2 The Novelty of Modern Entities in Enabling Nonhuman Autonomous Systems.		51
3.3 The Zero-Member LLC.		58
3.4 Models of Private-Law Personhood for Software.		67

viii	Contents
3.4.1 Frameworks for Granting Legal Personhood	68
3.4.2 Formal versus Substantive Legal Personhood	70
3.5 Conclusion	73
4 The Legal Viability of Autonomous Organizations.	76
4.1 The Focus of the Objections to Autonomous Organizations	78
4.2 The Workability of LLCs without Ongoing Human Internal Governance	80
4.2.1 Cross-Ownership	81
4.2.2 Vetogates	83
4.2.3 Defiance	89
4.3 The Legal Soundness of Autonomous Entities Under Current Statutes	92
4.3.1 Statutory Definitions	93
4.3.2 Business-Law Foundations	98
4.4 Are Autonomous Organizations “Absurd,” So That Courts Will Strike Them Down?	104
4.4.1 Timing and Justice	104
4.4.2 Identifying the Absurdity	107
4.4.3 The Context of Technological Change	108
4.5 Autonomous Organizations and the Internal-Affairs Doctrine	110
4.6 Conclusion	116
5 The Advantages of Autonomous Organizations.	117
5.1 Apparent Problems That Aren’t Really Problems.	119
5.1.1 Disaggregating the Rights of Legal Personality	122
5.1.2 The Dignity of Contracting with Software	124
5.1.3 The Renewed Vitality of Dead-Hand Control	133
5.1.4 Dangers of Artificial Intelligence	138
5.2 Practical Autonomy and Legal Function.	142
6 The Limitations and Legal Implications of Autonomous Organizations	147
6.1 The Role of Intent in the Private Law.	149
6.1.1 Intentional Torts, Conventional Organizations, and Autonomous Organizations	150
6.1.2 Intent and Contracts	158
6.1.3 Punishing Bad Intent.	160

Contents	ix
6.2 Drift, Abuse, and Formalism in Organizational Law	161
6.2.1 Legal Recognition of Evolving Expectations.	163
6.2.2 Judicial Administration and Dissolution.	164
6.2.3 The Equitable Doctrine of Reformation.	166
Conclusion	169
Index	171