Contents

Introduction 1
Welcome to the Third Nuclear Age 1
Outline of the book 13

1. Whose nuclear age is it anyway? 17
Introduction: Constructing nuclear knowledge 17
Nuclear history is written by the victors 19
The concepts of a First and Second Nuclear Age 25
Atomic semantics: What is a Third Nuclear Age? 33
Conclusion: Continuity and change in global nuclear politics 43

2. Swords, shields, and the security dilemma 45
Introduction: Technology as a driver of change 45
Déjà vu all over again: Technological change in perspective 47
Buzzword bingo: Beware the quantum, AI, hypersonic, space laser weapon ... 52
A quiet metamorphosis: Smarter, real-time, dispersed, and more interlinked technologies 64
Conclusion: Nuclear techno-politics 74

3. Rethinking the unthinkable 77
Introduction: Nuclear deterrence works ... until the day it doesn't 77
The enduring nuclear revolution? 79
Battlefield nuclear weapons, limited war, and the end of the taboo? 87
Winning wars against nuclear-armed opponents? 95
Conclusion: Responsibility, entanglement, and stability 103

4. To great power competition and beyond ... 106
Introduction: Polarity, stability, and nuclear politics 106
From the War on Terror to great power competition ... 108
Nuclear dominos and the death of the West 119
Postcards from the 'global south' 129
Conclusion: A more contested nuclear order? 136

5. Taming Einstein's monsters 139
Introduction: The breakdown of consensus 139
The slow death of nuclear arms control and restraint 140
'Orthodoxy' versus the Ban Treaty? 148
Nuclear culture wars? 156
Conclusion: Alternative nuclear futures ... 167

6. Atoms and the Anthropocene: The nuclear-climate-development nexus 169
Introduction: Putting the nuclear challenge into context 169
Nuclear winter and planetary destruction 171
A nuclear panacea? 176
Towards a world of interconnected risks 187
Conclusion: The climate-nuclear Janus 194

Conclusion: 'A strange game. The only winning move is not to play' 196
The centrality of power to nuclear politics 199
'Plus ça change, plus c'est la même chose' (or don't get too drawn to things that are new and shiny) 201
Always be prepared ... 203
Are we feeling lucky ...? 206

Index 209