

# Contents

<i>Making Europe: An Introduction to the Series</i>	ix
<i>Acknowledgements</i>	xvii
<b>Introduction</b>	<b>1</b>
<b>Part I Cultivating Experts, Ordering Knowledge</b>	
<b>1. Educating Experts</b>	<b>21</b>
Technical Education as a Strategic Issue	28
Copying & Circulating Educational Models	32
The Quest for Respect	39
Engineers as Experts	50
<b>2. Technical Experts as New National Elites</b>	<b>55</b>
Old Regimes & New Elites	59
Heralds of the Nation	65
Reinventing the Nation in War & Crisis	70
<b>3. Architectures of Knowledge</b>	<b>79</b>
Orders of Knowledge: Mundaneum	87
Visual Education: Isotype	97

Standardizing Knowledge: Wilhelm Ostwald	102
The Social Promise of Technology	107
<b>Part II Endangered Experts, New Social Orders</b>	
<b>4. Expertise with a Cause</b>	<b>115</b>
Rationalizing the Factory & Beyond	125
Transatlantic Fordism	132
Self-Empowerment & Social Engineering	139
<b>5. Faustian Bargains in Totalitarian Europe</b>	<b>143</b>
Hitler's Mastermind of Annihilation: Konrad Meyer	147
Best Man: Guglielmo Marconi & Benito Mussolini	154
Stalin's Rainmaker: Trofim Lysenko	161
Experts in the Age of Extremes	169
<b>6. Experts in Exile</b>	<b>177</b>
Stalin's Operation Osoaviakhim	177
Intellectual Reparations	179
Émigré Experts as Agents of Modernity	187
Émigré Experts as an Endangered Species	195
Forced Migration & New Knowledge Orders	197
<b>Part III Cooperating Experts, Building Institutions</b>	
<b>7. Geographies of Cooperation in Nuclear Europe</b>	<b>205</b>
The European Super Machine	205
Europe's Model of Technoscientific Collaboration	208
Ways of Collaborating in Nuclear Europe	216
Breeding & Fusing Europe	229
The Multiple Geographies of Europe	238
<b>8. Contesting Europe in Space</b>	<b>243</b>
Space Europe Eastern Mode: Interkosmos	243
A Fragmented Europe: ELDO	247
Space Europe Western Mode: ESA	260
Towards European Integration in Space	264
<b>9. Experts' Europe from a Bird's-Eye View</b>	<b>277</b>
Lisbon 2000: Building Europe on Knowledge	277
Flying High: Is there a European Knowledge Society?	280
Flying Low: Are there European Expert Communities?	287

<b>Conclusion</b>	<b>299</b>
<i>Endnotes</i>	313
<i>Bibliography</i>	335
<i>Illustration Credits</i>	369
<i>Making Europe: Series Acknowledgements</i>	375
<i>Index</i>	377