This volume in the highly respected Cambridge History of Science series is devoted to exploring the history of modern science using national, transnational, and global frames of reference. Organized by topic and culture, its essays by distinguished scholars offer the most comprehensive and up-to-date nondisciplinary history of modern science currently available. Essays are grouped together in separate sections that represent larger regions: Europe; Africa, the Middle East, and South Asia; East and Southeast Asia; the United States, Canada, Australia, New Zealand, and Oceania; and Latin America. Each of these regional groupings ends with a separate essay reflecting on the analysis in the preceding chapters. Intended to provide a balanced and inclusive treatment of the modern world, contributors analyze the history of science not only in local, national, and regional contexts but also with respect to the circulation of knowledge, tools, methods, people, and artifacts across national borders.


Ronald L. Numbers is Hilldale Professor Emeritus of the History of Science and Medicine at the University of Wisconsin-Madison, where he taught between 1974 and his retirement in 2013. He has written or edited more than two dozen books, including The Creationists (1992; 2nd ed. 2006), Science and Christianity in Pulpit and Pew (2007), and Galileo Goes to Jail and Other Myths about Science and Religion (ed.) (2009).

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CONTENTS

Notes on Contributors  page xiv
General Editors’ Preface xxv

1 Introduction 1
HUGH RICHARD SLOTTEN

PART I TRANSNATIONAL, INTERNATIONAL, AND GLOBAL 7

2 Science and Imperialism since 1870 9
PRATIK CHAKRABARTI AND MICHAEL WORBOYS
Imperialism 12
Science and “Constructive” Imperialism, 1870–1914 14
The New Colonialism, 1918–1945 20
Development and Welfare, 1945–2000 26
Conclusion 30

3 The Geomagnetic Project: Internationalism in Science Between the French Revolution and the Franco-Prussian War 32
NICOLAAS A. RUPKE
The Humboldtians and Terrestrial Magnetism 33
The Royal Society and Sabine 35
Internationalism as a Negotiated Process 38

4 International Science from the Franco-Prussian War to World War Two: An Era of Organization 43
BRIGITTE SCHROEDER-GUDEHUSS
International Science as Practice and Ideology 44
Congresses and Associations 45
An Era of Organization 47
Sobering Insights 48
Community and Competition 50
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Internationalism in Science after 1940</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>World War II and the Early Cold War: 1940–57</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Refining the Bipolar World: International Science in the Sputnik Era</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Crumbling Bipolarity: Internationalism at the End of the Twentieth Century and Beyond</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>73</td>
</tr>
<tr>
<td>6</td>
<td>International Science in Antarctica</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Coastal Encounters</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>Territorial Ambition</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Scientific Internationalism</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Post-IGY Science</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Antarctica’s Future</td>
<td>87</td>
</tr>
<tr>
<td>7</td>
<td>Missionary Science</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Early Protestant Missionary Science</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>The Scope of Missionary Science</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Theology and Missionary Science</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>Spreading Science</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Controversy and Conflict</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>Host Cultures</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>Missionary Science and Imperialism</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>Science Against Christianity, 1850–1930: The End of Missionary Science?</td>
<td>105</td>
</tr>
<tr>
<td>8</td>
<td>Museums of Natural History and Science</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>Scientific Revolution</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Taxonomy and Systematics</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>Museums Beyond Europe</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td>Museum Suppliers</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>Museum Networks and Hierarchies</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>Human Factors</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>Civic and Public Museums</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>Science Museums</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Natural History Museums in the Twentieth Century</td>
<td>122</td>
</tr>
<tr>
<td>9</td>
<td>National Scientific Surveys</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>The Scientific Survey and State Science: The French Model</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>The Militarization of Scientific Surveys: Great Britain and the Ordnance Survey</td>
<td>129</td>
</tr>
</tbody>
</table>
Contents

Science Surveys and Nation Building: The British "Rationalization" of India 131
The US Coast Survey, Nation Building, and the Advancement of Science 133
Conclusion 135

10 Expeditionary Science
Richard J. Sorrenson
Surveying 139
Adventuring 141
Collecting 143
Testing 144
Probing 145

PART II NATIONAL AND REGIONAL

EUROPE

11 United Kingdom
David Edgerton and John V. Pickstone
The British Enlightenment in Countryside and City 153
Politics: Repression and Resurgence 155
Industry and Analysis 158
Fiscal-Military State 160
Religion and Education in Liberal Britain 162
Education, Industry, and Empire (1890–1914) 167
The Great War and After 171
The Second World War 178
The Nationalization of Research and Development 180
Ideologues and Ideologies 185
Denationalization and Internationalization 188

12 France: During the Long Nineteenth Century
Robert Fox and George Weisz
Science, War, and the State, 1789–1815 193
 Patronage and the Profession of Science, 1815–ca. 1860 198
The Roots of Reform 205
Science and the Republic 208
The Limits to Reform 211
Conclusion 214

13 France: Post-1914
Dominique Pestre
The French Panorama of Scientific Institutions 220
The So-Called Grandes Écoles 221
The Universities 222
The National Research Institutes 223
Contents

Disciplinary Recompositions 224
Overall Narratives: The Interwar Period 229
Post-WWII: 1945 to the End of the 1970s 230
The “Neo-Liberal,” US-Induced, Moment, 1980s to 2016 232

14 Germany

KATHRYN M. OLESKO
Historiographical Traditions 233
The Peace of Westphalia to the End of the Holy Roman Empire (1648–1806) 236
The Reform Era to Social Revolution (1806–48) 243
Politics, Popular Culture, and State Policy (1849–70) 249
The Regulatory and Social Welfare State (1871–1918) 253
Science and Culture in the Weimar Republic (1919–32) 259
National Socialism and War (1933–45) 263
Science Divided in the Cold War (1946–89) 269
Science in the Reunited Germany (after 1990) 276

15 Russia and the Former USSR

LOREN GRAHAM
Peter the Great 280
The Academy of Sciences 280
Lomonosov 281
Eighteenth-Century Strengths: Mathematics and Exploration 282
The Nineteenth-Century Expansion of Russian Science 283
The Twentieth Century 289
The Strengths and Weaknesses of Russian Science and Technology 297
Recent Developments 303

16 Low Countries

KLAAS VAN BERKEL
A False Start (1795–1830) 307
Stagnation and Slow Recovery (1830–76) 309
A Second Golden Age (1876–1914) 312
Crisis, Recovery, and New Concerns (Post-1914) 318

17 Scandinavia

JOLE R. SHACKELFORD
Early Scientific Leadership and Institutional Development 327
Enlightenment: Academic Science in the Service of Society 328
Scandinavian Science in the Romantic Period: An Extension of Continental Science 329
Nordic Science: Exploitation of Northern Latitudes and Dominance of Specialities 331
Ecology and the North 334
Philanthropy and Social Responsibility 336
Research Strategies for Small Nations 339
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization, Funding, and Control of R&amp;D in Norden</td>
<td>340</td>
</tr>
<tr>
<td>Conclusion</td>
<td>343</td>
</tr>
<tr>
<td><strong>18 Italy</strong></td>
<td></td>
</tr>
<tr>
<td>Giuliano Pancaldi</td>
<td>345</td>
</tr>
<tr>
<td>Enlightenment Legacies, the Spirit of Association, and a New Nation</td>
<td>347</td>
</tr>
<tr>
<td>Striving for a National Scientific Community</td>
<td>351</td>
</tr>
<tr>
<td>Diasporas</td>
<td>356</td>
</tr>
<tr>
<td>Weak Science and Technology, and a Remarkable Economic Takeoff</td>
<td>357</td>
</tr>
<tr>
<td>Conclusion: When Imagined National Scientific Communities Backfire</td>
<td>359</td>
</tr>
<tr>
<td><strong>19 Spain</strong></td>
<td></td>
</tr>
<tr>
<td>Lino Camprubí and Thomas F. Glick</td>
<td>361</td>
</tr>
<tr>
<td>The Fall of the Old Regime (1808–98)</td>
<td>361</td>
</tr>
<tr>
<td>Regeneration, Protectionism, and Basic Research (1900–36)</td>
<td>365</td>
</tr>
<tr>
<td>National-Catholicism and Development (1939–75)</td>
<td>368</td>
</tr>
<tr>
<td>Continuities and Breaks in the Transition to Democracy (1978–Present)</td>
<td>372</td>
</tr>
<tr>
<td>Conclusion: New Directions in Historiography</td>
<td>374</td>
</tr>
<tr>
<td><strong>20 Greece</strong></td>
<td></td>
</tr>
<tr>
<td>Efthymios Nicolaidis</td>
<td>376</td>
</tr>
<tr>
<td>The Greek Communities Before the Foundation of the Greek State</td>
<td>376</td>
</tr>
<tr>
<td>Science as a Means of Modernizing the National Greek State</td>
<td>379</td>
</tr>
<tr>
<td>Twentieth-Century Science: From Ideology to Research</td>
<td>385</td>
</tr>
<tr>
<td><strong>21 Portugal</strong></td>
<td></td>
</tr>
<tr>
<td>Ana Simões and Maria Paula Diogo</td>
<td>390</td>
</tr>
<tr>
<td>Eighteenth-Century Absolutism, Scientific Institution Building, and the Role of Estrangeirados</td>
<td>391</td>
</tr>
<tr>
<td>Nineteenth-Century Liberalism, the Construction of the Techno-Scientific Nation, and the Hegemonic Role of Engineers</td>
<td>393</td>
</tr>
<tr>
<td>Twentieth-Century Republicanism and the Constitutive Role of Science in Building the Ephemeral First Republic and the Long Dictatorial Regime</td>
<td>396</td>
</tr>
<tr>
<td>Conclusion</td>
<td>400</td>
</tr>
<tr>
<td><strong>22 Europe: A Commentary</strong></td>
<td></td>
</tr>
<tr>
<td>David Cahan</td>
<td>402</td>
</tr>
<tr>
<td>The Laggards: Greece, Portugal, Russia (to 1860), and Spain</td>
<td>404</td>
</tr>
<tr>
<td>The Mid-Level Players: The Low Countries, Scandinavia, Italy, and Russia (from 1860)</td>
<td>407</td>
</tr>
<tr>
<td>The Big Three: France, the United Kingdom, and the Germanic States</td>
<td>411</td>
</tr>
</tbody>
</table>
## Contents

**AFRICA, THE MIDDLE EAST, AND SOUTH ASIA**

23 **Middle East**

**Yakov M. Rabkin**

- Science and Tradition
- Science and the State
- Military Concerns
- Beyond the Military
- Science under Zionism
- Printing
- Research Activities
- International Dimension
- Scientific Performance
- Conclusion

24 **India**

**Deepak Kumar**

- Early Interactions
- The Colonial Initiatives
- New Articulations
- New Vision and Its Pioneers
- Gandhian Alternative
- Nehruvian Era
- After Nehru

25 **Maghreb of North Africa**

**Michael A. Osborne**

- French Governance from the Invasion of Algiers (1830) to the Moroccan Protectorate (1912)
- Scientific Exploration of the Maghreb
- Medicine and the Natural Sciences
- The Physical Sciences
- Botany and the Agricultural Sciences
- The Pasteur Institutes and Western Science
- Science in an Independent Maghreb

26 **Sub-Saharan Africa**

**Georgina M. Montgomery, John M. Mackenzie, and Libbie J. Freed**

- Before 1900
- Twentieth Century
- Science Post-Independence
- Conclusion

27 **Africa, the Middle East, and South Asia: A Commentary**

**Hugh Richard Slotten**

- Colonialism and Science
- Using Different Scales of Analysis
## Contents

**EAST AND SOUTHEAST ASIA**  xi

### 28 China

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shellen Xiao Wu and Fa-ti Fan</td>
<td>Science in the Late Qing</td>
<td>521</td>
</tr>
<tr>
<td></td>
<td>Science in the Splintered Republic</td>
<td>523</td>
</tr>
<tr>
<td></td>
<td>Science in the People’s Republic of China</td>
<td>531</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>540</td>
</tr>
</tbody>
</table>

### 29 Japan

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>James R. Bartholomew</td>
<td>Tokugawa Legacy</td>
<td>555</td>
</tr>
<tr>
<td></td>
<td>Emergence of Modern Science in the Meiji Period (1868–1912)</td>
<td>560</td>
</tr>
<tr>
<td></td>
<td>Japanese Science During and Immediately after the First World War</td>
<td>563</td>
</tr>
<tr>
<td></td>
<td>Japanese Science in the Interwar Years and the Second World War</td>
<td>566</td>
</tr>
<tr>
<td></td>
<td>From the Oil Shock to the Present</td>
<td>569</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>572</td>
</tr>
</tbody>
</table>

### 30 Korea

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geun Bae Kim and Yung Sik Kim</td>
<td>Transmission of Western Scientific Knowledge: From the Seventeenth to the Mid-Nineteenth Century</td>
<td>577</td>
</tr>
<tr>
<td></td>
<td>Early Efforts to Develop Modern Science: From the Late Nineteenth Century to the Early 1950s</td>
<td>578</td>
</tr>
<tr>
<td></td>
<td>Emergence of a New Scientific Generation in the 1950s</td>
<td>580</td>
</tr>
<tr>
<td></td>
<td>Establishment of Infrastructure in the 1960s and 1970s</td>
<td>582</td>
</tr>
<tr>
<td></td>
<td>Condensed Growth of Science and Technology in the 1980s and 1990s</td>
<td>585</td>
</tr>
<tr>
<td></td>
<td>Globalization of Scientific Research in the Twenty-First Century</td>
<td>587</td>
</tr>
<tr>
<td></td>
<td>Concluding Remarks: Characteristics of Modern Science in Korea</td>
<td>589</td>
</tr>
</tbody>
</table>

### 31 Indochina

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Michele Thompson</td>
<td>European Science and Technology in Indochina to 1802</td>
<td>593</td>
</tr>
<tr>
<td></td>
<td>European Science Under Gia Long (1802–20) and Minh Mang (1820–41)</td>
<td>593</td>
</tr>
<tr>
<td></td>
<td>The Imposition of French Colonial Rule</td>
<td>595</td>
</tr>
<tr>
<td></td>
<td>The French Colonial Period</td>
<td>596</td>
</tr>
<tr>
<td></td>
<td>The Road to the “American War”</td>
<td>598</td>
</tr>
<tr>
<td></td>
<td>The Indochina Wars</td>
<td>601</td>
</tr>
<tr>
<td></td>
<td>1980 to 1994</td>
<td>603</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
<td>605</td>
</tr>
</tbody>
</table>

### 32 Philippines

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warwick Anderson</td>
<td>An Apostolic Colonial Science</td>
<td>609</td>
</tr>
<tr>
<td></td>
<td>Science and the Spanish Colonial State</td>
<td>610</td>
</tr>
</tbody>
</table>
Contents

The Gospel of American Science 616
Converting to National Science 621
Conclusion 625
33 East and Southeast Asia: A Commentary 626
  Morris F. Low

UNITED STATES, CANADA, AUSTRALIA, NEW ZEALAND, AND OCEANIA 639

34 United States 641
  Ronald L. Numbers
  The New Nation 646
  Local Communities 653
  The Rise to World Power 669
  Geology and Paleontology 678
  Astronomy 682
  Chemistry 686
  Physics and Mathematics 689
  The Biological Sciences 692
  Imperialism 696
  The Great Instauration 703
  Conclusion 711

35 Australia, New Zealand, and Oceania 712
  R. W. Home
  Reconnaissance 713
  Colonial Science 716
  An Expanding Scientific Community 721
  Science in Peace and War 724
  Science in the Modern Era 727
  Conclusion 734

36 Canada 736
  Suzanne Zeller
  Natural Historical Ways: Encountering Nature 739
  Analytical Ways: Subduing Nature 741
  Experimentalist Ways: Transforming Nature 746
  Conclusion 750

37 United States, Canada, Australia, New Zealand, and Oceania: A Commentary 752
  Hugh Richard Slotten

LATIN AMERICA 761

38 Spanish South America 763
  Marcos Cueto
Contents

The Late Colonial Period: Expeditions and Local Savants 763
The Nineteenth Century: Pioneers and Emerging Communities 768
The Twentieth Century: Stabilizing Institutions and Recurrent Challenges 774
Final Remarks 781

39 Greater Caribbean: Mexico, Central America, and the West Indies 782
   STUART MCCOOK
Colonial Science, 1500–1820 784
Science and State-Building in the Long Nineteenth Century 786
Science for Development in the Twentieth Century, 1898–1989 790
Austerity and Sustainability: Science since 1989 797

40 Brazil 799
   MARILIA COUTINHO AND SIMON SCHWARTZMAN
Colonial and Imperial Science 799
From the Republic to the Second World War: Public Health and Agriculture 801
Beginnings of Academic Research 803
Post-War Developments: Science for Power and Economic Planning 804
Autonomy and Isolation of the Science and Technology Sector 806

41 Latin America: A Commentary 810
   HEBE VESSURI

Index 823
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Notes on Contributors


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Notes on Contributors

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Notes on Contributors

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Although reflections on the development of what we call “science” date back to antiquity, the history of science did not emerge as a distinctive field of scholarship until well into the twentieth century. In 1912, the Belgian scientist–historian George Sarton (1884–1956), who contributed more than any other single person to the institutionalization of the history of science, began publishing *Isis*, an international review devoted to the history of science and its cultural influences. Twelve years later, he helped to create the History of Science Society, which by the end of the century had attracted some 4000 individual and institutional members. In 1941, the University of Wisconsin established a department of the history of science, the first of dozens of such programs to appear worldwide.

Since the days of Sarton, historians of science have produced a small library of monographs and essays, but they have generally shied away from writing and editing broad surveys. Sarton himself, inspired in part by the Cambridge histories, planned to produce an eight-volume *History of Science*, but he completed only the first two installments (1952, 1959), which ended with the birth of Christianity. His mammoth three-volume *Introduction to the History of Science* (1927–48), more a reference work than a narrative history, never got beyond the Middle Ages. The closest predecessor to *The Cambridge History of Science* is the three-volume (four-book) *Histoire Générale des Sciences* (1957–64), edited by René Taton, which appeared in an English translation under the title *General History of the Sciences* (1963–4).
Edited just before the late twentieth-century boom in the history of science, the Taton set quickly became dated. During the 1990s, Roy Porter began editing the very useful Fontana History of Science (published in the United States as the Norton History of Science), with volumes devoted to a single discipline and written by a single author. Between 2001 and 2004 Sandro Pertruccio, as editor-in-chief, brought out a lavishly illustrated, ten-volume *Storia della Scienza*.

The *Cambridge History of Science* comprises eight volumes, the first four arranged chronologically from antiquity through the eighteenth century, the latter four organized thematically and covering the nineteenth and twentieth centuries. Eminent scholars from Europe and North America, who together form the editorial board for the series, edit the respective volumes:

- **Volume 1:** *Ancient Science*, edited by Alexander Jones, University of Toronto, and Liba Taub, University of Cambridge
- **Volume 2:** *Medieval Science*, edited by the late David C. Lindberg and Michael H. Shank, University of Wisconsin-Madison
- **Volume 3:** *Early Modern Science*, edited by Katharine Park, Harvard University, and Lorraine Daston, Max Planck Institute for the History of Science, Berlin
- **Volume 4:** *Eighteenth-Century Science*, edited by Roy Porter, late of the Wellcome Trust Centre for the History of Medicine at University College London
- **Volume 5:** *The Modern Physical and Mathematical Sciences*, edited by Mary Jo Nye, Oregon State University
- **Volume 6:** *The Modern Biological and Earth Sciences*, edited by Peter J. Bowler, Queen’s University of Belfast, and John V. Pickstone, late of the University of Manchester
- **Volume 7:** *The Modern Social Sciences*, edited by Theodore M. Porter, University of California, Los Angeles, and Dorothy Ross, Johns Hopkins University
- **Volume 8:** *Modern Science in National, Transnational, and Global Context*, edited by Hugh Richard Slotten, University of Otago, Ronald L. Numbers, University of Wisconsin-Madison, and David N. Livingstone, Queen’s University of Belfast

Our collective goal is to provide an authoritative, up-to-date account of science – from the earliest literate societies in Mesopotamia and Egypt to the end of the twentieth century – that even nonspecialist readers will find engaging. Written by leading experts from every inhabited continent, the essays in *The Cambridge History of Science* explore the systematic investigation of nature and society, whatever it was called. (The term “science” did not acquire its present meaning until early in the nineteenth century.) Reflecting the ever-expanding range of approaches and topics in the history of science, the contributing authors explore non-Western as well as Western...
science, applied as well as pure science, popular as well as elite science, scientific practice as well as scientific theory, cultural context as well as intellectual content, and the dissemination and reception as well as the production of scientific knowledge. George Sarton would scarcely recognize this collaborative effort as the history of science, but we hope we have realized his vision.

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