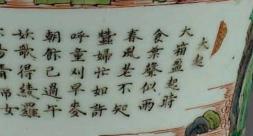


THE EARTH AND ITS PEOPLES A GLOBAL HISTORY

SIXTH EDITION



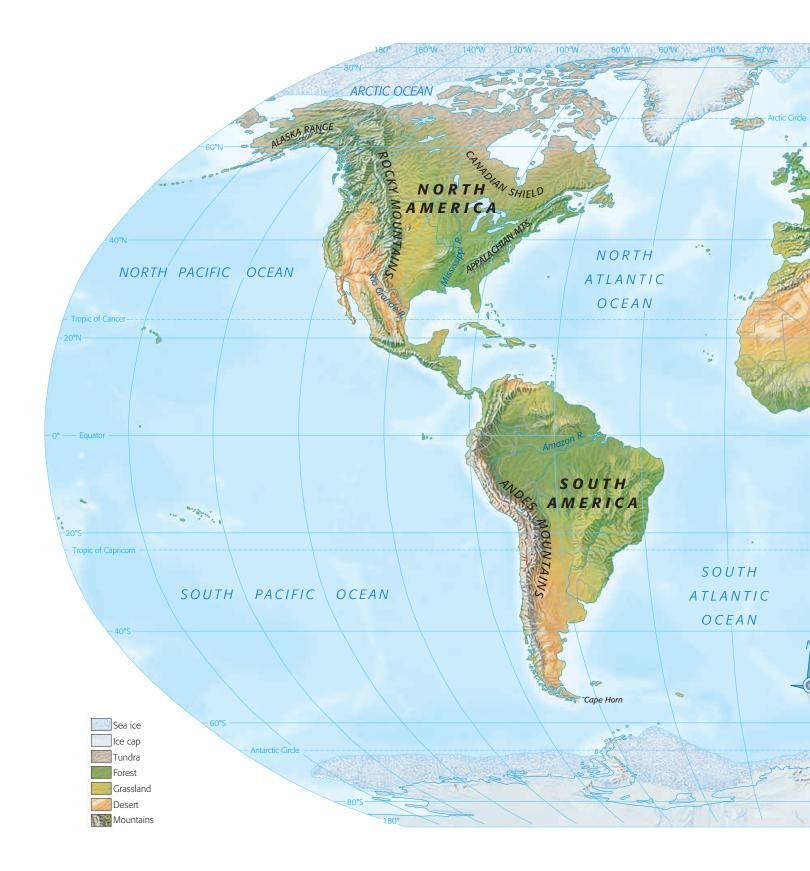




in the other

Bulliet Crossley Headrick Hirsch Johnson Northrup

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.



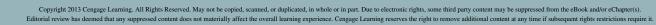


Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

The Earth and Its Peoples

A GLOBAL HISTORY

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.



0

0

0-0 155

a

0-0

EDITION

6

The Earth and Its Peoples

A GLOBAL HISTORY

Richard W. Bulliet Columbia University

Pamela Kyle Crossley Dartmouth College

Daniel R. Headrick Roosevelt University

Steven W. Hirsch Tufts University

Lyman L. Johnson University of North Carolina—Charlotte

David Northrup Boston College



Australia • Brazil • Japan • Korea • Mexico • Singapore • Spain • United Kingdom • United States

This is an electronic version of the print textbook. Due to electronic rights restrictions, some third party content may be suppressed. Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. The publisher reserves the right to remove content from this title at any time if subsequent rights restrictions require it. For valuable information on pricing, previous editions, changes to current editions, and alternate formats, please visit <u>www.cengage.com/highered</u> to search by ISBN#, author, title, or keyword for materials in your areas of interest.

CENGAGE Learning

The Earth and Its Peoples: A Global History, Sixth Edition Richard W. Bulliet, Pamela Kyle Crossley, Daniel R. Headrick, Steven W. Hirsch,

Lyman L. Johnson, David Northrup Product Director: Suzanne Jeans

Product Manager: Brooke Barbier

Senior Content Developer: Tonya Lobato

Product Assistant: Katie Coaster

Media Developer: Kate MacLean

Marketing Development Manager: Kyle Zimmerman

Senior Content Project Manager: Carol Newman

Associate Art Director: Hannah Wellman

Manufacturing Planner: Sandee Milewski

Senior Rights Acquisition Specialist: Jennifer Meyer Dare

Production Service/Compositor: Lachina Publishing Services

Text Designer: Diane Beasley

Cover Designer: Wing Ngan, Ink Design, Inc.

Cover Image: Vase decorated with scenes from the "Gengzhi tu": Winnowing of rice and feeding of the silkworms. 18th century, Qing Dynasty. Green porcelain, 43 cm. Musee des Arts Asiatiques-Guimet, Paris, France/© RMN-Grand Palais/Art Resource, NY. Photo: Thierry Ollivier

© 2014, 2011, 2008 Cengage Learning

WCN: 02-200-203

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced, transmitted, stored, or used in any form or by any means graphic, electronic, or mechanical, including but not limited to photocopying, recording, scanning, digitizing, taping, Web distribution, information networks, or information storage and retrieval systems, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the publisher.

For product information and technology assistance, contact us at Cengage Learning Customer & Sales Support, 1-800-354-9706

For permission to use material from this text or product, submit all requests online at **www.cengage.com/permissions**. Further permissions questions can be emailed to **permissionrequest@cengage.com**.

Library of Congress Control Number: 2013932724

Student Edition:

ISBN-13: 978-1-285-43679-1

ISBN-10: 1-285-43679-2

Cengage Learning

200 First Stamford Place, 4th Floor Stamford, CT 06902 USA

Cengage Learning is a leading provider of customized learning solutions with office locations around the globe, including Singapore, the United Kingdom, Australia, Mexico, Brazil, and Japan. Locate your local office at **international.cengage.com/region**

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

For your course and learning solutions, visit www.cengage.com.

Purchase any of our products at your local college store or at our preferred online store **www.cengagebrain.com**.

Instructors: Please visit **login.cengage.com** and log in to access instructorspecific resources.

Printed in the United States of America 1 2 3 4 5 6 7 17 16 15 14 13

Brief Contents

PART I The Emergence of Human Communities, to 500 B.C.E. 2

- Nature, Humanity, and History, to 3500 B.C.E. 4
- 2 The First River-Valley Civilizations, 3500–1500 B.C.E. 26
- **3** The Mediterranean and Middle East, 2000–500 B.C.E. 52
- 4 New Civilizations Outside the West Asian Core Area, 2300 B.C.E.–350 C.E. 82

PART II The Formation of New Cultural Communities, 1000 B.C.E.-400 C.E. 110

- **5** Greece and Iran, 1000–30 B.C.E. 112
- 6 An Age of Empires: Rome and Han China, 753 B.C.E.-330 C.E. 142
- 7 India and Southeast Asia, 1500 B.C.E.–1025 C.E. 168
- 8 Peoples and Civilizations of the Americas, from 1200 B.C.E. 192

PART III Growth and Interaction of Cultural Communities, 300 B.C.E.-1200 C.E. 220

- 9 Networks of Communication and Exchange, 300 B.C.E.-1100 C.E. 222
- **10** The Sasanid Empire and the Rise of Islam, 200–1200 242
- **11** Christian Societies Emerge in Europe, 600–1200 266
- 12 Inner and East Asia, 400–1200 290

PART IV Interregional Patterns of Culture and Contact, 1200–1550 310

- **13** Mongol Eurasia and Its Aftermath, 1200–1550 312
- 14 Latin Europe, 1200–1500 338
- **15** Southern Empires, Southern Seas, 1200–1500 360
- **16** The Maritime Revolution, to 1550 386

PART V The Globe Encompassed, 1500–1750 414

- **17** Transformations in Europe, 1500–1750 416
- **18** The Diversity of American Colonial Societies, 1530–1770 444
- **19** The Atlantic System and Africa, 1550–1800 470
- 20 Between Europe and China, 1500–1750 498
- 21 East Asia in Global Perspective 524

PART VI Revolutions Reshape the World, 1750–1870 546

- **22** The Early Industrial Revolution, 1760–1851 548
- Revolutionary Changes in the Atlantic World, 1750–1850 574
- 24 Land Empires in the Age of Imperialism, 1800–1870 600
- **25** Nation Building and Economic Transformation in the Americas, 1800–1890 624

PART VII Global Diversity and Dominance, 1750–1945 654

- **26** Varieties of Imperialism in Africa, India, Southeast Asia, and Latin America, 1750–1914 656
- **27** The New Power Balance, 1850–1900 684
- 28 The Crisis of the Imperial Order, 1900–1929 712
- 29 Revolutions in Living, 1900-1950 736
- **30** The Collapse of the Old Order, 1929–1949 762

PART VIII Perils and Promises of a Global Community, 1945 to the Present 790

- **31** The Cold War and Decolonization, 1945–1975 792
- **32** The End of the Cold War and the Challenge of Economic Development and Immigration, 1975–2000 818
- 33 New Challenges in a New Millennium 848

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

Contents

MAPS xvii ENVIRONMENT + TECHNOLOGY xix DIVERSITY + DOMINANCE xix MATERIAL CULTURE xx ISSUES IN WORLD HISTORY XX PREFACE XXI ABOUT THE AUTHORS XXIX NOTE ON SPELLING AND USAGE XXXI

PART I The Emergence of Human Communities, to 500 B.C.E.

Nature, Humanity, and History, to 3500 B.C.E.

AFRICAN GENESIS 5

Interpreting the Evidence 5 • Human Evolution 6 • Migrations from Africa 8

TECHNOLOGY AND CULTURE IN THE ICE AGE 11 Food Gathering and Stone Tools 11 • Gender Roles and Social Life 14 • Hearths and Cultural Expressions 15

THE AGRICULTURAL REVOLUTIONS 16

The Transition to Plant Cultivation 16 • Domesticated Animals and Pastoralism 19 • Agriculture and Ecological Crisis 20

LIFE IN NEOLITHIC COMMUNITIES 20 The Triumph of Food Producers 21 • Cultural Expressions 21 • Early Towns and Specialists 22

CONCLUSION 24

KEY TERMS 24 • SUGGESTED READING 25 • SUGGESTED VIEWING 25

- DIVERSITY + DOMINANCE: Cave Art 12
- ENVIRONMENT + TECHNOLOGY: The Iceman 16

2 The First River-Valley Civilizations, 3500–1500 B.C.E. 26

MESOPOTAMIA 29

Settled Agriculture in an Unstable Landscape 29

- Sumerians and Semites 30 Cities, Kings, and Trade 31
- Mesopotamian Society 33 Gods, Priests, and
- Temples 34 Technology and Science 35

EGYPT 39

The Land of Egypt: "Gift of the Nile" 39 • Divine Kingship 41 • Administration and Communication 42 The People of Egypt 43 • Belief and Knowledge 44

THE INDUS VALLEY CIVILIZATION 46

Natural Environment 46 • Material Culture 47Transformation of the Indus Valley Civilization 49

CONCLUSION 49

4

KEY TERMS 50 · SUGGESTED READING 51

- DIVERSITY + DOMINANCE: Violence and Order in the Babylonian New Year's Festival 36
- MATERIAL CULTURE: Lamps and Candles 38
- ENVIRONMENT + TECHNOLOGY: Environmental Stress in the Indus Valley 48

3 The Mediterranean and Middle East, 2000–500 B.C.E. 52

THE COSMOPOLITAN MIDDLE EAST,

1700–1100 B.C.E. 54 Western Asia 54 • New Kingdom Egypt 56 • Commerce and Communication 58

THE AEGEAN WORLD, 2000–1100 B.C.E. 60 Minoan Crete 60 • Mycenaean Greece 60 • The Fall of Late Bronze Age Civilizations 62

THE ASSYRIAN EMPIRE, 911–612 B.C.E. 64 God and King 64 • Conquest and Control 64 • Assyrian Society and Culture 65

ISRAEL, 2000–500 B.C.E. 67 Origins, Exodus, and Settlement 67 • Rise of the Monarchy 69 • Fragmentation and Dispersal 70

PHOENICIA AND THE MEDITERRANEAN,

1200-500 в.с.е. 71

The Phoenician City-States 71 • Expansion into the Mediterranean 76 • Carthage's Commercial Empire 77 • War and Religion 78

FAILURE AND TRANSFORMATION, 750–550 B.C.E. 79

CONCLUSION 80

KEY TERMS 81 • SUGGESTED READING 81

- DIVERSITY + DOMINANCE: Protests Against the Ruling Class in Israel and Babylonia 72
- ENVIRONMENT + TECHNOLOGY: Ancient Textiles and Dyes 75

vii

2

4 New Civilizations Outside the West Asian Core Area, 2300 B.C.E.-350 C.E. 82

EARLY CHINA, 2000-221 B.C.E. 84

Geography and Resources 84 • The Late Neolithic: Artifacts and Legends 85 • The Shang Period, 1766–1045 B.C.E. 85 • The Zhou Period, 1045–221 B.C.E. 88

- Confucianism, Daoism, and Chinese Society 91
- The Warring States Period, 481–221 B.C.E. 95

NUBIA, 2300 B.C.E.–350 C.E. 95 Early Cultures and Egyptian Domination 2300–1100 B.C.E. 96 • The Kingdom of Meroë, 800 B.C.E.–350 C.E. 97

PASTORAL NOMADS OF THE EURASIAN STEPPES, 1000–100 B.C.E. 98 Early Nomadism 98 • Steppe Nomads 99 • The

Scythians 100 • China and the Nomads 101

CELTIC EUROPE, 1000-50 B.C.E. 102

The Spread of the Celts 102 • Celtic Society 103 • Belief and Knowledge 104

CONCLUSION 105

Environment and Organization 105 • Religion and Power 106 • A Tale of Two Hemispheres 106

KEY TERMS 107 . SUGGESTED READING 107

- ENVIRONMENT + TECHNOLOGY: Divination in Ancient Societies 88
- DIVERSITY + DOMINANCE: Human Nature and Good Government in the Analects of Confucius and the Legalist Writings of Han Fei 92
- **ISSUES IN WORLD HISTORY:** Animal Domestication 108

PART II The Formation of New Cultural Communities, 1000 B.C.E.–400 C.E.

110

5 Greece and Iran, 1000–30 B.C.E. 112

ANCIENT IRAN, 1000-500 B.C.E. 113

Geography and Resources 114 • The Rise of the Persian Empire 115 • Imperial Organization 117 • Ideology and Religion 118

THE RISE OF THE GREEKS, 1000–500 B.C.E. 120 Geography and Resources 121 • The Emergence of the Polis 122 • New Intellectual Currents 126 • Athens and Sparta 128

THE STRUGGLE OF PERSIA AND GREECE, 546–323 B.C.E. 129

Early Encounters 129 • The Height of Athenian Power 130 • Inequality in Classical Greece 132 • Failure of the City-State and Triumph of the Macedonians 133

THE HELLENISTIC SYNTHESIS, 323–30 B.C.E. 136

CONCLUSION 140

KEY TERMS 141 • SUGGESTED READING 141

- DIVERSITY + DOMINANCE: Persian and Greek Perceptions of Kingship 120
- MATERIAL CULTURE: Wine and Beer in the Ancient World 134
- ENVIRONMENT + TECHNOLOGY: Ancient Astronomy 138

6 An Age of Empires: Rome and Han China, 753 B.C.E.–330 C.E. 142

ROME'S CREATION OF A MEDITERRANEAN EMPIRE, 753 B.C.E.–330 C.E. 144

A Republic of Farmers, 753–31 B.C.E. 144 • Expansion in Italy and the Mediterranean 147 • The Failure of the Republic 148 • The Roman Principate, 31 B.C.E.-330 C.E. 149

- An Urban Empire 150 The Rise of Christianity 153
- Technology and Transformation 154

THE ORIGINS OF IMPERIAL CHINA,

221 в.с.е.-220 с.е. 158

The Qin Unification of China, 221–206 B.C.E. 158 • The Long Reign of the Han, 202 B.C.E.–220 C.E. 159 • Chinese Society 162 • New Forms of Thought and Belief 163 • Decline of the Han 164

CONCLUSION 165

KEY TERMS 167 • SUGGESTED READING 167

- DIVERSITY + DOMINANCE: Socioeconomic Mobility, Winners and Losers in Imperial Rome and Han China 150
- ENVIRONMENT + TECHNOLOGY: Ancient Glass 156

7 India and Southeast Asia, 1500 B.C.E.–1025 C.E.

168

FOUNDATIONS OF INDIAN CIVILIZATION, 1500 B.C.E.-300 C.E. 170

The Indian Subcontinent 170 • The Vedic Age 171

- Challenges to the Old Order: Jainism and Buddhism 173
- The Evolution of Hinduism 175

IMPERIAL EXPANSION AND COLLAPSE,

324 B.C.E. -650 C.E. 178 • The Mauryan Empire, 324-184 B.C.E. 178 • Commerce and Culture in an Era of Political Fragmentation 179 • The Gupta Empire, 320-550 C.E. 181

SOUTHEAST ASIA, 50–1025 c.e. 186 Early Civilization 186 • The Srivijayan Kingdom 188 CONCLUSION 190

220

242

KEY TERMS 191 • SUGGESTED READING 191 • SUGGESTED VIEWING 191

- ENVIRONMENT + TECHNOLOGY: Indian Mathematics 182
- DIVERSITY + DOMINANCE: Relations Between Women and Men in the Kama Sutra and the Arthashastra 184

8 Peoples and Civilizations of the Americas, from 1200 B.C.E. 192

FORMATIVE CIVILIZATIONS OF THE OLMEC AND CHAVÍN, 1200–200 B.C.E. 194 The Mesoamerican Olmec, 1200–400 B.C.E. 194 • Early South American Civilization: Chavín, 900–200 B.C.E. 197

CLASSIC-ERA CULTURE AND SOCIETY

IN MESOAMERICA, 200–900 199 • Teotihuacan 199 The Maya 200

THE POSTCLASSIC PERIOD IN MESOAMERICA,

900-1300 203

The Toltecs 203 • Cholula 205

NORTHERN PEOPLES 206 Southwestern Desert Cultures 206 • Mound Builders:

The Hopewell and Mississippian Cultures 207

ANDEAN CIVILIZATIONS, 200–1400 209 Cultural Response to Environmental Challenge 209 • The Early Intermediate Period Moche 210 • Tiwanaku and Wari 211 • Chimú 215

CONCLUSION 216

KEY TERMS 217 • SUGGESTED READING 217

- DIVERSITY + DOMINANCE: Burials as Historical Texts 212
- ENVIRONMENT + TECHNOLOGY: The Maya Writing System 214
- ISSUES IN WORLD HISTORY: Oral Societies and the Consequences of Literacy 218

PART III Growth and Interaction of Cultural Communities, 300 B.C.E.–1200 C.E.

Networks of Communication and Exchange, 300 B.C.E.–1100 C.E. 222

THE SILK ROAD 224

Origins and Operations 224 • Nomadism in Central and Inner Asia 225 • The Impact of the Silk Road 226

THE INDIAN OCEAN MARITIME SYSTEM 227 Origins of Contact and Trade 230 • The Impact of Indian Ocean Trade 230

ROUTES ACROSS THE SAHARA 231

Early Saharan Cultures 231 • Trade Across the Sahara 234

SUB-SAHARAN AFRICA 235

A Challenging Geography 235 • The Development of
Cultural Unity 235 • African Cultural Characteristics 236
The Advent of Iron and the Bantu Migrations 236

THE SPREAD OF IDEAS 237

Ideas and Material Evidence 237 • The Spread of Buddhism 238 • The Spread of Christianity 239

CONCLUSION 240

KEY TERMS 241 • SUGGESTED READING 241

- DIVERSITY + DOMINANCE: Travel Accounts of Africa and India 228
- ENVIRONMENT + TECHNOLOGY: Camel Saddles 234

10 The Sasanid Empire and the Rise of Islam, 200–1200

THE SASANID EMPIRE, 224–651 244 Politics and Society 244 • Religion and Empire 245

THE ORIGINS OF ISLAM 246

The Arabian Peninsula Before Muhammad 246
Muhammad in Mecca and Medina 247
Formation of the Umma 248
Succession to Muhammad 249

THE RISE AND FALL OF THE CALIPHATE,

632-1258 250

The Islamic Conquests, 634–711 250 • The Umayyad and Early Abbasid Caliphates, 661–850 251 • Political Fragmentation, 850–1050 251 • Assault from Within and Without, 1050–1258 254

ISLAMIC CIVILIZATION 256

Law and Dogma 257 • Converts and Cities 257 • Women and Islam 259 • The Recentering of Islam 261

CONCLUSION 264

KEY TERMS 265 • SUGGESTED READING 265

- DIVERSITY + DOMINANCE: Secretaries, Turks, and Beggars 260
- ENVIRONMENT + TECHNOLOGY: Chemistry 262
- MATERIAL CULTURE: Head Coverings 263

11 Christian Societies Emerge in Europe, 600–1200

266

THE BYZANTINE EMPIRE, 600–1200 268 An Empire Beleaguered 268 • Society and Urban Life 269 • Cultural Achievements 270

EARLY MEDIEVAL EUROPE, 600–1000 271 The Time of Insecurity 271 • A Self-Sufficient Economy 273 • Early Medieval Society in the West 274

THE WESTERN CHURCH 275 Politics and the Church 276 • Monasticism 278

KIEVAN RUSSIA, 900–1200 281 The Rise of the Kievan Empire 281 • Society and Culture 283

WESTERN EUROPE REVIVES, 1000–1200 283 The Role of Technology 283 • Cities and the Rebirth of the Trade 284

THE CRUSADES, 1095–1204 285 The Roots of the Crusades 285 • The Impact of the Crusades 286

CONCLUSION 287

KEY TERMS 288 • SUGGESTED READING 288

• ENVIRONMENT + TECHNOLOGY: Iron Production 276

• DIVERSITY + DOMINANCE: The Struggle for Christian Morality 278

12 Inner and East Asia, 400–1200 290

THE SUI AND TANG EMPIRES, 581–755 291 Chang'an: Metropolis at the Center of East Asia 292 • Buddhism and the Tang Empire 292 • Upheavals and Repression, 750–879 293 • The End of the Tang Empire, 879–907 297

CHINA AND ITS RIVALS 298

The Liao and Jin Challenge 298 • Song Industries 299 • Economy and Society in Song China 300

NEW KINGDOMS IN EAST ASIA 304

Chinese Influences 304 • Korea 304 • Japan 305 • Vietnam 307

CONCLUSION 308

KEY TERMS 309 • SUGGESTED READING 309

- DIVERSITY + DOMINANCE: Law and Society in China and Japan 296
- ENVIRONMENT + TECHNOLOGY: Writing in East Asia, 400–1200 306

PART IV Interregional Patterns of Culture and Contact, 1200–1550

13 Mongol Eurasia and Its Aftermath, 1200–1550 3

312

THE RISE OF THE MONGOLS, 1200–1260 314 Nomadism in Central and Inner Asia 314 • The Mongol Conquests, 1215–1283 314 • Overland Trade and Disease 318

THE MONGOLS AND ISLAM, 1260–1500 320 Mongol Rivalry 320 • Islam and the State 321 • Culture and Science in Islamic Eurasia 321

REGIONAL RESPONSES IN WESTERN EURASIA 324 Russia and Rule from Afar 324 • New States in F

Russia and Rule from Afar 324 • New States in Eastern Europe and Anatolia 325

MONGOL DOMINATION IN CHINA, 1271–1368 326

The Yuan Empire, 1271–1368 327 • The Fall of the Yuan Empire 328

THE EARLY MING EMPIRE, 1368–1500 329 Ming China on a Mongol Foundation 329 • Technology and Population 330 • The Ming Achievement 331 CENTRALIZATION AND MILITARISM IN EAST ASIA, 1200–1500 333 Korea from the Mongols to the Choson Dynasty, 1231-1500 333 • Political Transformation in Japan,

1274-1500 334 • The Emergence of Vietnam, 1200-1500 336

310

CONCLUSION 336

KEY TERMS 337 • SUGGESTED READING 337

- DIVERSITY + DOMINANCE: Observations of Mongol Life 318
- ENVIRONMENT + TECHNOLOGY: From Gunpowder to Guns 332

14 Latin Europe, 1200–1500 338

RURAL GROWTH AND CRISIS 339 Peasants, Population, and Plague 339 • Social Rebellion 341 • Mills and Mines 342

URBAN REVIVAL 343 Trading Cities 343 • Civic Life 346 • Gothic Cathedrals 347

414

LEARNING, LITERATURE, AND THE RENAISSANCE 350

The Renaissance 350 • Humanists and Printers 352 • Renaissance Artists 353

POLITICAL AND MILITARY

TRANSFORMATIONS 354

Monarchs, Nobles, and the Church 354 • The Hundred Years' War 355 • New Monarchies in France and England 357 • Iberian Unification 357 • The Ottoman Frontier 358

CONCLUSION 359

KEY TERMS 359 • SUGGESTED READING 359

- DIVERSITY + DOMINANCE: Persecution and Protection of Jews, 1272–1349 348
- ENVIRONMENT + TECHNOLOGY: The Clock 350

15 Southern Empires, Southern Seas, 1200–1500 360

TROPICAL AFRICA AND ASIA 361

The Tropical Environment in Africa and Asia 362 • Human Ecosystems 362 • Water Systems and Irrigation 363 • Mineral Resources 364

NEW ISLAMIC EMPIRES 366

Mali in the Western Sudan 366 • The Delhi Sultanate in India 368

INDIAN OCEAN TRADE 372

Monsoon Mariners 372 • Africa: The Swahili Coast and Zimbabwe 374 • Arabia: Aden and the Red Sea 375 • India: Gujarat and the Malabar Coast 375 • Southeast Asia 376

SOCIAL AND CULTURAL CHANGE 377

Architecture, Learning, and Religion 377 • Social and Gender Distinctions 378

THE WESTERN HEMISPHERE 379 Mesoamerica: The Aztecs 379 • The Andes: The Inka 382 CONCLUSION 383

KEY TERMS 384 • SUGGESTED READING 384

- MATERIAL CULTURE: Salt 365
- DIVERSITY + DOMINANCE: Personal Styles of Rule in India and Mali 370
- ENVIRONMENT + TECHNOLOGY: The Indian Ocean Dhow 373

16 The Maritime Revolution, to 1550 386

GLOBAL MARITIME EXPANSION BEFORE 1450 388 The Indian Ocean 388 • The Pacific Ocean 391 • The Atlantic Ocean 392

EUROPEAN EXPANSION, 1400–1550 394 Motives for Exploration 394 • Portuguese Voyages 394 • Spanish Voyages 396

ENCOUNTERS WITH EUROPE, 1450–1550 399 Western Africa 399 • Eastern Africa 401 • Indian Ocean States 402 • The Americas 406

CONCLUSION 409

KEY TERMS 410 . SUGGESTED READING 411

- ENVIRONMENT + TECHNOLOGY: Vasco da Gama's Fleet 398
- **DIVERSITY + DOMINANCE:** Kongo's Christian King 402
- ISSUES IN WORLD HISTORY: Climate and Population to 1500 412

PART V The Globe Encompassed, 1500–1750

17 Transformations in Europe, 1500–1750

CULTURE AND IDEAS 418

Early Reformation 418 • The Counter-Reformation and the Politics of Religion 420 • Local Religion, Traditional Culture, and Witch-Hunts 422 • The Scientific Revolution 424 • The Early Enlightenment 425

SOCIAL AND ECONOMIC LIFE 426

The Bourgeoisie 426 • Peasants and Laborers 428 • Women and the Family 431

POLITICAL INNOVATIONS 431

State Development 432 • The Monarchies of England and France 434 • Warfare and Diplomacy 435 • Paying the Piper 439

CONCLUSION 442

KEY TERMS 442 • SUGGESTED READING 443

- ENVIRONMENT + TECHNOLOGY: Mapping the World 429
- **DIVERSITY** + **DOMINANCE:** Commercial Expansion and Risk 436

18 The Diversity of American Colonial Societies, 1530–1770 444

THE COLUMBIAN EXCHANGE 446 Demographic Changes 446 • Transfer of Plants and Animals 446

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it

416

SPANISH AMERICA AND BRAZIL 448

State and Church 449 • Colonial Economies 452 • Society in Colonial Latin America 455

ENGLISH AND FRENCH COLONIES IN NORTH AMERICA 459

Early English Experiments 459 • The South 459 • New England 461 • The Middle Atlantic Region 462 • French America 463

COLONIAL EXPANSION AND CONFLICT 466

Imperial Reform in Spanish America and Brazil 466 • Reform and Reorganization in British America 467

CONCLUSION 468

KEY TERMS 469 • SUGGESTED READING 469

• ENVIRONMENT + TECHNOLOGY: A Silver Refinery at Potosí, Bolivia, 1700 453

• **DIVERSITY** + **DOMINANCE:** Race and Ethnicity in the Spanish Colonies: Negotiating Hierarchy 456

19 The Atlantic System and Africa, 1550–1800

470

PLANTATIONS IN THE WEST INDIES 472

Colonization Before 1650 472 • Sugar and Slaves 473

PLANTATION LIFE IN THE EIGHTEENTH CENTURY 474

Technology and Environment 475 • Slaves' Lives 476 • Free Whites and Free Blacks 480

CREATING THE ATLANTIC ECONOMY 482 Capitalism and Mercantilism 482 • The Atlantic Circuit 483

AFRICA, THE ATLANTIC, AND ISLAM 487

The Gold Coast and the Slave Coast 487 • The Bight of Biafra and Angola 489 • Africa's European and Islamic Contacts 490

CONCLUSION 495

KEY TERMS 496 • SUGGESTED READING 496

- ENVIRONMENT + TECHNOLOGY: Hurricanes and the Caribbean Plantation Economy 477
- **DIVERSITY** + **DOMINANCE**: Slavery in West Africa and the Americas 492

20 Between Europe and China, 1500–1750

498

THE OTTOMAN EMPIRE, TO 1750 500

Expansion and Frontiers 500 • Central Institutions 502 • Crisis of the Military State, 1585–1650 503 • Economic Change and Growing Weakness 506

THE SAFAVID EMPIRE, 1502-1722 508

Safavid Society and Religion 508 • A Tale of Two Cities: Isfahan and Istanbul 510 • Economic Crisis and Political Collapse 511

THE MUGHAL EMPIRE, 1526–1739 512 Political Foundations 512 • Hindus and Muslims 513 • Central Decay and Regional Challenges 513

THE RUSSIAN EMPIRE, 1500–1725 514 The Drive Across Northern Asia 514 • Russian Society and Politics to 1725 516 • Peter the Great 516

THE MARITIME WORLDS OF ISLAM, 1500–1750 518

Muslims in Southeast Asia 519 • Muslims in Coastal Africa 519 • European Powers in Southern Seas 521

CONCLUSION 522

KEY TERMS 522 • SUGGESTED READING 523

- DIVERSITY + DOMINANCE: Islamic Law and Ottoman Rule 504
- ENVIRONMENT + TECHNOLOGY: Tobacco and Waterpipes 508

21 East Asia in Global Perspective 524

EAST ASIA AND EUROPE 526

Trading Companies and Missionaries 526 $\,\cdot\,$ Chinese Influences on Europe 527 $\,\cdot\,$ Japan and the Europeans 528

THE IMJIN WAR AND JAPANESE UNIFICATION 529

TOKUGAWA JAPAN AND CHOSON KOREA TO 1800 531

Japanese Reunification and Economic Growth 531

- Japanese Elite Decline and Social Crisis 532
- Choson Korea 533

FROM MING TO QING 534

Ming Economic Growth, 1500–1644 534 • Ming Collapse and the Rise of the Qing 536 • Emperor Kangxi 537 Tea and Diplomacy 537 • Population Growth and Environmental Stress 540

CONCLUSION 542

KEY TERMS 543 • SUGGESTED READING 543

- ENVIRONMENT + TECHNOLOGY: East Asian Porcelain 532
- MATERIAL CULTURE: Four-Wheeled Vehicles 535
- DIVERSITY + DOMINANCE: Korean Envoys Meet with Hideyoshi Toyotomi 538
- **ISSUES IN WORLD HISTORY:** The Little Ice Age 544

PART VI Revolutions Reshape the World, 1750–1870

624

22 The Early Industrial Revolution, 1760–1851

CAUSES OF THE INDUSTRIAL REVOLUTION 550 Population Growth 550 • The Agricultural Revolution 550 Trade and Inventiveness 551 • Britain and Continental Europe 552

THE TECHNOLOGICAL REVOLUTION 554 Mass Production: Pottery 554 • Mechanization: The Cotton Industry 555 • The Iron Industry 558 • The Steam Engine 559 • Railroads 560 • Communication over Wires 561

THE IMPACT OF THE EARLY INDUSTRIAL REVOLUTION 562

The New Industrial Cities 562 • Rural

Environments 564 • Working Conditions 564 • Changes in Society 567

NEW ECONOMIC AND POLITICAL IDEAS 568 Laissez Faire and Its Critics 568 • Protests and Reforms 569

THE LIMITS OF INDUSTRIALIZATION OUTSIDE THE WEST 570

Egypt 570 • India 571 • China 571

CONCLUSION 572

KEY TERMS 573 • SUGGESTED READING 573

- DIVERSITY + DOMINANCE: Adam Smith and the Division of Labor 556
- ENVIRONMENT + TECHNOLOGY: Gas Lighting 566

23 Revolutionary Changes in the Atlantic World, 1750–1850

PRELUDE TO REVOLUTION:

THE EIGHTEENTH-CENTURY CRISIS 576 Colonial Wars and Fiscal Crises 576 • The Enlightenment and the Old Order 576 • Folk Cultures and Popular Protest 578

THE AMERICAN REVOLUTION, 1775–1800 580 Frontiers and Taxes 580 • The Course of Revolution, 1775–1783 581 • The Construction of Republican Institutions, to 1800 583

THE FRENCH REVOLUTION, 1789–1815 584 French Society and Fiscal Crisis 585 • Protest Turns to Revolution, 1789–1792 586 • The Terror, 1793–1794 588 • Reaction and the Rise of Napoleon, 1795–1815 589

REVOLUTION SPREADS, CONSERVATIVES RESPOND, 1789–1850 592

The Haitian Revolution, 1789–1804 593 • The Congress of Vienna and Conservative Retrenchment, 1815–1820 596

• Nationalism, Reform, and Revolution, 1821–1850 596

CONCLUSION 598

548

KEY TERMS 598 • SUGGESTED READING 599

- ENVIRONMENT + TECHNOLOGY: The Guillotine 589
- DIVERSITY + DOMINANCE: Robespierre and Wollstonecraft Defend and Explain the Terror 590

24 Land Empires in the Age of Imperialism, 1800–1870 600

THE OTTOMAN EMPIRE 602

Egypt and the Napoleonic Example 602 • Ottoman Reform and the European Model, 1807–1853 603 • The Crimean War and Its Aftermath 607

THE RUSSIAN EMPIRE 610

Russia and Europe 610 $\, \bullet \,$ Russia and Asia 611 $\, \bullet \,$ Cultural Trends 611

THE QING EMPIRE 613

Economic and Social Disorder 613 • The Opium War and Its Aftermath, 1839–1850 613 • The Taiping Rebellion, 1850–1864 616 • Decentralization at the End of the Qing Empire, 1864–1875 619

CONCLUSION 622

KEY TERMS 623 • SUGGESTED READING 623

- ENVIRONMENT + TECHNOLOGY: The Web of War 609
- DIVERSITY + DOMINANCE: Chinese Responses to Imperialism 620

25 Nation Building and Economic Transformation in the Americas, 1800–1890

INDEPENDENCE IN LATIN AMERICA,

1800-1830 626

Roots of Revolution, to 1810 626 • Spanish South America, 1810–1825 626 • Mexico, 1810–1823 628

• Brazil, to 1831 630

THE PROBLEM OF ORDER, 1825–1890 630 Constitutional Experiments 631 • Personalist Leaders 631 • The Threat of Regionalism 634 • Foreign Interventions and Regional Wars 636 • Native Peoples and the Nation-State 637

574

THE CHALLENGE OF SOCIAL AND ECONOMIC CHANGE 639

The Abolition of Slavery 639 • Immigration 641 • American Cultures 643 • Women's Rights and the Struggle for Social Justice 644 • Development and Underdevelopment 645 • Altered Environments 648

CONCLUSION 649

KEY TERMS 650 • SUGGESTED READING 651

- DIVERSITY + DOMINANCE: The Afro-Brazilian Experience, 1828 632
- ENVIRONMENT + TECHNOLOGY: Industrializing Sugar Agriculture in Cuba 646
- **ISSUES IN WORLD HISTORY:** State Power, the Census, and the Question of Identity 652

PART VII Global Diversity and Dominance, 1750–1945

26 Varieties of Imperialism in Africa, India, Southeast Asia, and Latin America, 1750–1914

656

CHANGES AND EXCHANGES IN AFRICA 658 Southern Africa 658 • West and Equatorial Africa 661 • The Berlin Conference 662 • Modernization in Egypt and Ethiopia 664 • Transition from the Slave Trade 665 • Secondary Empire in Eastern Africa 666

INDIA UNDER BRITISH RULE 666

East India Company 667 • Political Reform and Industrial Impact 668 • Indian Nationalism 670

SOUTHEAST ASIA AND THE PACIFIC 670 Australia 671 • New Zealand 671 • Hawaii and the Philippines, 1878-1902 673

IMPERIALISM IN LATIN AMERICA 674

American Expansionism and the Spanish-American War, 1898 674 • Economic Imperialism 674 • Revolution and Civil War in Mexico 675 • American Intervention in the Caribbean and Central America, 1901–1914 678

THE WORLD ECONOMY AND THE GLOBAL ENVIRONMENT 678

Expansion of the World Economy 679 • Free Trade 679 • New Labor Migrations 681

CONCLUSION 682

KEY TERMS 682 • SUGGESTED READING 683

- DIVERSITY + DOMINANCE: Two Africans Recall the Arrival of the Europeans 662
- ENVIRONMENT + TECHNOLOGY: Imperialism and Tropical Ecology 680

27 The New Power Balance, 1850–1900

684

654

NEW TECHNOLOGIES AND THE WORLD ECONOMY 686

Railroads 686 • Steamships and Telegraph Cables 686 • The Steel and Chemical Industries 687 • Environmental Problems 688 • Electricity 688 • World Trade and Finance 689

SOCIAL CHANGES 690

Population and Migrations 690 • Urbanization and Urban Environments 691 • Middle-Class Women's "Separate Sphere" 693 • Working-Class Women 694

SOCIALISM AND LABOR MOVEMENTS 696 Revolutionary Alternatives 696 • Labor Unions and Movements 697

NATIONALISM AND THE RISE OF ITALY, GERMANY, AND JAPAN 698

Language and National Identity in Europe Before 1871 698 • The Unification of Italy, 1860–1870 698 • The Unification of Germany, 1866–1871 699 • The West Challenges Japan 700 • The Meiji Restoration and the Modernization of Japan, 1868–1894 702 • Nationalism and Social Darwinism 704

THE GREAT POWERS OF EUROPE, 1871–1900 706 Germany at the Center of Europe 706 • The Liberal Powers: France and Great Britain 706 • The Conservative Powers: Russia and Austria-Hungary 707

CHINA, JAPAN, AND THE WESTERN POWERS 708 China in Turmoil 708 • Japan Confronts China 709

CONCLUSION 710

KEY TERMS 710 • SUGGESTED READING 711

- ENVIRONMENT + TECHNOLOGY: Railroads and Immigration 692
- MATERIAL CULTURE: Cotton Clothing 695
- DIVERSITY + DOMINANCE: Giuseppe Mazzini on Revolutionary Nationalism 702

762

28 The Crisis of the Imperial Order, 1900–1929

712

ORIGINS OF THE CRISIS IN EUROPE

AND THE MIDDLE EAST 713 The Ottoman Empire and the Balkans 713 • Nationalism, Alliances, and Military Strategy 714

THE "GREAT WAR" AND THE RUSSIAN REVOLUTIONS, 1914–1918 715

Stalemate, 1914–1917 715 • The Home Front and the War Economy 717 • The Ottoman Empire at War 719 • Double Revolution in Russia 720 • The End of the War in Western Europe, 1917–1918 721

PEACE AND DISLOCATION IN EUROPE, 1919–1929 721

The Impact of the War 721 • The Peace Treaties 722

- + Russian Civil War and the New Economic Policy $\,723$
- An Ephemeral Peace 724

CHINA AND JAPAN: CONTRASTING DESTINIES 725

Social and Economic Change 725 • Revolution and War, 1900–1918 727 • Chinese Warlords and the Guomindang, 1919–1929 727

THE NEW MIDDLE EAST 728

The Mandate System 728 • The Rise of Modern Turkey 728 • Arab Lands and the Question of Palestine 729

CONCLUSION 734

KEY TERMS 735 • SUGGESTED READING 735

- DIVERSITY + DOMINANCE: The Middle East After World War I 730
- ENVIRONMENT + TECHNOLOGY: Oil and War 734

29 Revolutions in Living, 1900–1950 736

NEW TECHNOLOGY OUTSIDE THE INDUSTRIALIZED WORLD 738

Urbanization 738 • Electricity 739 • New Media 741

NEW WAYS OF LIVING IN THE INDUSTRIALIZED WORLD 742

Identity 742 • Women's Lives 743 • Revolution in the Sciences: The New Physics 743 • The New Social Sciences 744 • New Technologies and Activities 744 • Technology and the Environment 746

A NEW INDIA, 1905-1947 748

The Land and the People 748 • British Rule and Indian Nationalism 749 • Mahatma Gandhi and Militant Nonviolence 751 • India Moves Toward Independence 752 • Partition and Independence 754

MEXICO, ARGENTINA, AND BRAZIL, 1917-1949 754

The Cárdenas Reforms 755 • The Transformation of Argentina 755 • Brazil and Argentina, to 1929 755 • The Depression and the Vargas Regime in Brazil 756 • Argentina After 1930 757

SUB-SAHARAN AFRICA, 1900–1945 757

Colonial Africa: Economic and Social Changes 758 • Religious and Political Changes 759 • Africa and the New Media 760

CONCLUSION 760

KEY TERMS 761 • SUGGESTED READING 761

- MATERIAL CULTURE: Bells, Gongs, and Drums 740
- ENVIRONMENT + TECHNOLOGY: New Materials 747
- **DIVERSITY + DOMINANCE:** Gandhi and the Media 752

30 The Collapse of the Old Order, 1929–1949

THE STALIN REVOLUTION 764

Five-Year Plans 764 • Collectivization of Agriculture 764 • Terror and Opportunities 766

THE DEPRESSION 766 Economic Crisis 767 • Depression in Industrial Nations 767 • Depression in Nonindustrial Regions 768

THE RISE OF FASCISM 770 Mussolini's Italy 770 • Hitler's Germany 770 • The Road to War, 1933–1939 771

EAST ASIA, 1931–1945 772 The Manchurian Incident of 1931 772 • The Long March 773 • The Sino-Japanese War, 1937–1945 774

THE SECOND WORLD WAR 775

The War of Movement 775 • War in Europe and North Africa 776 • War in Asia and the Pacific 778 • The End of War 778 • Collapse of the Guomindang and Communist Victory 780

THE CHARACTER OF WARFARE 781

The Science and Technology of War 782 • Bombing Raids 782 • The Holocaust 782 • The Home Front in Europe and Asia 784 • The Home Front in the United States 784 • War and the Environment 785

CONCLUSION 785

KEY TERMS 786 • SUGGESTED READING 787

- DIVERSITY + DOMINANCE: Women, Family Values, and the Russian Revolution 768
- **ENVIRONMENT + TECHNOLOGY:** The Magnetophon 783
- ISSUES IN WORLD HISTORY: Famines and Politics 788

PART VIII Perils and Promises of a Global Community, 1945 to the Present

790

31 The Cold War and Decolonization, 1945–1975 792

THE COLD WAR 794

The United Nations 794 • Capitalism and Communism 795 • West Versus East in Europe and Korea 798 • The United States and Vietnam 800 • The Race for Nuclear Supremacy 801

DECOLONIZATION AND NATION BUILDING 802 New Nations in South and Southeast Asia 802 • The Struggle for Independence in Africa 804 • The Quest for Economic Freedom in Latin America 807

BEYOND A BIPOLAR WORLD 810

The Third World 810 • Japan and China 811 • The Middle East 813 • The Emergence of Environmental Concerns 815

CONCLUSION 816

KEY TERMS 817 • SUGGESTED READING 817

- ENVIRONMENT + TECHNOLOGY: The Green Revolution 796
- DIVERSITY + DOMINANCE: Race and the Struggle for Justice in South Africa 808

32 The End of the Cold War and the Challenge of Economic Development and Immigration, 1975–2000 818

POSTCOLONIAL CRISES AND ASIAN ECONOMIC EXPANSION 820

Revolutions, Repression, and Democratic Reform in Latin America 820 • Islamic Revolutions in Iran and Afghanistan 823 • Asian Transformation 825 • China Rejoins the World Economy 826

THE END OF THE BIPOLAR WORLD 828

Crisis in the Soviet Union 828 • The Collapse of the Socialist Bloc 829 • Africa in the Era of Global Political Change 830 • The Persian Gulf War 830

THE CHALLENGE OF POPULATION GROWTH 831 Demographic Transition 832 • The Industrialized Nations 834 • The Developing Nations 834 • Old and Young Populations 835

UNEQUAL DEVELOPMENT AND THE MOVEMENT OF PEOPLES 835

The Problem of Inequality 837 • Internal Migration: The Growth of Cities 838 • Global Migration 839

TECHNOLOGICAL AND ENVIRONMENTAL CHANGE 839

New Technologies and the World Economy 840

• Conserving and Sharing Resources 841 • Responding to Environmental Threats 843

CONCLUSION 845

KEY TERMS 846 • SUGGESTED READING 846

- DIVERSITY + DOMINANCE: The Struggle for Women's Rights in an Era of Global Political and Economic Change 826
- ENVIRONMENT + TECHNOLOGY: Connected 841
- MATERIAL CULTURE: Fast Food 842
- 33 New Challenges in a New Millennium 848

GLOBALIZATION AND ECONOMIC CRISIS 850

An Interconnected Economy 850 • Global Financial Crisis 852 • Globalization and Democracy 855 • Regime Change in Iraq and Afghanistan 856

THE QUESTION OF VALUES 858

Faith and Politics 858 • Universal Rights and Values 859 • Women's Rights 865

GLOBAL CULTURE 866

The Media and the Message 866 • The Spread of Pop Culture 867 • Emerging Global Elite Culture 868 • Enduring Cultural Diversity 870

- Enduring Cultural Diversity 870
- **DIVERSITY + DOMINANCE:** Conflict and Civilization 860
- ENVIRONMENT + TECHNOLOGY: Global Warming 864

KEY TERMS 871 • SUGGESTED READING 871

INDEX I-1

Maps

- 1.1 Human Dispersal to 10,000 Years Ago 9
- **1.2** Early Centers of Plant and Animal Domestication 18
- 2.1 River-Valley Civilizations, 3500–1500 B.C.E. 28
- 2.2 Mesopotamia 30
- 2.3 Ancient Egypt 40
- 3.1 The Middle East in the Second Millennium B.C.E. 54
- 3.2 Minoan and Mycenaean Civilizations of the Aegean 61
- 3.3 The Assyrian Empire 65
- 3.4 Phoenicia and Israel 68
- **3.5** Colonization of the Mediterranean 76
- **4.1** China in the Shang and Zhou Periods, 1750–221 B.C.E. 87
- 4.2 Ancient Nubia 96
- 4.3 Pastoral Nomads of the Eurasian Steppes 99
- **4.4** The Celtic Peoples 103
- 5.1 The Persian Empire Between 550 and 522 B.C.E. 114
- **5.2** Ancient Greece 123
- **5.3** Hellenistic Civilization 137
- **6.1** The Roman Empire 146
- 6.2 Han China 160
- 7.1 Ancient India 172
- 7.2 Southeast Asia 187
- 8.1 Olmec and Chavín Civilizations 196
- 8.2 Maya Civilization, 250–1400 C.E. 200
- 8.3 Postclassic Mesoamerica 204
- 8.4 Culture Areas of North America 207
- 8.5 Andean Civilizations, 200 B.C.E.–1532 C.E. 210
- 9.1 Asian Trade and Communication Routes 226
- 9.2 Africa and the Trans-Saharan Trade Routes 233
- 10.1 Early Expansion of Muslim Rule 247
- 10.2 Rise and Fall of the Abbasid Caliphate 253
- **11.1** The Spread of Christianity 271
- **11.2** Germanic Kingdoms 272
- **11.3** Kievan Russia and the Byzantine Empire in the Eleventh Century 282
- 11.4 The Crusades 286
- 12.1 The Tang Empire in Inner and Eastern Asia, 750 294
- 12.2 Liao and Song Empires, ca. 1100 300
- **12.3** Jin and Southern Song Empires, ca. 1200 300
- **13.1** The Mongol Domains in Eurasia in 1300 317
- 13.2 Western Eurasia in the 1300s 322
- 13.3 The Ming Empire and Its Allies, 1368–1500 330
- 13.4 Korea and Japan, 1200–1500 334
- **14.1** The Black Death in Fourteenth-Century Europe 342
- **14.2** Trade and Manufacturing in Later Medieval Europe 344
- 14.3 Europe in 1453 356

- **15.1** Africa and the Indian Ocean Basin: Physical Characteristics 364
- 15.2 Africa, 1200–1500 367
- 15.3 South and Southeast Asia, 1200–1500 369
- **15.4** Arteries of Trade and Travel in the Islamic World, to 1500 374
- **15.5** Major Mesoamerican Civilizations, 1000 B.C.E.–1519 C.E. 380
- 16.1 Exploration and Settlement in the Indian and Pacific Oceans Before 1500 392
- 16.2 Middle America to 1533 393
- **16.3** European Exploration, 1420–1542 397
- **17.1** Religious Reformation in Europe 421
- **17.2** The European Empire of Charles V 433
- **17.3** Europe in 1740 438
- **18.1** Colonial Latin America in the Eighteenth Century 450
- 18.2 European Claims in North America, 1755–1763 465
- **19.1** The Atlantic Economy 484
- **19.2** The African Slave Trade, 1500–1800 486
- 19.3 West African States and Trade, 1500–1800 488
- **20.1** Muslim Empires in the Sixteenth and Seventeenth Centuries 502
- **20.2** The Expansion of Russia, 1500–1800 515
- **20.3** European Colonization in the Indian Ocean, to 1750 520
- **21.1** The Qing Empire, 1644–1783 536
- 21.2 Climate and Diversity in the Qing Empire 541
- 22.1 The Industrial Revolution in Britain, ca. 1850 553
- 22.2 Industrialization in Europe, ca. 1850 563
- 23.1 The American Revolutionary War 583
- 23.2 Napoleon's Europe, 1810 594
- 23.3 The Haitian Revolution 595
- 24.1 The Ottoman and Russian Empires, 1829-1914 604
- 24.2 Conflicts in the Qing Empire, 1839–1870 615
- 25.1 Latin America by 1830 629
- 25.2 Dominion of Canada, 1873 634
- **25.3** Territorial Growth of the United States, 1783–1853 635
- 25.4 The Expansion of the United States, 1850–1920 647
- 26.1 Africa in the Nineteenth Century 660
- 26.2 Asia in 1914 672
- **26.3** The Mexican Revolution 676
- 27.1 Unification of Italy, 1860–1870 699
- 27.2 Unification of Germany, 1866-1871 701
- 27.3 Expansion and Modernization of Japan, 1868–1918 704
- **28.1** Europe in 1913 716
- 28.2 The First World War in Europe 718

- 28.3 Territorial Changes in Europe After World War I 723
- **28.4** Territorial Changes in the Middle East After World War I 732
- 29.1 The Partition of India, 1947 748
- **30.1** Chinese Communist Movement and the Sino-Japanese War, to 1938 774
- **30.2** World War II in Europe and North Africa 777
- **30.3** World War II in Asia and the Pacific 779
- **31.1** Cold War Confrontation 799

- **31.2** Decolonization, 1947–1990 803
- **31.3** Middle East Oil and the Arab-Israeli Conflict, 1947–1973 814
- 32.1 The End of the Soviet Union 831
- 32.2 World Population Growth 836
- **32.3** Fresh Water Resources 844
- **33.1** Global Distribution of Wealth 853
- **33.2** Regional Trade Associations, 2004 854
- 33.3 World Religions 862

Features



ENVIRONMENT + TECHNOLOGY

The Iceman 16 Environmental Stress in the Indus Valley 48 Ancient Textiles and Dyes 75 Divination in Ancient Societies 88 Ancient Astronomy 138 Ancient Glass 156 Indian Mathematics 182 The Maya Writing System 214 Camel Saddles 234 Chemistry 262 Iron Production 276 Writing in East Asia, 400-1200 306 From Gunpowder to Guns 332 The Clock 350 The Indian Ocean Dhow 373 Vasco da Gama's Fleet 398 Mapping the World 429

A Silver Refinery at Potosí, Bolivia, 1700 453 Hurricanes and the Caribbean Plantation Economy 477 Tobacco and Waterpipes 508 East Asian Porcelain 532 Gas Lighting 566 The Guillotine 589 The Web of War 609 Industrializing Sugar Agriculture in Cuba 646 Imperialism and Tropical Ecology 680 Railroads and Immigration 692 Oil and War 734 New Materials 747 The Magnetophon 783 The Green Revolution 796 Connected 841 Global Warming 864



DIVERSITY + DOMINANCE

Cave Art 12 Violence and Order in the Babylonian New Year's Festival 36 Protests Against the Ruling Class in Israel and Babylonia 72 Human Nature and Good Government in the Analects of Confucius and the Legalist Writings of Han Fei 92 Persian and Greek Perceptions of Kingship 120 Socioeconomic Mobility, Winners and Losers in Imperial Rome and Han China 150 Relations Between Women and Men in the Kama Sutra and the Arthashastra 184 Burials as Historical Texts 212 Travel Accounts of Africa and India 228 Secretaries, Turks, and Beggars 260 The Struggle for Christian Morality 278 Law and Society in China and Japan 296 Observations of Mongol Life 318 Persecution and Protection of Jews, 1272-1349 348 Personal Styles of Rule in India and Mali 370 Kongo's Christian King 402

Commercial Expansion and Risk 436 Race and Ethnicity in the Spanish Colonies: Negotiating Hierarchy 456 Slavery in West Africa and the Americas 492 Islamic Law and Ottoman Rule 504 Korean Envoys Meet with Hideyoshi Toyotomi 538 Adam Smith and the Division of Labor 556 Robespierre and Wollstonecraft Defend and Explain the Terror 590 Chinese Responses to Imperialism 620 The Afro-Brazilian Experience, 1828 632 Two Africans Recall the Arrival of the Europeans 662 Giuseppe Mazzini on Revolutionary Nationalism 702 The Middle East After World War I 730 Gandhi and the Media 752 Women, Family Values, and the Russian Revolution 768 Race and the Struggle for Justice in South Africa 808 The Struggle for Women's Rights in an Era of Global Political and Economic Change 826 Conflict and Civilization 860

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.



MATERIAL CULTURE

Lamps and Candles 38 Wine and Beer in the Ancient World 134 Head Coverings 263 Salt 365 Four-Wheeled Vehicles 535 Cotton Clothing 695 Bells, Gongs, and Drums 740 Fast Food 842



ISSUES IN WORLD HISTORY

Animal Domestication 108 Oral Societies and the Consequences of Literacy 218 Climate and Population to 1500 412 The Little Ice Age 544 State Power, the Census, and the Question of Identity 652 Famines and Politics 788

Preface

In preparing the sixth edition of this book, we examined the flow of topics from chapter to chapter and decided that certain rearrangements within chapters and in the order of chapters would accommodate the needs of instructors and students better than the template they had followed since the first edition. The first change was reversing the order of the third and fourth chapters to have early Mediterranean and Middle Eastern history directly follow the discussion of the origins of civilization in the Nile Valley and Mesopotamia.

The second change addressed the problem of when and how to discuss the history of pre-Columbian America. The time span to be covered, ranging from roughly 1500 B.C.E. to 1500 C.E., was too long to fit easily into the book's division into eight parts. The new structure we have adopted relocates the long pre-Aztec and pre-Inka narrative from Part III, Growth and Interaction of Cultural Communities, to the end of Part II, The Formation of New Cultural Communities. This change puts the status of the earliest civilizations in the Western Hemisphere on the same footing as the civilizations of early Greece, China, and South and Southeast Asia. It has the added benefit of making the history of East Asia in the Tang and Song periods directly precede the history of the Mongol empire, which allows instructors to have an uninterrupted focus on East Asia. The histories of the Aztecs and Inkas have been shifted to the chapter on tropical history located in Part IV, Interregional Patterns of Culture and Contact. This allows for a discussion of the overall influence of tropical environments and places them in close proximity to our treatment of the coming of Europeans to the New World.

A third structural change has shortened the length of the book from 34 to 33 chapters. To lessen the impression that Europe's domination of the world should always be the primary focus of student attention between the eighteenth and mid-twentieth centuries we have combined the two separate chapters on European imperialism, Chapters 26 and 28 in previous editions, into one. We feel that this change provides a better balance between the saga of European imperialism, accounts of resistance to imperialism, and the rise of independence movements in different parts of the world.

In a related change, we have relocated the chapter dealing with the histories of India, Latin America, and Africa in the first half of the twentieth century from after World War II, the old Chapter 31, to a position between the world wars. The aim of this chapter, titled "Revolutions in Living," is to portray that period not only as a time of political change in parts of the world subjected to European imperialism, but also as one of transformation of daily lives of people in both the industrialized and nonindustrialized worlds. The added focus of the chapter fills a gap between discussion of the Industrial Revolution in the eighteenth and nineteenth centuries and the advent of major technological changes in the post-World War II era.

Finally in this new edition, contributor and East Asian specialist Michael Wert of Marquette University brought a fresh perspective to many of our chapters dealing with East Asia, helping ensure that our coverage is at the forefront of emerging scholarship.

The authors believe that these changes, along with myriad smaller changes detailed below, significantly enhance the overall goal of *The Earth and Its Peoples*, namely, to be a textbook that speaks not only for the past but also to today's student and teacher. Students and instructors alike should take away from this text a broad, and due to the changes, more flowing impression of human societies beginning as sparse and disconnected communities reacting creatively to local circumstances; experiencing ever more intensive stages of contact, interpenetration, and cultural expansion and amalgamation; and arriving at a twenty-first-century world in which people increasingly visualize a single global community.

Process, not progress, is the keynote of this book: a steady process of change over time, at first experienced differently in various regions, but eventually connecting peoples and traditions from all parts of the globe. Students should come away from this book with a sense that the problems and promises of their world are rooted in a past in which people of every sort, in every part of the world, confronted problems of a similar character and coped with them as best they could. We believe that our efforts will help students see where their world has come from and learn thereby something useful for their own lives.

CENTRAL THEMES AND GOALS

We subtitled *The Earth and Its Peoples* "A Global History" because the book explores the common challenges and experiences that unite the human past. Although the dispersal of early humans to every livable environment resulted in a myriad of different economic, social, political, and cultural systems, all societies displayed analogous patterns in meeting their needs and exploiting their environments. Our challenge was to select the particular data and episodes that would best illuminate these global patterns of human experience.

To meet this challenge, we adopted two themes for our history: "technology and the environment" and "diversity and dominance." The first theme represents the commonplace material bases of all human societies at all times. It grants no special favor to any cultural group even as it embraces subjects of the broadest topical, chronological, and geographical range. The second theme expresses the reality that every human society has constructed or inherited structures of domination. We examine practices and institutions of many sorts: military, economic, social, political, religious, and cultural, as well as those based on kinship, gender, and literacy. Simultaneously we recognize that alternative ways of life and visions of societal organization continually manifest themselves both within and in dialogue with every structure of domination.

With respect to the first theme, it is vital for students to understand that technology, in the broad sense of experience-based knowledge of the physical world, underlies all human activity. Writing is a technology, but so is oral transmission from generation to generation of lore about medicinal or poisonous plants. The magnetic compass is a navigational technology, but so is Polynesian mariners' hard-won knowledge of winds, currents, and tides that made possible the settlement of the Pacific islands.

All technological development has come about in interaction with environments, both physical and human, and has, in turn, affected those environments. The story of how humanity has changed the face of the globe is an integral part of our first theme. Yet technology and the environment do not explain or underlie all important episodes of human experience. The theme of "diversity and dominance" informs all our discussions of politics, culture, and society. Thus when narrating the histories of empires, we describe a range of human experiences within and beyond the imperial frontiers without assuming that imperial institutions are a more fit topic for discussion than the economic and social organization of pastoral nomads or the lives of peasant women. When religion and culture occupy our narrative, we focus not only on the dominant tradition but also on the diversity of alternative beliefs and practices.

ORGANIZATION

The *Earth and Its Peoples* uses eight broad chronological divisions to define its conceptual scheme of global historical development.

In **Part One: The Emergence of Human Communities, to 500 B.C.E.**, we examine important patterns of human communal organization primarily in the Eastern Hemisphere. Small, dispersed human communities living by foraging spread to most parts of the world over tens of thousands of years. They responded to enormously diverse environmental conditions, at different times in different ways, discovering how to cultivate plants and utilize the products of domestic animals. On the basis of these new modes of sustenance, population grew, permanent towns appeared, and political and religious authority, based on collection and control of agricultural surpluses, spread over extensive areas.

Part Two: The Formation of New Cultural Communities, 1000 B.C.E.-400 C.E., introduces the concept of a "cultural community," in the sense of a coherent pattern of activities and symbols pertaining to a specific human community. While all human communities develop distinctive cultures, including those discussed in Part One, historical development in this stage of global history prolonged and magnified the impact of some cultures more than others. In the geographically contiguous African-Eurasian landmass, as well as in the Western Hemisphere, the cultures that proved to have the most enduring influence traced their roots to the second and first millennia B.C.E.

Part Three: Growth and Interaction of Cultural Communities, 300 B.C.E.–1200 C.E., deals with early episodes of technological, social, and cultural exchange and interaction on a continental scale both within and beyond the framework of imperial expansion. These are so different from earlier interactions arising from more limited conquests or extensions of political

boundaries that they constitute a distinct era in world history, an era that set the world on the path of increasing global interaction and interdependence that it has been following ever since.

In **Part Four: Interregional Patterns of Culture and Contact, 1200–1550**, we look at the world during the three and a half centuries that saw both intensified cultural and commercial contact and increasingly confident self-definition of cultural communities in Europe, Asia, Africa, and the Americas. The Mongol conquest of a vast empire extending from the Pacific Ocean to eastern Europe greatly stimulated trade and interaction. In the West, strengthened European kingdoms began maritime expansion in the Atlantic, forging direct ties with sub-Saharan Africa and entering into conflict with the civilizations of the Western Hemisphere.

Part Five: The Globe Encompassed, 1500–1750, treats a period dominated by the global effects of European expansion and continued economic growth. European ships took over, expanded, and extended the maritime trade of the Indian Ocean, coastal Africa, and the Asian rim of the Pacific Ocean. This maritime commercial enterprise had its counterpart in European colonial empires in the Americas and a new Atlantic trading system. The contrasting capacities and fortunes of traditional land empires and new maritime empires, along with the exchange of domestic plants and animals between the hemispheres, underline the technological and environmental dimensions of this first era of complete global interaction.

In **Part Six: Revolutions Reshape the World, 1750–1870**, the word *revolution* is used in several senses: in the political sense of governmental overthrow, as in France and the Americas; in the metaphorical sense of radical transformative change, as in the Industrial Revolution; and in the broadest sense of a perception of a profound change in circumstances and worldview. Technology and environment lie at the core of these developments. With the rapid ascendancy of the Western belief that science and technology could overcome all challenges—environmental or otherwise—technology became an instrument not only of transformation but also of domination, to the point of threatening the integrity and autonomy of cultural traditions in nonindustrial lands and provoking strong movements of resistance.

Part Seven: Global Diversity and Dominance, 1750–1945, examines the development of a world arena in which people conceived of events on a global scale. Imperialism, international economic connections, and world-encompassing ideological tendencies, such as nationalism and socialism, present the picture of a globe becoming increasingly involved with European political and ideological concerns. Two world wars arising from European rivalries provide a climax to these developments, and European exhaustion affords other parts of the world new opportunities for independence and self-expression.

For **Part Eight: Perils and Promises of a Global Community, 1945 to the Present**, we divide the period since World War II into three time periods: 1945–1975, 1975–2000, and 2000 to the present. The challenges of the Cold War and postcolonial nation building dominate much of the period and unleash global economic, technological, and political forces that become increasingly important in all aspects of human life. With the end of the Cold War, however, new forces come to the fore. Technology is a key topic in Part Eight because of its integral role in both the growth and the problems of a global community. However, its many benefits in improving the quality of life become clouded by negative impacts on the environment.

FEATURES AND NEW PEDAGOGICAL AIDS

As with previous editions, the sixth edition offers a number of valuable features and pedagogical aids designed to pique student interest in specific world history topics and help them process and retain key information. Historical essays for each of the eight parts called Issues in World History are specifically designed to alert students to broad and recurring conceptual issues that are of great interest to contemporary historians; this feature has proved to be an instructor and student favorite. Six in-chapter essays on Material Culture call particular attention to the many ways in which objects and processes of everyday life can play a role in understanding human history on a broad scale. Thus essays like "Bells, Gongs, and Drums" and "Lamps and Candles" are not only interesting in and of themselves but also suggestive of how today's world historians find meaning in the ordinary dimensions of human life. The Environment and Technology feature, which has been a valuable resource in all prior editions of *The Earth and Its Peoples*, serves to illuminate the major theme of the text by demonstrating the shared material bases of all human societies across time. Finally, Diversity and Dominance, also core to the theme of the text, is the primary source feature that brings a myriad of real historical voices to life in a common struggle for power and autonomy.

Pedagogical aids include the following:

- **Chapter Opening Focus Questions** These questions are keyed to every major subdivision of the chapter and serve to help students focus on the core chapter concepts.
- **Section Reviews** Short bullet-point reviews summarize each major section in every chapter and remind students of key information.
- **Chapter Conclusions** Every chapter ends with a comparative conclusion that helps students better synthesize chapter material and understand how it fits into the larger picture.
- **Marginal Key Term with Definitions** Students can handily find key term definitions on the same page where the term first appears.
- **Pronunciation Guide** Hard-to-pronounce words are spelled phonetically for students throughout the text.

CHANGES IN THIS EDITION

In addition to the pedagogical aids outlined above, numerous chapter-by-chapter changes have been made, including new illustrations, new maps, streamlining of the textual discussion, and updates to many of the boxed feature essays. Here are a few highlights:

- In Chapter 1 the feature on "Cave Art" has been expanded.
- Chapter 4 descriptions of early civilizations in the Western Hemisphere have been shifted to Chapter 8 in order to facilitate a more unified discussion of Pre-Columbian America.
- Chapter 4 also contains a substantial new section on pastoral nomadism in the Eurasian steppe. Chapter 6 has a new Diversity and Dominance feature, "Socioeconomic Mobility: Winners and Losers in Imperial Rome and Han China," and a new Environment and Technology feature, "Ancient Glass." A Material Culture essay, "Lamps and Candles," has also been added.
- Chapter 8 has been extensively revised. Discussion of the Olmec and Chavín have been moved from Chapter 3 and the discussion of the Toltec, Tiwanaku, Wari, and Chimú civilizations expanded. Discussion of the Aztec and Inka civilizations appears in Chapter 15.
- Chapter 9 includes discussion of early Egyptian archaeological site of Nabta Playa.
- Chapter 12 contains expanded coverage of Korea.
- Chapter 13 contains expanded coverage of Vietnam and Yunnan province in southwest China.
- Chapter 14 has expanded coverage of eastern Europe and the Ottoman empire.
- Chapter 15 bears a new title, "Southern Empires, Southern Seas," and includes treatment of the Aztec and Inka empires that were previously covered much earlier in the book.
- Chapter 16 reflects new research on South Asian and Polynesian maritime cultures.
- Chapter 17 includes a new feature devoted to the first joint stock company and foreign trade. Coverage of early capitalism is expanded to include a discussion of stock markets and speculative bubbles like the Tulip, South Sea, and Mississippi Company frenzies.
- Chapter 19 includes a new feature, "Hurricanes and the Caribbean Plantation Economy."
- Chapter 20 has expanded to include the history of Russia, hence a new opening that features a Russian popular hero and the change of title to "Territorial Empires Between Europe and China."
- Chapter 21 has a new discussion of Korean history and the Imjin War.
- Chapters 22–23 have been reversed in sequence to provide better continuity to discussions of revolutions in Europe and parallel changes in the Americas.
- Chapter 22 includes a new discussion of proto-industrialization as well as augmented discussions of the spread of industrialization to continental Europe and North America and the early career of Karl Marx. The section "Protest and Reform" has been broadly revised to include machine breaking in the textile sector and rural resistance to mechanization in the Captain Swing riots.
- Chapter 25 has a new feature: "Industrializing Sugar Agriculture in Cuba."
- Chapter 26 combines accounts of European imperialism that were previously contained in this chapter and in Chapter 28.
- Chapter 27 features a revised discussion of early Japanese industrialization as well as an expanded treatment of Marx and Marxism and a new discussion of Mikhail Bakunin and anarchism. The chapter also includes a new feature: "Giuseppe Mazzini on Revolutionary Nationalism."
- Chapter 29 combines in a new chapter a discussion of technology and lifestyle changes that occurred between 1900 and 1945 with accounts of political movements in India, Latin Amer-

ica, and Africa that were previously located in Chapter 31. Highlights include a Diversity and Dominance feature, "Gandhi and the Media," an Environment and Technology feature, "New Materials," and a Material Culture essay, "Bells, Gongs, and Drums."

- Chapter 30 includes a new Environment and Technology feature, "The Magnetophon."
 - Chapter 31 includes an updated discussion about the Cold War confrontation between West and East plus a revised discussion of apartheid and South Africa's struggle for independence.
 - Chapter 32 contains a thoroughly updated feature, "Connected" to include discussion and pictures of the latest technology. The best current data are included in the demographic tables and discussion.
 - Chapter 33 updates world affairs through the first half of 2013 and incorporates new statistical information on maps.

FORMATS

To accommodate different academic calendars and approaches to the course, *The Earth and Its Peoples* is available in three formats. There is a one-volume hardcover version containing all 33 chapters, along with a two-volume paperback edition: Volume I: To 1550 (Chapters 1–16) and Volume II: Since 1500 (Chapters 16–33). For readers at institutions with the quarter system, we offer a three-volume paperback version: Volume A: To 1200 (Chapters 1–12), Volume B: From 1200 to 1870 (Chapters 12–25), and Volume C: Since 1750 (Chapters 22–33). Volume II includes an Introduction that surveys the main developments set out in Volume I and provides a groundwork for students studying only the period since 1500.

ANCILLARIES

A wide array of supplements accompany this text to assist students with different learning needs and to help instructors master today's various classroom challenges.

Instructor Resources

Aplia^{••} **[ISBN: 9781285768113]** is an online interactive learning solution that improves comprehension and outcomes by increasing student effort and engagement. Founded by a professor to enhance his own courses, Aplia provides automatically graded assignments with detailed, immediate explanations on every question. The interactive assignments have been developed to address the major concepts covered in *The Earth and Its Peoples* and are designed to promote critical thinking and engage students more fully in learning. Question types include questions built around animated maps, primary sources such as newspaper extracts, or imagined scenarios, like engaging in a conversation with a historical figure or finding a diary and being asked to fill in some blanks; more in-depth primary source question sets address a major topic with a number of related primary sources and questions that promote deeper analysis of historical evidence. Many of the questions incorporate images, video clips, or audio clips. Students get immediate feedback on their work (not only what they got right or wrong, but why), and they can choose to see another set of related questions if they want more practice. A searchable eBook is available inside the course as well so that students can easily reference it as they work. Mapreading and writing tutorials are also available to get students off to a good start.

Aplia's simple-to-use course management interface allows instructors to post announcements, upload course materials, host student discussions, e-mail students, and manage the gradebook; a knowledgeable and friendly support team offers assistance and personalized support in customizing assignments to the instructor's course schedule. To learn more and view a demo for this book, visit www.aplia.com.

MindTap Reader for *The Earth and Its Peoples* is an eBook specifically designed to address the ways students assimilate content and media assets. MindTap Reader combines thoughtful navigation ergonomics, advanced student annotation, note-taking, and search tools, and embedded media assets such as video and MP3 chapter summaries, primary source documents with criti-

cal thinking questions, and interactive (zoomable) maps. Students can use the eBook as their primary text or as a multimedia companion to their printed book. The MindTap Reader eBook is available within the MindTap and Aplia online offerings found at www.cengagebrain.com.

Online PowerLecture with Cognero[®] **[ISBN: 9781285455013]** This PowerLecture is an allin-one online multimedia resource for class preparation, presentation, and testing. Accessible through Cengage.com/login with your faculty account, you will find available for download: book-specific Microsoft[®] PowerPoint[®] presentations; a Test Bank in both Microsoft[®] Word[®] and Cognero[®] formats; an Instructor Manual; Microsoft[®] PowerPoint[®] Image Slides; and a JPEG Image Library.

The **Test Bank**, offered in Microsoft[®] Word[®] and Cognero[®] formats, contains multiple-choice and essay questions for each chapter. Cognero[®] is a flexible, online system that allows you to author, edit, and manage test bank content for *The Earth and Its People*, sixth edition. Create multiple test versions instantly and deliver through your LMS from your classroom, or wherever you may be, with no special installs or downloads required.

The **Instructor's Manual** contains for each chapter: an outline and summary; critical thinking questions; in-class activities; lecture launching suggestions; a list of key terms with definitions; and suggested readings and Web resources. The *Microsoft® PowerPoint® presentations* are ready-to-use, visual outlines of each chapter. These presentations are easily customized for your lectures and offered along with chapter-specific Microsoft® PowerPoint® Image Slides and JPEG Image Libraries. Access your Online PowerLecture at **www.cengage.com/login**.

History CourseMate Cengage Learning's History CourseMate brings course concepts to life with interactive learning, study tools, and exam preparation tools that support the printed textbook. Use Engagement Tracker to monitor student engagement in the course and watch student comprehension soar as your class works with the printed textbook and the textbook-specific website. An interactive eBook allows students to take notes, highlight, search, and interact with embedded media (such as quizzes, flashcards, primary sources, and videos). Learn more at **www.cengage.com/coursemate**.

CourseReader CourseReader is an online collection of primary and secondary sources that lets you create a customized electronic reader in minutes. With an easy-to-use interface and assessment tool, you can choose exactly what your students will be assigned—simply search or browse Cengage Learning's extensive document database to preview and select your customized collection of readings. In addition to print sources of all types (letters, diary entries, speeches, newspaper accounts, etc.), their collection includes a growing number of images and video and audio clips.

Each primary source document includes a descriptive headnote that puts the reading into context and is further supported by both critical thinking and multiple-choice questions designed to reinforce key points. For more information visit **www.cengage.com/coursereader**.

Cengagebrain.com Save your students time and money. Direct them to **www.cengagebrain**. **com** for choice in formats and savings and a better chance to succeed in your class. Cengagebrain.com, Cengage Learning's online store, is a single destination for more than 10,000 new textbooks, eTextbooks, eChapters, study tools, and audio supplements. Students have the freedom to purchase a-la-carte exactly what they need when they need it. Students can save 50% on the electronic textbook, and can pay as little as \$1.99 for an individual eChapter.

Reader Program Cengage Learning publishes a number of readers, some containing exclusively primary sources, others a combination of primary and secondary sources, and some designed to guide students through the process of historical inquiry. Visit Cengage.com/history for a complete list of readers.

Custom Options Nobody knows your students like you, so why not give them a text that is tailor-fit to their needs? Cengage Learning offers custom solutions for your course—whether it's making a small modification to The Earth and Its Peoples to match your syllabus or combining multiple sources to create something truly unique. You can pick and choose chapters, include your own material, and add additional map exercises along with the Rand McNally Atlas to create a text that fits the way you teach. Ensure that your students get the most out of

their textbook dollar by giving them exactly what they need. Contact your Cengage Learning representative to explore custom solutions for your course.

Student Resources

Writing for College History, first edition [ISBN: 9780618306039] Prepared by Robert M. Frakes, Clarion University. This brief handbook for survey courses in American history, Western Civilization/European history, and world civilization guides students through the various types of writing assignments they encounter in a history class. Providing examples of student writing and candid assessments of student work, this text focuses on the rules and conventions of writing for the college history course.

The History Handbook, second edition [ISBN: 9780495906766] Prepared by Carol Berkin of Baruch College, City University of New York and Betty Anderson of Boston University. This book teaches students both basic and history-specific study skills such as how to read primary sources, research historical topics, and correctly cite sources. Substantially less expensive than comparable skill-building texts, *The History Handbook* also offers tips for Internet research and evaluating online sources.

Doing History: Research and Writing in the Digital Age, second edition [ISBN: 9781133587880] Prepared by Michael J. Galgano, J. Chris Arndt, and Raymond M. Hyser of James Madison University. Whether you're starting down the path as a history major, or simply looking for a straightforward and systematic guide to writing a successful paper, you'll find this text to be an indispensible handbook to historical research. This text's "soup to nuts" approach to researching and writing about history addresses every step of the process, from locating your sources and gathering information, to writing clearly and making proper use of various citation styles to avoid plagiarism. You'll also learn how to make the most of every tool available to you—especially the technology that helps you conduct the process efficiently and effectively.

The Modern Researcher, sixth edition [ISBN: 9780495318705] Prepared by Jacques Barzun and Henry F. Graff of Columbia University. This classic introduction to the techniques of research and the art of expression is used widely in history courses, but is also appropriate for writing and research methods courses in other departments. Barzun and Graff thoroughly cover every aspect of research, from the selection of a topic through the gathering, analysis, writing, revision, and publication of findings, presenting the process not as a set of rules but through actual cases that put the subtleties of research in a useful context. Part One covers the principles and methods of research; Part Two covers writing, speaking, and getting one's work published.

Rand McNally Historical Atlas of the World, second edition [ISBN: 9780618841912] This valuable resource features over 70 maps that portray the rich panoply of the world's history from preliterate times to the present. They show how cultures and civilization were linked and how they interacted. The maps make it clear that history is not static. Rather, it is about change and movement across time. The maps show change by presenting the dynamics of expansion, cooperation, and conflict. This atlas includes maps that display the world from the beginning of civilization; the political development of all major areas of the world; expanded coverage of Africa, Latin America, and the Middle East; the current Islamic World; and the world population change in 1900 and 2000.

ACKNOWLEDGMENTS

In preparing the sixth edition, we benefited from the critical readings of many colleagues. Our sincere thanks go in particular to contributor Michael Wert of Marquette University who lent his fresh perspective to our coverage of East Asia. We thank Beatrice Manz of the History Department at Tufts University who provided guidance on the new Pastoral Nomads section in Part I. We are also indebted to the following instructors who lent their insight over various editions: Hedrick Alixopuilos, Santa Rosa Junior College; Hayden Bellenoit, U.S. Naval Academy; Dusty Bender, Central Baptist College; Cory Crawford, Ohio University; Adrian De Gifis, Loyola Uni-

versity New Orleans; Peter de Rosa, Bridgewater State University; Aaron Gulyas, Mott Community College; Darlene Hall, Lake Erie College; Vic Jagos, Scottsdale Community College; Adrien Ivan, Vernon College; Andrew Muldoon, Metropolitan State College of Denver; Percy Murray, Shaw University; Dave Price, Santa Fe College; Anthony Steinhoff, University of Tennessee-Chattanooga; Anara Tabyshalieva, Marshal University; Susan Autry, Central Piedmont Community College; Christopher Cameron, University of North Carolina at Charlotte; Anna Collins, Arkansas Tech University; William Connell, Christopher Newport University; Gregory Crider, Winthrop University; Shawn Dry, Oakland Community College; Nancy Fitch, California State University, Fullerton; Christine Haynes, University of North Carolina at Charlotte; Mark Herman, Edison College; Ellen J. Jenkins, Arkansas Tech University; Frank Karpiel, The Citadel; Ken Koons, Virginia Military Institute; David Longfellow, Baylor University; Heather Lucas, Georgia Perimeter College; Jeff Pardue, Gainesville State College; Craig Patton, Alabama A & M University; Amanda Pipkin, University of North Carolina at Charlotte; Linda Scherr, Mercer County Community College; Robert Sherwood, Georgia Military College; Brett Shufelt, Copiah-Lincoln Community College; Peter Thorsheim, University of North Carolina at Charlotte; Kristen Walton, Salisbury University; Christopher Ward, Clayton State University; William Wood, Point Loma Nazarene University.

When textbook authors set out on a project, they are inclined to believe that 90 percent of the effort will be theirs and 10 percent that of various editors and production specialists employed by their publisher. How very naïve. This book would never have seen the light of day had it not been for the unstinting labors of the great team of professionals who turned the authors' words into beautifully presented print. Our debt to the staff of Cengage Learning remains undiminished in the sixth edition. Brooke Barbier, product manager, has offered us firm but sympathetic guidance throughout the revision process. Tonya Lobato, senior content developer, offered astute and sympathetic assistance as the authors worked to incorporate many new ideas and subjects into the text. Carol Newman, senior content project manager, moved the work through the production stages to meet a challenging schedule. Abbey Stebing did an outstanding job of photo research.

We thank also the many students whose questions and concerns, expressed directly or through their instructors, shaped much of this revision. We continue to welcome all readers' suggestions, queries, and criticisms. Please contact us at our respective institutions.

About the Authors

RICHARD W. BULLIET Professor of Middle Eastern History at Columbia University, Richard W. Bulliet received his Ph.D. from Harvard University. He has written scholarly works on a number of topics: the social and economic history of medieval Iran (The Patricians of Nishapur and Cotton, Climate, and Camels in Early Islamic Iran), the history of human-animal relations (The Camel and the Wheel and Hunters, Herders, and Hamburgers), the process of conversion to Islam (Conversion to Islam in the Medieval Period), and the overall course of Islamic social history (Islam: The View from the Edge and The Case for Islamo-Christian Civilization). He is the editor of the Columbia History of the Twentieth Century. He has published four novels, coedited The Encyclopedia of the Modern Middle East, and hosted an educational television series on the Middle East. He was awarded a fellowship by the John Simon Guggenheim Memorial Foundation and was named a Carnegie Corporation Scholar.

PAMELA KYLE CROSSLEY Pamela Kyle Crossley received her Ph.D. in Modern Chinese History from Yale University. She is currently the Robert and Barbara Black Professor of History at Dartmouth College. Her books include The Wobbling Pivot: An Interpretive History of China Since 1800; What Is Global History?; A Translucent Mirror: History and Identity in Qing Imperial Ideology; The Manchus; Orphan Warriors: Three Manchu Generations and the End of the Qing World; and (with Lynn Hollen Lees and John W. Servos) Global Society: The World Since 1900.

DANIEL R. HEADRICK Daniel R. Headrick received his Ph.D. in History from Princeton University. Professor of History and Social Science, Emeritus, at Roosevelt University in Chicago, he is the author of several books on the history of technology, imperialism, and international relations, including The Tools of Empire: Technology and European Imperialism in the Nineteenth Century; The Tentacles of Progress: Technology Transfer in the Age of Imperialism; The Invisible Weapon: Telecommunications and International Politics; Technology: A World History; Power Over Peoples: Technology, Environments and Western Imperialism, 1400 to the Present; and When Information Came of Age: Technologies of Knowledge in the Age of Reason and Revolution, 1700-1850. His articles have appeared in the Journal of World History and the Journal of Modern History, and he has been awarded fellowships by the National Endowment for the Humanities, the John Simon Guggenheim Memorial Foundation, and the Alfred P. Sloan Foundation.

STEVEN W. HIRSCH Steven W. Hirsch holds a Ph.D. in Classics from Stanford University and is currently Associate Professor of Classics and History at Tufts University. He has received grants from the National Endowment for the Humanities and the Massachusetts Foundation for Humanities and Public Policy. His research and publications include The Friendship of the Barbarians: Xenophon and the Persian Empire, as well as articles and reviews in the Classical Journal, the American Journal of Philology, and the Journal of Interdisciplinary History. He is currently completing a comparative study of ancient Greco-Roman and Chinese civilizations.

LYMAN L. JOHNSON Professor Emeritus of History at the University of North Carolina at Charlotte, Lyman L. Johnson earned his Ph.D. in Latin American History from the University of Connecticut. A two-time Senior Fulbright-Hays Lecturer, he also has received fellowships from the Tinker Foundation, the Social Science Research Council, the National Endowment for the Humanities, and the American Philosophical Society. His recent books include Workshop of Revolution: Plebeian Buenos Aires and the Atlantic World, 1776-1810; Death, Dismemberment, and Memory; The Faces of Honor (with Sonya Lipsett-Rivera); Aftershocks: Earthquakes and Popular Politics in Latin America (with Jürgen Buchenau); Essays on the Price History of Eighteenth-Century Latin America (with Enrique Tandeter); and Colonial Latin America (with Mark A. Burkholder). He also has published in journals, including the Hispanic American Historical Review, the Journal of Latin American Studies, the International Review of Social History, Social History, and Desarrollo Económico. He has served as president of the Conference on Latin American History. **DAVID NORTHRUP** David Northrup earned his Ph.D. in African and European History from the University of California, Los Angeles. He has published scholarly works on African, Atlantic, and world history. His most recent books are How English Became the Global Language, the third edition of Africa's Discovery of Europe, 1450-1850, and the Diary of Antera Duke, an Eighteenth-Century African Slave Trader. He taught at a rural secondary school on Nigeria, Tuskegee Institute in Alabama, Boston College, and Venice International University and is a past president of the World History Association.

Note on Spelling and Usage

Where necessary for clarity, dates are followed by the letters C.E. or B.C.E. The abbreviation C.E. stands for "Common Era" and is equivalent to A.D. (anno Domini, Latin for "in the year of the Lord"). The abbreviation B.C.E. stands for "before the Common Era" and means the same as B.C. ("before Christ"). In keeping with our goal of approaching world history without special concentration on one culture or another, we chose these neutral abbreviations as appropriate to our enterprise. Because many readers will be more familiar with English than with metric measurements, however, units of measure are generally given in the English system, with metric equivalents following in parentheses.

In general, Chinese has been Romanized according to the pinyin method. Exceptions include proper names well established in English (e.g., Canton, Chiang Kaishek) and a few English words borrowed from Chinese (e.g., kowtow). Spellings of Arabic, Ottoman Turkish, Persian, Mongolian, Manchu, Japanese, and Korean names and terms avoid special diacritical marks for letters that are pronounced only slightly differently in English. An apostrophe is used to indicate when two Chinese syllables are pronounced separately (e.g., Chang'an).

For words transliterated from languages that use the Arabic script—Arabic, Ottoman Turkish, Persian, Urdu—the apostrophe indicating separately pronounced syllables may represent either of two special consonants, the hamza or the ain. Because most English-speakers do not hear the distinction between these two, they have not been distinguished in transliteration and are not indicated when they occur at the beginning or end of a word. As with Chinese, some words and commonly used place-names from these languages are given familiar English spellings (e.g., Quran instead of Qur'an, Cairo instead of al-Qahira). Arabic romanization has normally been used for terms relating to Islam, even where the context justifies slightly different Turkish or Persian forms, again for ease of comprehension.

Before 1492 the inhabitants of the Western Hemisphere had no single name for themselves. They had neither a racial consciousness nor a racial identity. Identity was derived from kin groups, language, cultural practices, and political structures. There was no sense that physical similarities created a shared identity. America's original inhabitants had racial consciousness and racial identity imposed on them by conquest and the occupation of their lands by Europeans after 1492. All of the collective terms for these first American peoples are tainted by this history. Indians, Native Americans, Amerindians, First Peoples, and Indigenous Peoples are among the terms in common usage. In this book the names of individual cultures and states are used wherever possible. Amerindian and other terms that suggest transcultural identity and experience are used most commonly for the period after 1492.

There is an ongoing debate about how best to render Amerindian words in English. It has been common for authors writing in English to follow Mexican usage for Nahuatl and Yucatec Maya words and place-names. In this style, for example, the capital of the Aztec state is spelled Tenochtitlán, and the important late Maya city-state is spelled Chichén Itzá. Although these forms are still common even in the specialist literature, we have chosen to follow the scholarship that sees these accents as unnecessary. The exceptions are modern place-names, such as Mérida and Yucatán, which are accented. A similar problem exists for the spelling of Quechua and Aymara words from the Andean region of South America. Although there is significant disagreement among scholars, we follow the emerging consensus and use the spellings khipu (not quipu), Tiwanaku (not Tiahuanaco), and Wari (not Huari). In this edition we have introduced the now common spelling Inka (not Inca) but keep Cuzco for the capital city (not Cusco), since this spelling facilitates locating this still-important city on maps.

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

The Earth and Its Peoples

A GLOBAL HISTORY

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.

PART

- **CHAPTER 1** Nature, Humanity, and History, to 3500 B.C.E.
- **CHAPTER 2** The First River-Valley Civilizations, 3500–1500 B.C.E.
- **CHAPTER 3** The Mediterranean and Middle East, 2000–500 B.C.E.
- CHAPTER 4 New Civilizations Outside the West Asian Core Area, 2300 B.C.E.–350 C.E.



ritish Museum/HIP/Art Resource, N

Babylonian Map of the World, ca. 600 B.C.E. This map on a clay tablet, with labels written in Akkadian cuneiform, shows a flat, round world with the city of Babylon at the center. Nearby features of the Mesopotamian landscape include the Euphrates River, mountains, marshes, and cities. Beyond the great encircling salt sea are seven islands. Like many ancient peoples, the Babylonians believed that distant lands were home to legendary beasts, strangely formed peoples, and mysterious natural phenomena.

The Emergence of Human Communities, to 500 B.C.E.

Human beings evolved over several million years from primates in Africa. Able to walk upright and possessing large brains, hands with opposable thumbs, and the capacity for speech, early humans used teamwork and created tools to survive in diverse environments. They spread relatively quickly to almost every habitable area of the world, hunting and gathering wild plant products. Around 10,000 years ago some groups began to cultivate plants, domesticate animals, and make pottery vessels for storage. These developments led to permanent settlements—at first small villages but eventually larger towns.

The earliest complex societies arose in the great river valleys of Mesopotamia, Egypt, Pakistan, and northern China. In these arid regions agriculture depended on river water, and centers of political power arose to organize the labor required to dig and maintain irrigation channels. Kings and priests dominated these early societies from the urban centers, helped by administrators, scribes, soldiers, merchants, craftsmen, and others with specialized skills. Surplus food grown in the countryside by a dependent peasantry sustained the activities of these groups.

As they sought access to raw materials, especially metals, certain centers came to dominate broader expanses of territory. This development also stimulated long-distance trade and diplomatic relations between major powers. Artisans made weapons, tools, and ritual objects from bronze, and culture and technology spread to neighboring regions, such as southern China, Nubia, Syria-Palestine, Anatolia, and the Aegean.

In the Western Hemisphere, different geographical circumstances led to distinctive patterns of technological and cultural response. These early civilizations in southern Mexico and the Andean region of South America are discussed in Part 2.

CHAPTER

Chapter Outline

African Genesis

In light of scientific advances in our understanding of human origins, what have we learned about our relationship to the earth and other living species?

Technology and Culture in the Ice Age

How did the physical and mental abilities that gradually evolved in humans enable them to adapt their way of life to new environments during the Great Ice Age?

The Agricultural Revolutions

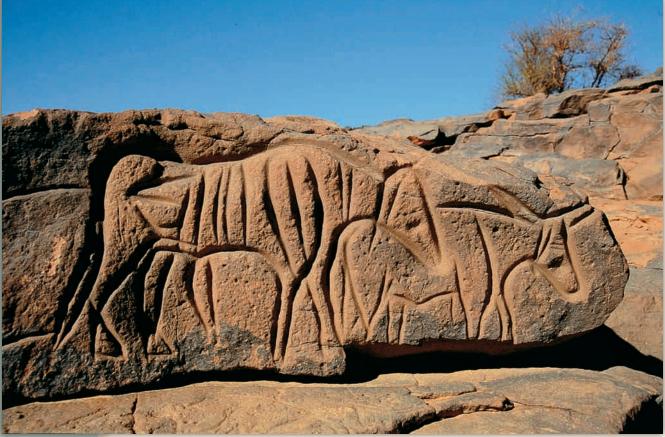
After nearly 2 million years of physical and cultural development, how did human communities in different parts of the world learn to manipulate nature through agriculture and the domestication of animals?

Life in Neolithic Communities

What cultural achievements characterized life in the Neolithic period?

Conclusion

- DIVERSITY + DOMINANCE Cave Art
- ENVIRONMENT + TECHNOLOGY The Iceman



Engraving of Two Cattle in the Sahara, ca. 5000 B.C.E. Around 10,000 B.C.E. people settled in the central Sahara and began to engrave rocks with pictures of animals. The engravings display an expert knowledge of animal stance, movement, and anatomy.

Nature, Humanity, and History, to 3500 B.C.E.

Paintings and engravings on stone created tens of thousands of years ago by early humans have been found on every continent. Someone in Central Africa carved this image of cattle around 5000 B.C.E., when the Sahara was not a desert but a verdant savanna supporting numerous species of wildlife. Why the image was carved and what significance it originally held will likely remain a mystery, but for us it is a beautiful work of art that reveals much about our human ancestry.

Long before the invention of writing, societies told themselves stories about how human beings and the natural world were created. Some, like the Yoruba (yoh-roo-bah) people of West Africa, related that the first humans came down from the sky; others, like the Hopi of southwest North America, claimed that they emerged out of a hole in the earth. Although such creation myths typically explain how a people's way of life, social divisions, and cultural system arose, historical accuracy in the modern sense was not their primary purpose. As with the story of Adam and Eve in the Hebrew Bible, their goal was to define the moral principles that people thought should govern their dealings with the supernatural world, with each other, and with the rest of nature.

In the nineteenth century evidence began to accumulate about the actual origins of humanity. Natural scientists were finding remains of early humans who resembled apes. Other discoveries suggested that the familiar ways of life based on farming and herding did not arise within a generation or two of creation, as many myths suggested, but tens of thousands of years after humans first appeared. This evidence provides insights into human identity that are as meaningful as those propounded by the creation myths.

AFRICAN GENESIS

The discovery in the mid-nineteenth century of the remains of ancient creatures that had both humanlike and apelike features generated excitement and controversy. The finds upset many people because they challenged religious beliefs about human origins. Others welcomed the new evidence for what some had long suspected: that the physical characteristics of modern humans had evolved over incredibly long periods of time.

Interpreting the Evidence

In 1856 in the Neander Valley of Germany, laborers discovered fossilized bones of a creature with a body much like that of modern humans but with a face that had heavy brow ridges and a low forehead, like the faces of apes. Although we now know these were Neanderthals, a type of human common in Europe and the Middle East from 135,000 to 25,000 years ago, in the midnineteenth century the idea of humans that different from modern people was so novel that some scholars thought they must be deformed individuals from recent times. evolution The biological theory that, over time, changes occurring in plants and animals, mainly as a result of natural selection and genetic mutation, result in new species. Three years after the Neanderthal finds, Charles Darwin, a young English naturalist (student of natural history), published *On the Origin of Species*, in which he argued that the time frame for all biological life was far longer than most people supposed. Darwin based his conclusion on the pioneering research of others and on his own investigations of fossils and living plant and animal species in Latin America. He proposed that the great diversity of living species and the profound changes in them over time could be explained by natural selection, the process by which biological variations that enhance a population's ability to survive become dominant in that species. He theorized that, over long periods of time, the changes brought about by this process could lead to the **evolution** of distinct new species.

Turning to the sensitive subject of human evolution in *The Descent of Man* (1871), Darwin summarized the growing consensus among naturalists that human beings had come into existence through the same process of natural selection. Because humans shared so many physical similarities with African apes, he proposed Africa as the home of the first humans, even though there was no fossil evidence at the time to support his hypothesis.

The next major discoveries pointed to Asia, rather than Africa, as the original human home. On the Indonesian island of Java in 1891, Eugene Dubois uncovered an ancient skullcap of what was soon called Java man. In 1929 near Peking (an old form of Beijing **[bay-jeeng]**), China, W. C. Pei discovered a similar skullcap of what became known as Peking man.

By then, even older fossils had been found in southern Africa. In 1924 Raymond Dart found the skull of a creature that he named *Australopithecus africanus* (aw-strah-loh-PITH-uh-kuhs ah-frih-KAH-nuhs) (African southern ape), which he argued was transitional between apes and early humans. For many years most specialists disputed Dart's idea because, although *Australopithecus africanus* walked upright like a human, its brain was the size of an ape's.

Since 1950, Louis and Mary Leakey and their son Richard, along with many others, have discovered a wealth of early human fossils in the exposed sediments of the Great Rift Valley of eastern Africa. These finds are strong evidence for Dart's hypothesis and for Darwin's guess that the tropical habitat of the African apes was the cradle of humanity.

The development of modern archaeological techniques has added to our knowledge. Rather than collect isolated bones, researchers sift the neighboring soils to extract the fossilized remains of other creatures, seeds, and even pollen existing at the time, documenting the environment in which early humans lived. They can also measure the age of most finds by the rate of molecular change in potassium, contained in minerals in lava flows, or in carbon from wood and bone.

A major new approach was made possible by the full decipherment of the human genetic code in 2003. Researchers have been able to extrapolate backward from genetic differences among contemporary human populations to answer such questions as: when language first emerged; the approximate size and location in Northeast Africa of the ancestral human population and the date when some of its members moved out of the continent; the paths taken by migrating groups as humans ultimately spread to all habitable parts of the planet; and when the skin color of the various human populations developed.

By combining these forms of evidence with the growing understanding of how other species adapt to their natural environments, researchers can trace the evolutionary changes that produced modern humans over the course of millions of years.

Human Evolution

Biologists classify **australopithecines (aw-strah-loh-PITH-uh-seen)** and humans as members of a family of primates known as **hominids (HOM-uh-nid)**. Primates are members of a class of warm-blooded, four-limbed, social animals known as mammals that came to prominence about 65 million years ago. The first hominids are now dated to about 7 million years ago.

Among living primates, modern humans are most closely related to the African apes chimpanzees and gorillas. Since Darwin's time it has been popular (and controversial) to say that we are descended from apes. In fact, apes and humans share a common ancestor. Over 99 percent of human DNA, the basic genetic blueprint, is identical to that of the great apes. But three traits distinguish humans from apes and other primates. The earliest of these traits to appear was **bipedalism** (walking upright on two legs). Being upright frees the forelimbs from any role in locomotion and enhances an older primate trait: a hand with a long, opposable thumb that can work with the fingers to manipulate objects skillfully. Modern humans' second distinctive trait is a very large brain. Besides enabling humans to think abstractly, experience profound emotions, and construct complex social relationships, this larger brain controls the fine motor

australopithecines The several extinct species of humanlike primates that existed from about 4.5 million years ago to 1.4 million years ago (genus Australopithecus).

hominid The biological family that includes humans and humanlike primates.

bipedalism The ability to walk upright on two legs, characteristic of hominids.

CHRONOLOGY			
	Geological Epochs	Species and Migrations	Technological Advances
7,000,000 B.C.E.		7,000,000 в.с.е. Earliest hominids	
4,000,000 B.C.E.		4,500,000 в.с.е. Australopithecines 2,300,000 в.с.е. Early <i>Homo habilis</i>	2,600,000 B.C.E. Earliest stone tools; hunting and gathering (foraging) societies
2,000,000 B.C.E.	2,000,000–9000 B.C.E. Pleistocene (Great Ice Age)	1,800,000–350,000 B.C.E. Homo erectus	2,000,000–8000 в.с.е. Paleolithic (Old Stone Age)
1,000,000 B.C.E.		400,000–100,000 в.с.е. Archaic Homo sapiens	500,000 в.с.е. Use of fire
100,000 B.C.E.		 100,000 B.C.E. Anatomically modern <i>Homo</i> sapiens in Africa 50,000 B.C.E. Behaviorally modern <i>Homo</i> sapiens possessing language Migrations to Eurasia 46,000 B.C.E. Modern humans in Australia 18,000 B.C.E. Modern humans in Americas 	30,000 в.с.е. First cave paintings
10,000 B.C.E.	9000 B.C.E.—present Holocene		8000–2000 в.с.е. Neolithic (New Stone Age); earliest agriculture

movements of the hand and of the tongue, increasing humans' tool-using capacity and facilitating the development of speech. The physical possibility of language, however, depends on a third distinctive human trait: the location of the larynx (voice box). In humans it lies much lower in the neck than in any other primate.

These critical biological traits are due to natural selection, the preservation of genetic changes that enhanced the ability of the ancestors of modern humans to survive and reproduce. Major shifts in the world's climate led to evolutionary changes in human ancestors and other species. Falling temperatures culminated in the **Great Ice Age**, or Pleistocene (**PLY-stuh-seen**) epoch, extending from about 2 million to about 9000 B.C.E. (see Chronology). These temperature changes and altered rainfall and vegetation imposed great strains on plant and animal species, causing large numbers of new species to evolve.

Beginning approximately 4.5 million years ago, several species of australopithecines evolved in southern and eastern Africa. In northern Ethiopia in 1974, Donald Johanson unearthed a wellpreserved skeleton of a twenty-five-year-old female, whom he nicknamed Lucy. Mary Leakey's discovery of fossilized footprints in Tanzania in 1977 provided spectacular visual evidence that australopithecines walked on two legs.

Bipedalism evolved because it provided australopithecines with some advantage for survival. Some studies suggest that walking and running on two legs is very energy efficient. Another theory is that bipeds survived better because they could carry armfuls of food back to their mates and children.

Climate changes between 2 and 3 million years ago led to the evolution of a new species, the first to be classified in the same genus (*Homo*) with modern humans. At Olduvai (ol-DOO-vy) Gorge in northern Tanzania in the early 1960s, Louis Leakey discovered the fossilized remains of a creature that he named *Homo habilis* (HOH-moh HAB-uh-luhs) (handy human). What most distinguished *Homo habilis* from the australopithecines was a brain that was nearly 50 percent larger. Greater intelligence may have enabled *Homo habilis* to locate things to eat throughout the seasons of the year. Seeds and other fossilized remains found in ancient *Homo habilis* camps indicate that the new species ate a greater variety of more nutritious foods than did australopithecines.

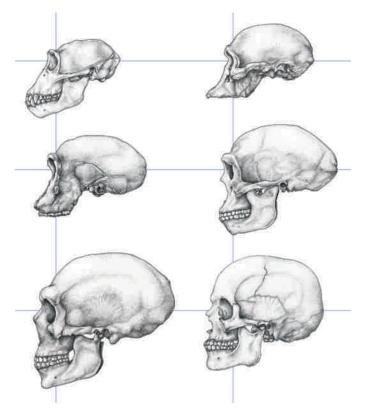
By 1 million years ago *Homo habilis* and all the australopithecines had become extinct. In their habitat lived a new hominid, *Homo erectus* (HOH-moh ee-REK-tuhs) (upright human), which first appeared in eastern Africa about 1.8 million years ago. (It is uncertain whether

Great Ice Age Geological era that occurred between about 2 million and 11,000 years ago.

Homo habilis The first human species (now extinct). It evolved in Africa about 2.3 million years ago.

Homo erectus An extinct human species. It evolved in Africa about 1.8 million years ago.

Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.



Evolution of the Human Brain These drawings of skulls show the extensive cranial changes associated with the increase in brain size during 5 million years of evolutionary change. Seen here are the skulls of a chimpanzee, *Australopithecus, Homo Habilis, Homo Erectus, Neanderthal,* and *Homo Sapiens*. © Copyright Deborah Maizels, 1994

Homo erectus evolved from Homo habilis or both species descended from Australopithecus.) These creatures possessed brains a third larger than those of Homo habilis, which presumably accounted for their better survivability. A nearly complete skeleton of a twelve-year-old male of the species discovered by Richard Leakey in 1984 on the shores of Lake Turkana in Kenya shows that Homo erectus closely resembled modern people from the neck down. Homo erectus was very successful in dealing with different environments and underwent hardly any biological changes for over a million years.

Sometime between 400,000 and 100,000 years ago, a new human species emerged: *Homo sapiens* (HOH-moh **SAY-pee-enz**) (wise human). The brains of *Homo sapiens* were a third larger than those of *Homo erectus*, whom they gradually superseded. Although this species was anatomically similar to people today, archaeological and genetic evidence suggest that a further development around 50,000 years ago produced the first behaviorally modern humans, with the intellectual and social capabilities that we have.

There is no scholarly consensus on when, why, or how humans developed the capacity to speak. In the absence of tangible evidence, this question has even been labeled "the hardest problem in science." Assuming that the shape of the throat and low position of the larynx are essential to vocalizing a wide range of sounds, it ought to be relevant that these features were still evolving in *Homo habilis* and *Homo erectus*. Some scholars link the development of language in the fullest sense to the period around 50,000 years ago when *Homo sapiens* began to migrate out of Africa and employed a larger, more sophisticated set of tools that can be sorted into functional categories.

This slow but remarkable process of physical evolution, which distinguished humans from other primates, was one

part of what was happening. Equally remarkable was the way in which humans were extending their habitat.

Migrations from Africa

Early humans first expanded their range in eastern and southern Africa. Then they ventured out of Africa, perhaps following migrating herds of animals or searching for more abundant food supplies in a time of drought. The reasons are uncertain, but the end results are vividly clear: humans successfully colonized diverse environments, including deserts and arctic lands (see Map 1.1). This dispersal demonstrates early humans' talent for adaptation.

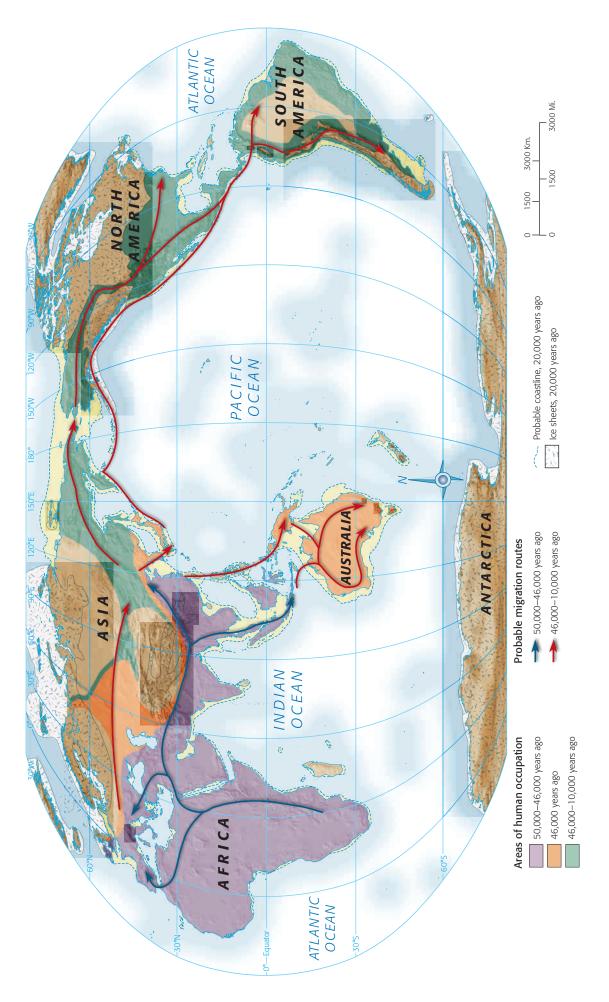
Homo erectus was the first human species to inhabit all parts of Africa and to be found outside Africa. Java man and Peking man were members of this species. At that time, Java was not an island but was part of the Southeast Asian mainland. During the Pleistocene, massive glaciers of frozen water spread out from the poles and mountains. At their peak such glaciers covered a third of the earth's surface and contained so much frozen water that ocean levels were lowered by over 450 feet (140 meters), exposing land bridges between many places now isolated by water (see Map 1.1).

DNA and fossil evidence suggest that *Homo sapiens* also first evolved in Africa. The ancestral group from which all modern humans are descended may have comprised as few as 5,000 individuals. From this population, a band of several hundred people initially moved out of Northeast Africa around 50,000 years ago, and their descendants rapidly spread across the planet (although some scientists dispute this "African Genesis" and hold that distinct groups of *Homo sapiens* evolved from *Homo erectus* populations in Africa, Europe, China, and Southeast Asia).

Recent excavations and DNA analysis have shown that early modern humans co-existed and interbred with other species of *Homo* that are now extinct: Neanderthals and Denisovans

human species. It evolved in Africa sometime between 400,000 and 100,000 years ago.

Homo sapiens The current





Copyright 2013 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. Due to electronic rights, some third party content may be suppressed from the eBook and/or eChapter(s). Editorial review has deemed that any suppressed content does not materially affect the overall learning experience. Cengage Learning reserves the right to remove additional content at any time if subsequent rights restrictions require it.