

GLOBALIZATION AND DIVERSITY

GEOGRAPHY OF A CHANGING WORLD

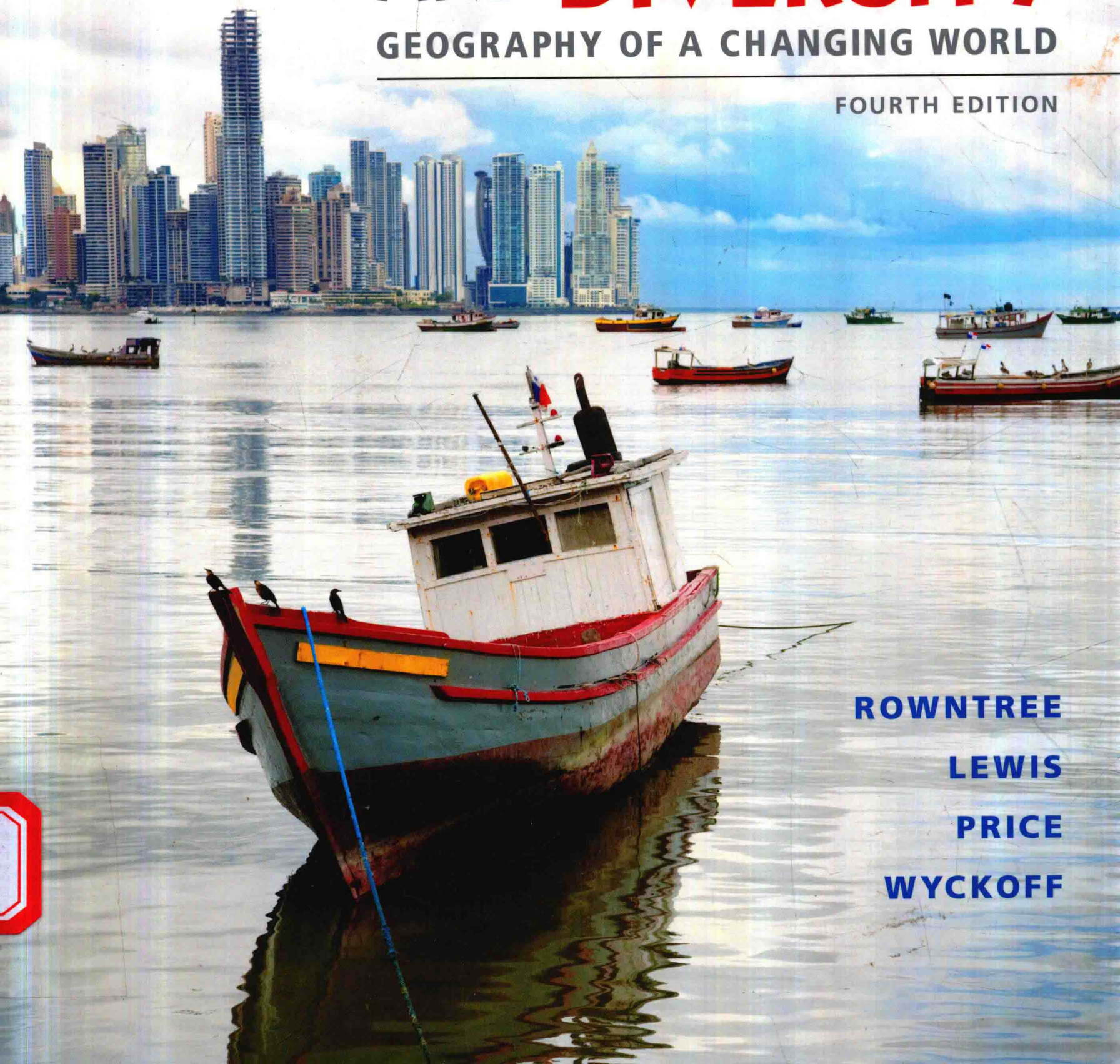
FOURTH EDITION

ROWNTREE

LEWIS

PRICE

WYCKOFF



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World – Political



The Caribbean



— Boundaries delineate the 12 regions discussed in the book

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PREFACE

Globalization and Diversity: Geography of a Changing World, Fourth Edition, is intended for college and university world regional geography classes. Our perspective is that globalization is the most fundamental reorganization of the world's environmental economic, cultural, and geopolitical structure since the Industrial Revolution, therefore our focus throughout is to discuss and analyze the geographic changes accompanying these changes.

As geographers and teachers, we think it essential for students to understand two interactive realities in the modern world. First, they need to appreciate and evaluate the changes in environmental, cultural, political, and economic systems resulting from globalization. Second, they need to deepen their understanding of the development and persistence of geographic diversity. These opposing and interactive forces form a theme running throughout our book and are reflected in the title, *Globalization and Diversity*.

NEW TO THE FOURTH EDITION

- **Working Toward Sustainability** features in all chapters describe sustainability projects throughout the world, emphasizing positive environmental and social initiatives and their results.
- **Chapter opening vignettes** with panoramic photographs provide a current real-world introduction to each region.
- Each chapter begins with a set of **Learning Objectives** to help students recognize the most important concepts in the chapter.
- **Review Questions** at the end of each major thematic section help students check their comprehension of the material as they read.
- Following an introduction in Chapter 1, **gender issues** are discussed in all regional chapters.
- **Migration maps and text material** highlight the importance of regional and global migration flows.
- All regional chapters now contain graphics showing how **population pyramids** at different scales help us better understand population dynamics.
- Updated **environmental issues maps** in all regional chapters have been standardized and brought up to date.
- Updated **population maps** in all regional chapters contain more effective categorizations of density and urban size.
- **Current information on climate change** is integrated in all of our chapters, including the policies and programs enacted by different countries and regions to address climate change, emission reduction, and energy usage. Material on these topics is introduced in Chapter 2 and subsequently presented through the regional chapters in dedicated climate change sections.
- **Current data and information** are integrated into all text, tables, and maps, based on the the latest information from the

2010 U.S. Census, the World Bank, United Nations, and 2012 Population Reference Bureau Population Data.

- **Quick Response (QR) codes** at the end of each of chapter enable students to link smartphones and other mobile devices to the new *Globalization and Diversity* authors' blog, as well as to Martin Lewis' innovative and provocative *GeoCurrents* blog.
- The Fourth Edition is now supported by **MasteringGeography™**, the most widely used and effective online homework, tutorial, and assessment system for the geosciences. Assignable media and activities include MapMaster™ interactive maps, *Encounter World Regional Geography* Google Earth Explorations, geography videos, Thinking Spatially and Data Analysis Activities, end-of-chapter questions, reading quizzes, Test Bank questions, and select Geoscience Animations.

New and Updated in Chapter 1

- **Geography Matters.** New discussion of fundamental geographic concepts, including areal differentialization, regions, and the cultural landscape.
- **Geographer's Toolbox.** New discussion of latitude and longitude, map projections, scale, different kinds of maps, aerial photos remote sensing, and GIS.
- **Expanded, integrated treatment of globalization.** A revised presentation of globalization in different contexts that provides students with a critical framework for understanding its varied aspects.
- **Demographic transition revised.** Following the lead of professional demographers, a fifth stage has been added to the traditional demographic transition model to account for the current very low natural population rates in developed countries.
- **The Nation-State Revisited.** A critical view of the traditional nation-state concept that sets the scene for regional material on micro-regionalism, ethnic separatism, migrant enclaves, and multicultural nationalism.

New and Updated in Chapter 2

- **Geology: A Restless Earth.** A new section that includes explanation of plate tectonics and geologic hazards.
- **Climate Controls.** New content that discusses the effects of latitude, land-water interactions, global wind patterns, and topography on weather and climate.
- **Updated section on climate change and international activity to limit atmospheric emissions.** New material based on the latest CO₂ emission data and global discussions regarding post-Kyoto activity.
- **Water: A Scarce World Resource.** A new section that focuses on global water problems and solutions.

- **Revised discussion of bioregions.** A more detailed cartographic depiction of biomes and bioregions, complemented by a fuller discussion of the world's ecological diversity, as well as the issues faced in protecting those environments around the globe.

CHAPTER ORGANIZATION

We organized *Globalization and Diversity* to describe and explain the major world regions, including those of Asia, Europe, Africa, and the Americas. Our 12 regional chapters, however, depart somewhat from traditional world regional textbooks. Instead of filling these regional chapters with descriptions of individual countries, we develop five important themes as the structure for each regional chapter. We begin with *Environmental Geography*, describing the physical geography of each region, as well as current environmental issues. Then we assess the region's *Population and Settlement*, discussing its demography, migration, land use, and settlement (including cities). Third is a section on *Cultural Coherence and Diversity* that examines the geography of language and religion. It also explores current popular culture and cultural tensions resulting from the interplay of globalization and diversity. Following this is a thematic section on each region's *Geopolitical Framework* that examines the political geography of the region, including micro-regionalism, separatism, ethnic conflicts, global terrorism, and supranational organizations. We conclude each regional chapter with a section on *Economic and Social Development*, in which we analyze each region's economic framework; this section also examines social development, a topic that includes health, education, and gender issues.

The regional framework follows two substantive introductory chapters that provide the conceptual framework of human and physical geography necessary for understanding the contemporary globalized world. In the first chapter, we introduce the idea of globalization and ask students to ponder the costs and benefits of the globalization process, a critical perspective that is becoming increasingly necessary in the contentious global arena. Following this material, we examine the geographical foundation for each of the five thematic sections. This discussion draws heavily on the major concepts fundamental to an introductory university geography course. The second introductory chapter, "The Changing Global Environment," presents the themes and concepts of global physical geography, including landforms and geology, climate, climate change, hydrology, and biogeography.

CHAPTER FEATURES

Within each regional chapter, several unique features complement the thematic pedagogy of our approach:

- **Comparable maps.** Of the many maps in each regional chapter, eight are constructed on the same themes and with similar data so that readers can easily draw comparisons between different regions. Thus, almost every regional chapter has maps of physical geography, climate, environmental issues, population density, migration, language, religion, and geopolitical issues of the region.
- **Other maps.** Each regional chapter has additional maps illustrating such major themes as urban growth, ethnic tensions, social development, regional development, and linkages to the global economy.
- **Comparable regional data sets.** To facilitate comparison between regions, as well as to provide important insight into the characteristics of each region, each chapter contains two thematic tables. The first provides population data of all sorts, including population density, level of urbanization, total fertility rates, and proportions of the population under 15 and over 65 years of age, as well as net migration rates for each country within the region. The second table presents economic and social development data for each country, including GNI per capita, GDP growth, life expectancy, percentage of the population living on less than \$2 per day, child mortality rates, and the UN gender equity index.
- **Working Toward Sustainability case studies.** This new feature in each regional chapter highlights examples of sustainability in multiple settings and at varied scales.
- **Exploring Global Connections case studies.** In each regional chapter, this feature explores how activities in different world regions are linked so that students understand that in a globalized world, regions are neither isolated nor discrete entities.

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We have many people to thank for their help in the conceptualization, writing, rewriting, and production of *Globalization and Diversity*, Fourth Edition. First, we'd like to thank the thousands of students in our world regional geography classes who have inspired us with their energy, engagement, and curiosity; challenged us with their critical insights; and demanded a textbook that better meets their need to understand the diverse people and places of our dynamic world.

Next, we are deeply indebted to many professional geographers and educators for their assistance, advice, inspiration, encouragement, and constructive criticism as we labored through the different stages of this book. Among the many who provided invaluable comments on various drafts and editions of *Globalization and Diversity*, or worked on supporting print or digital material, are:

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Les Rowntree

Martin Lewis

Marie Price

William Wyckoff

THE TEACHING AND LEARNING PACKAGE

In addition to the text itself, the authors and publisher have been pleased to work with a number of talented people to produce an excellent instructional package.

FOR TEACHERS AND STUDENTS

MasteringGeography™ with Pearson eText. The Mastering platform is the most widely used and effective online homework, tutorial, and assessment system for the sciences. It delivers self-paced tutorials that provide individualized coaching, focus on course objectives, and are responsive to each student's progress. The Mastering system helps teachers maximize class time with customizable, easy-to-assign, and automatically graded assessments that motivate students to learn outside of class and arrive prepared for lecture. MasteringGeography offers:

- **Assignable activities** that include MapMaster™ interactive map activities, *Encounter World Regional Geography* Google Earth Explorations, video activities, Geoscience Animation activities, map projection activities, coaching activities on the toughest topics in geography, end-of-chapter questions and exercises, reading quizzes, Test Bank questions, and more.
- **A student Study Area** with MapMaster™ interactive maps, videos, Geoscience Animations, web links, glossary flashcards, “In the News” RSS feeds, chapter quizzes, an optional Pearson eText including versions for iPad and Android devices, and more.

Pearson eText gives students access to the text whenever and wherever they can access the Internet. The eText pages look exactly like the printed text and include powerful interactive and customization functions, including links to the multimedia.

Practicing Geography: Careers for Enhancing Society and the Environment by Association of American Geographers (0321811151).

This book examines career opportunities for geographers and geospatial professionals in the business, government, nonprofit, and education sectors. A diverse group of academic and industry professionals shares insights on career planning, networking, transitioning between employment sectors, and balancing work and home life. The book illustrates the value of geographic expertise and technologies through engaging profiles and case studies of geographers at work.

Teaching College Geography: A Practical Guide for Graduate Students and Early Career Faculty by Association of American Geographers (0136054471).

This two-part resource provides a starting point for becoming an effective geography teacher from the very first day of class. Part One addresses “nuts-and-bolts” teaching issues. Part Two explores being

an effective teacher in the field, supporting critical thinking with GIS and mapping technologies, engaging learners in large geography classes, and promoting awareness of international perspectives and geographic issues.

Aspiring Academics: A Resource Book for Graduate Students and Early Career Faculty by Geographers Association of American Geographers (0136048919).

Drawing on several years of research, this set of essays is designed to help graduate students and early career faculty start their careers in geography and related social and environmental sciences. *Aspiring Academics* stresses the interdependence of teaching, research, and service—and the importance of achieving a healthy balance of professional and personal life—while doing faculty work. Each chapter provides accessible, forward-looking advice on topics that often cause the most stress in the first years of a college or university appointment.

Television for the Environment Earth Report Geography Videos on DVD (0321662989).

This three-DVD set helps students visualize how human decisions and behavior have affected the environment and how individuals are taking steps toward recovery. With topics ranging from the poor land management promoting the devastation of river systems in Central America to the struggles for electricity in China and Africa, these 13 videos from Television for the Environment's global *Earth Report* series recognize the efforts of individuals around the world to unite and protect the planet.

Television for the Environment Life World Regional Geography Videos on DVD (013159348X).

From the Television for the Environment's global *Life* series, this two-DVD set brings globalization and the developing world to the attention of any world regional geography course. These 10 full-length video programs highlight matters such as the growing number of homeless children in Russia, the lives of immigrants living in the United States and trying to aid family still living in their native countries, and the European conflict between commercial interests and environmental concerns.

Television for the Environment Life Human Geography Videos on DVD (0132416565).

This three-DVD set is designed to enhance any human geography course. These DVDs include 14 full-length video programs from Television for the Environment's global *Life* series, covering a wide array of issues affecting people and places in the contemporary world, including the serious health risks of pregnant women in Bangladesh, the social inequalities of the “untouchables” in the Hindu caste system, and Ghana's struggle to compete in a global market.

FOR TEACHERS

Instructor Resource Manual (Download) (0321862252).

The *Instructor Resource Manual*, created by Jim Tyner, follows the new organization of the main text. It includes a sample syllabus, chapter learning objectives, lecture outlines, a list of key terms, and answers to the textbook's Thinking Geographically and Review Questions. Discussion questions, classroom activities, and advice about how to integrate visual supplements (including web-based resources) are integrated throughout the chapter lecture outlines.

TestGen/Test Bank (Download) (0321861418).

TestGen is a computerized test generator that lets teachers view and edit *Test Bank* questions, transfer questions to tests, and print the test in a variety of customized formats. Authored by Iddi Adam, this *Test Bank* includes approximately 1,500 multiple-choice, true/false, and short answer/essay questions. Questions are correlated against the book's Learning Objectives, the revised U.S. National Geography Standards, chapter-specific learning outcomes, and Bloom's Taxonomy to help teachers to better map the assessments against both broad and specific teaching and learning objectives. The *Test Bank* is also available in Microsoft Word® and is importable into Blackboard.

Instructor Resource DVD (032186140X).

The *Instructor Resource DVD* provides teachers everything they need where they want it and helps make them more effective by saving them time and effort. All digital resources can be found in one well-organized, easy-to-access place. The IRC DVD includes:

- All textbook images as JPEGs, PDFs, and PowerPoint™ Presentations
- Pre-authored Lecture Outline PowerPoint™ Presentations, which outline the concepts of each chapter with embedded art and can be customized to fit instructors' lecture requirements
- CRS "Clicker" Questions in PowerPoint™ format, which correlate to the book's Learning Objectives, the U.S. National Geography Standards, chapter-specific learning outcomes, and Bloom's Taxonomy
- The TestGen software, *Test Bank* questions, and answers for both MACs and PCs
- Electronic files of the *Instructor Resource Manual* and *Test Bank*

This Instructor Resource content is also available completely online via the Instructor Resources section of MasteringGeography and www.pearsonhighered.com/irc.

FOR STUDENTS

Mapping Workbook (0321862201).

This workbook, which can be used in conjunction with either the main text or an atlas, features political and physical shaded relief base maps of every global region. These maps, along with the names of the regional key locations and physical features, are the basis for identification exercises. Conceptual exercises are included to further students' comprehension of the key points presented in the main text's chapters. An answer key is available to download from www.pearsonhighered.com/irc.

Goode's World Atlas, 22nd Edition (0321652002).

Goode's World Atlas has been the world's premiere educational atlas since 1923—and for good reason. It features over 250 pages of maps, from definitive physical and political maps to important thematic maps that illustrate the spatial aspects of many important topics. The 22nd Edition includes 160 pages of new, digitally produced reference maps, as well as new thematic maps on global climate change, sea-level rise, CO₂ emissions, polar ice fluctuations, deforestation, extreme weather events, infectious diseases, water resources, and energy production.

Pearson's Encounter Series provides rich, interactive explorations of geoscience concepts through GoogleEarth™ activities, covering a range of topics in regional, human, and physical geography. For those who do not use MasteringGeography, all chapter explorations are available in print workbooks, as well as in online quizzes at www.mygeoscienceplace.com, accommodating different classroom needs. Each exploration consists of a worksheet, online quizzes, and a corresponding Google Earth™ KMZ file.

- *Encounter World Regional Geography* Workbook and Website by Jess C. Porter (0321681754)
- *Encounter Human Geography* Workbook and Website by Jess C. Porter (0321682203)
- *Encounter Physical Geography* Workbook and Website by Jess C. Porter and Stephen O'Connell (0321672526)
- *Encounter Geosystems* Workbook and Website by Charlie Thomsen (0321636996)
- *Encounter Earth* by Steve Kluge (0321581296)

Dire Predictions: Understanding Global Warming by Michael Mann, Lee R. Kump (0136044352).

Dire Predictions is appropriate for any science or social science course in need of a basic understanding of the reports from the Intergovernmental Panel on Climate Change (IPCC). These periodic reports evaluate the risk of climate change brought on by humans. But the sheer volume of scientific data remains inscrutable to the general public, particularly to those who may still question the validity of climate change. In just over 200 pages, this practical text presents and expands upon the essential findings in a visually stunning and undeniably powerful way to the lay reader. Scientific findings that provide validity to the implications of climate change are presented in clear-cut graphic elements, striking images, and understandable analogies.

ABOUT THE AUTHORS



Les Rowntree is a Research Associate at the University of California, Berkeley, where he researches and writes about global and local environmental issues. This career change comes after more than three decades teaching both Geography and Environmental Studies at San Jose State University. As an environmental geographer, Dr. Rowntree's interests focus on international environmental issues, biodiversity conservation, and human-caused global change. He sees world regional geography as a way to engage and inform students by giving them the conceptual tools needed to critically assess a wide array of global issues.. Current projects include a natural history book on California's Coast Range, as well as creating and maintaining an assortment of web-based natural history, geography, and environmental blogs and Websites.



Martin Lewis is a Senior Lecturer in History at Stanford University, where he teaches courses on global geography. He has conducted extensive research on environmental geography in the Philippines and on the intellectual history of world geography. His publications include *Wagering the Land: Ritual, Capital, and Environmental Degradation in the Cordillera of Northern Luzon, 1900–1986* (1992), and, with Karen Wigen, *The Myth of Continents: A Critique of Metageography* (1997). Dr. Lewis has traveled extensively in East, South, and Southeast Asia. His current research focuses on the geography of languages. In April 2009, Dr. Lewis was recognized by *Time* magazine as one of America's most favorite lecturers.



Marie Price is a Professor of Geography and International Affairs at George Washington University. A Latin American specialist; Marie has conducted research in Belize, Mexico, Venezuela, Cuba, and Bolivia. She has also traveled widely throughout Latin America and Sub-Saharan Africa. Her studies have explored human migration, natural resource use, environmental conservation, and regional development. She is a non-resident fellow of the Migration Policy Institute, a nonpartisan think tank that focuses on immigration, and the Vice President of the American Geographical Society. Dr. Price brings to *Globalization and Diversity* a special interest in regions as dynamic spatial constructs that are shaped over time through both global and local forces. Her publications include the co-edited book *Migrants to the Metropolis: The Rise of Immigrant Gateway Cities* (2008, Syracuse University Press) and numerous academic articles and book chapters.



William Wyckoff is a geographer in the Department of Earth Sciences at Montana State University specializing in the cultural and historical geography of North America. He has written and co-edited several books on North American settlement geography, including *The Developer's Frontier: The Making of the Western New York Landscape* (1988), *The Mountainous West: Explorations in Historical Geography* (1995) (with Lary M. Dilsaver), *Creating Colorado: The Making of a Western American Landscape 1860–1940* (1999), and *On the Road Again: Montana's Changing Landscape* (2006). In 2003, he received Montana State's Cox Family Fund for Excellence Faculty Award for Teaching and Scholarship. A World Regional Geography instructor for 26 years, Dr. Wyckoff emphasizes in the classroom the connections between the everyday lives of his students and the larger global geographies that surround them and increasingly shape their future.

Put the world's diverse regions...

Conveying a strong sense of place and context, this contemporary approach to world regional geography helps students understand the unique connections among the world's diverse regions.

Globalization and Diversity

For most of the past 200 years, the landlocked region of Central Asia has been geopolitically dominated by countries located in other world regions and partially cut off from the main currents of global trade. Since the downfall of the Soviet Union in 1991, however, Central Asia has emerged as a key producer of globally traded resources and as a focus of international geopolitical rivalry.

ENVIRONMENTAL GEOGRAPHY

Intensive agriculture along the rivers that flow into the deserts of Central Asia has resulted in serious water shortages, leading to the drying up of many of the region's lakes and wetlands.

POPULATION AND SETTLEMENT

Pastoral nomadism, the traditional way of life across much of Central Asia, is gradually disappearing as people settle in towns and cities.

CULTURAL COHERENCE AND DIVERSITY

In much of eastern Central Asia, the growing Han Chinese population is sometimes seen as a threat to the long-term survival of the indigenous cultures of the Tibetan and Uyghur peoples.

GEOPOLITICAL FRAMEWORK

Afghanistan and its neighbors to the north are frontline states in the struggle between radical Islamic fundamentalism and secular governments.

ECONOMIC AND SOCIAL DEVELOPMENT

Despite its abundant resources, Central Asia remains a poor region, although much of it enjoys relatively high levels of social development.

► Soldiers in the U.S.-allied Afghan National Army walk through a field of opium poppies as they patrol in the Taliban stronghold of Panjwai in Kandahar province in 2009.

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CENTRAL ASIA 10

NEW! Chapter-opening vignettes with engaging photos provide students with a strong and immediate sense of the region.



EXPLORING GLOBAL CONNECTIONS

Social Media and Political Change: Lessons from the Arab Spring

A civil unrest spread with lightning speed through much of the Middle East in 2011, and as several regional conflicts continued thereafter, discussion focused on the role played by social media in spreading the conflicts and in popularizing the underlying reform movements (Figure 7.2.1). So was the Arab Spring a child of the Facebook generation? Well, yes and no. Ultimately, the chain of events producing dramatic protests in settings such as Tunisia, Egypt, Libya, Bahrain, Yemen, and Syria was probably not about the tweets, viral videos, and cell-phone connections that were sensationalized in the global media. Rather, it was more about how complex local geographies of people (from diverse ethnic, class, and tribal backgrounds) found themselves dealing with an equally complex assortment of country-specific political issues.

Still, technology and the Arab Spring were inextricably intertwined, particularly in three ways. First, cell phones, blogs, email, and tweets facilitated the flow of information that helped protesters plan events and coordinate strategies with allies. Second, local videos from smart phones and pinhole cameras documented government abuse and often provided (in settings such as Syria) the only proof of widespread state-supported violence. Third, the global diffusion of this information promoted the internationalization of political

discourse and made it easier to spread the word about local conflicts and to identify common threads among different protest movements. A related point is that about 60 percent of the region's population is under 30—precisely the group most inclined to use these technologies and often the people most frustrated by unresponsive governments that refuse to change their ways.

But is this technology inherently more democratic or liberating? Critics argue that such notions are merely naive cyber-utopianism. Consider what has happened in settings such as Iran, Syria, and China. In these countries, repressive governments have used the Internet and other forms of electronic communication (such as blogs and tweets) to compile dossiers on critics of the government, spy on online chatter, and even identify and arrest suspected enemies. In Iran, thousands were arrested after the 2009 uprisings as secret police made use of information from the Internet and social media. Similarly, Syria's repressive Assad regime made widespread use of Facebook to follow its opponents during its civil war. The

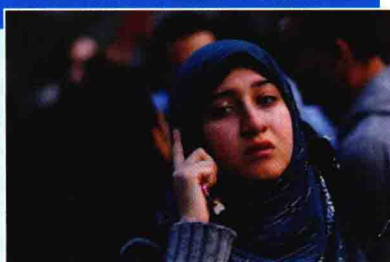


FIGURE 7.2.1 Communicating from the Front Lines, Cairo, Egypt, 2011 A young Egyptian woman talks on a mobile phone in Cairo's Tahrir Square during demonstrations in February, 2011.

Chinese government now employs thousands of workers to add pro-government online chatter to various Internet outlets.

So what lessons can we learn from the interplay of the Arab Spring and the new world of electronic and social media? No doubt, in that moment in time, tweets and cell phones mattered greatly. But equally clear is the fact that protesters have no monopoly on their knowledge and use of these communications technologies. Bloggers beware: Repressive governments can be fast learners. Finally, as events continue to unfold in the region, it appears that at least for now, local rivalries and shifting political alliances in particular locales may trump any potential for more pan-regional democratic and reform-minded discourse.

Updated **Exploring Global Connections** case studies reinforce the book's popular globalization theme by illustrating the interesting and sometimes unexpected interconnections between regions. Examples include social media and the Arab Spring; S. Korean's investment in Central Asia; Burma's connections with China; China's recent heavy investment in Australia; and many others.

Socially conscious topics—sustainability, gender issues, global climate change—combine with geography fundamentals to engage and involve students on multiple levels.

NEW! Working Towards Sustainability features show diverse applications of how sustainability initiatives apply to people, groups, and settlements in different places and at different scales, emphasizing positive environmental and social initiatives and their outcomes. Examples include urban rooftops in U.S. cities; preservation of the Azraq Basin in Jordan, Germany's renewable energy program, sustainable development in China's Loess Plateau, and many others.

FIGURE 7.42 Algerian Women Women now make up more than 30 percent of Algeria's newly-elected National Assembly, a higher proportion of female representation than in many Western nations.



Expanded coverage of gender issues, food, art, music, film, and sports brings these high-interest cultural topics to the forefront.



FIGURE 14.35 Samoan Football Players Even though rugby is the most popular sport in Oceania, there are a large number of Samoan football players in the United States, at both college and professional levels. Here, Joey Iosefa, running back for University of Hawaii moves the ball against San Jose State.



FIGURE 9.30 Svetlana Loboda Ukrainian singing star Svetlana Loboda was one of the top performers at Eurovision 2009, held in Moscow. In addition to a successful career in music and television, Loboda has championed the plight of battered women throughout the region.

WORKING TOWARD SUSTAINABILITY

Preserving Land and Life in Jordan's Azraq Basin

The Azraq Basin contains some of Jordan's largest supplies of groundwater (Figure 7.1.1). Associated surface springs and wetlands traditionally support both sedentary farmers (who depend on the basin for irrigation water for their desert grain and tree crops) and nomadic Bedouin populations (who use seasonal pastures to graze their camels, sheep, and goats). In addition, large flocks of migrating birds (including species from Scandinavia, Africa, and Siberia) use lakes in the area as stopovers on their multicontinental journeys (Figure 7.1.2).

Since 1980, however, unwelcome changes have threatened the long-term viability of the basin. Rapidly growing urban populations

in nearby Amman and Zarqa have placed increased demands on regional aquifers. In rural areas, many farmers have shifted to more commercialized and intensive forms of irrigated agriculture. Large numbers of new wells have been dug, many of them illegal. Periodic regional droughts—potentially related to global warming—have also been on the rise, limiting surface recharge. The results have been dramatic and painful. Beginning in the 1990s, many springs and shallow wells have



FIGURE 7.1.2 Azraq Wetlands, Jordan This small freshwater resource is an invaluable part of the Azraq Wetlands Nature Reserve in Jordan.

seen lower flows or have dried up. The salinity of the remaining water resources has risen. Wetlands have shrunk greatly in size, and many migratory birds have disappeared.

In a coordinated response to the crisis, the Jordanian government established the Azraq Oasis Restoration Project, designed to study the problem and come up with sustainable solutions to reverse falling groundwater levels, preserve traditional farming and grazing lifestyles, and restore the ecological integrity of the critical wetlands environment. The project has also teamed up with the International Union for Conservation of Nature, the Arab Women Organization (focused on improving the lives of ordinary Jordanian women), and numerous stakeholders in the area. Project researchers have emphasized a participatory approach, in which they spend large amounts of time in local workshops and seminars and do extensive fieldwork partnering with residents. Although only about 5–10 percent of the surface wetlands have been temporarily restored (through increased groundwater pumping), project leaders hope that their efforts will slow the drilling of new wells, encourage farmers to rethink the mix of crops they grow (and adopt more efficient drip irrigation systems), and offer more examples of urban water consumption and recycling.

The fate of the Azraq Basin remains in doubt. Lower population growth and widespread local participation in water conservation efforts are crucial elements in restoring the basin and its groundwater to sustainable levels. Ultimately, the project's chances for long-term success may lie in a creative blending of tradition and innovation that combines local and global knowledge and in the process redefines water as a sustainable resource in a part of the world where it increasingly seems in short supply.

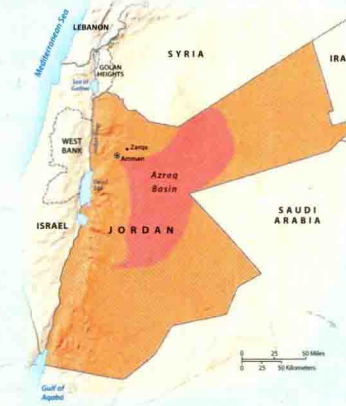
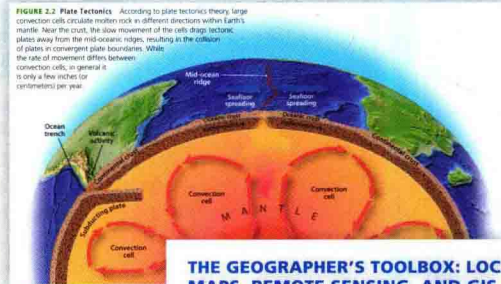


FIGURE 7.1.1 Azraq Basin, Jordan The map shows the size and centrality of Jordan's Azraq Basin. Note the proximity to Amman and Zarqa.

A stronger focus on geography fundamentals and tools of the trade includes expanded information in the introductory chapters on map reading and modern geospatial tools, and critical physical geography concepts such as plate tectonics and natural hazards.



THE GEOGRAPHER'S TOOLBOX: LOCATION, MAPS, REMOTE SENSING, AND GIS

Geographers use many different tools to represent the world in a convenient form for examination and analysis. You will need very different kinds of images and data if you're studying vegetation in Brazil or mining in Mongolia; population density in Tokyo or languages spoken in Europe; religions practiced in the Middle East or rainfall in southern India. Today's modern satellite and communications systems offer geographers an array of tools not imagined 50 years ago.

Structured to facilitate learning

Each of the regional chapters is organized into five thematic sections—Environmental Geography, Population and Settlement, Cultural Coherence and Diversity, Geopolitical Framework, and Economic and Social Development—to encourage cross-regional comparisons and highlight issues in today's globalized world. Each chapter also includes a new structured learning path to help students focus on important concepts and check their understanding.

NEW! Learning Objectives, which are presented in each chapter's opening pages, guide students in prioritizing the most important concepts in the chapter, and are connected to each chapter's Review Questions and MasteringGeography™ assessments.

LEARNING OBJECTIVES

After reading this chapter you should be able to:

- Identify the different components of globalization, including their controversial aspects, and list several ways in which globalization is changing world geographies.
- Describe the conceptual framework of world regional geography.
- Summarize the major tools used by geographers to study Earth's surface.
- Explain the concepts and metrics used to document changes in global population and settlement patterns.
- Describe the themes and concepts used to study the interaction between globalization and the world's cultural geographies.
- Explain how different aspects of globalization have interacted with global geopolitics from the colonial period to the present day.
- Identify the concepts and data important to documenting changes in the economic and social development of more and less developed countries.

NEW! Review Questions at the end of each thematic section help students check and apply their comprehension as they read each chapter.

REVIEW QUESTIONS

1. What is sectoral transformation, and how does it help explain economic change in North America?
2. Cite five types of location factors, and illustrate each with examples from your local economy.

REVIEW QUESTIONS

1. How did the colonization of Latin America by Iberia lead to the formation of the modern states of Latin America?
2. How are trade blocs reshaping the region's geopolitics?

End-of-chapter **Thinking Geographically** questions offer students opportunities to apply and synthesize their understanding and engage in collaborative/group activities.

Thinking Geographically

1. Select an economic, political, or cultural activity in your city or town, and discuss how it has been influenced by globalization.
2. Choose a specific country or region of the world and examine the benefits, and liabilities that globalization has posed for that country or region. Remember to look at different facets of globalization, such as the environment, cultural change and conflict, and the economic effects on different segments of the population.
3. Drawing on information in current newspapers and magazines, as well as TV and the Internet, apply the concepts of cultural imperialism, nationalism, and cultural syncretism to a region or place experiencing cultural tensions.
4. Select an African country with a colonial past. (a) Trace its pathway of decolonization; (b) describe and analyze its contemporary relations with its former colonial overseer, being sensitive to the matter of whether a neocolonial relationship has been established.
5. Using the tables of social indicators in the regional chapters of this book, identify traits shared by countries that have a high percentage of female illiteracy. Based on your inquiry, what general conclusions do you reach?

NEW! Quick Response (QR) Codes at the end of each chapter enable students to link smartphones and other mobile devices from the book to blogs written by the authors of the book, providing easy and immediate access to current updates on topics covered in the chapters.

Scan to visit the author's blog for chapter updates.



<http://gad4blog.wordpress.com/>

Authors' Blogs

Scan now to access the authors' blogs for up-to-date information on Concepts of World Geography.

Scan to visit the GeoCurrents blog.



<http://geocurrents.info/>

The power of visualization

A pedagogically oriented cartography program, large-format photos, illustrations, and other visualizations of current data help students experience and understand the world's diverse regions.

The **cartography program** features **standardized maps for all regional chapters**. Each regional chapter contains approximately 12 maps, with each region including many of the same thematic maps to help with cross-regional comparisons. This system allows students to compare and contrast concepts and data both within and between regions. Additionally, this system reinforces the global effect on local issues.

A **highly graphical presentation** includes a large-format map or photo on almost every page, with more than 50% of photos new to this edition.



FIGURE 7.31 Geopolitical Issues in East Asia East Asia remains one of the world's geopolitical hot spots. Tensions are particularly high between capitalist, democratic South Korea and the isolated communist regime of North Korea, as well as between China and Taiwan. China has had several border disputes, one of which involves a group of small islands in the South China Sea. Japan and Russia have not been able to resolve their quarrel over the southern Kuril Islands.

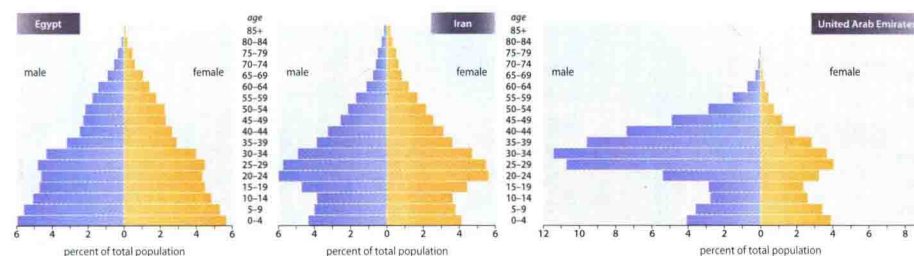
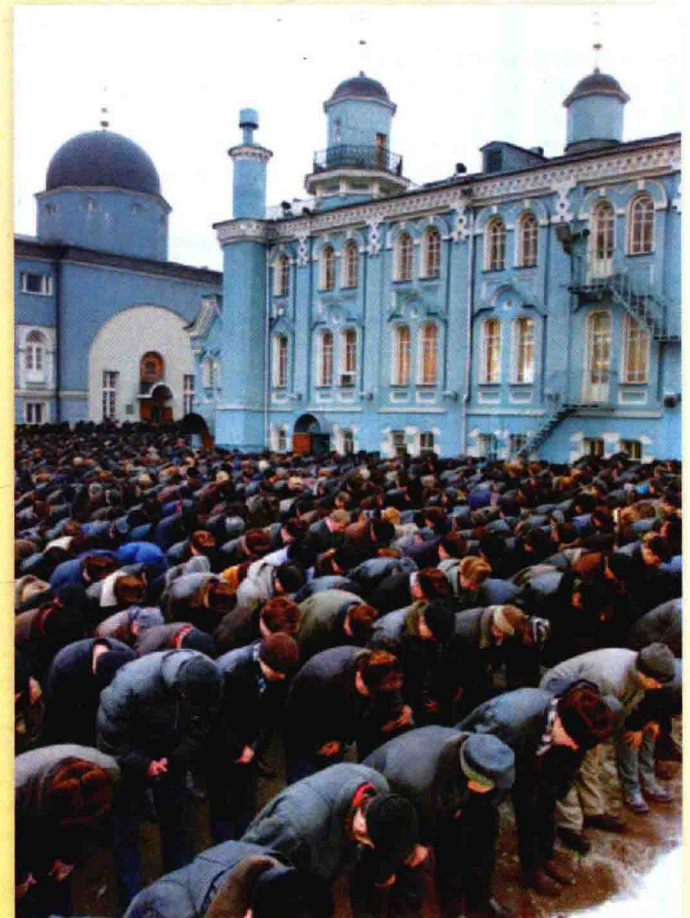


FIGURE 7.23 Population Pyramids: Egypt, Iran, and United Arab Emirates, 2012 Three distinctive demographic snapshots highlight regional diversity: Egypt's above-average growth rates differ sharply from those of Iran, where a focused campaign on family planning has reduced recent family sizes. Male immigrant laborers play a special role in skewing the pattern within the United Arab Emirates.

NEW! Paired population pyramids contrast subregions and settlements within each region, comparing either historic or forecasted change or current population trends.

The **most current data** throughout the book are pulled from the 2010 U.S. Census, 2012 Population Reference Bureau Data, and other important sources.

MasteringGeography delivers engaging, dynamic learning opportunities—focusing on course objectives and responsive to each student's progress—that are proven to help students absorb world regional course material and understand difficult geographic concepts.

Tools for improving geographic literacy and exploring Earth's dynamic landscape

MapMaster™ is a powerful interactive map tool that presents assignable layered thematic and place name interactive maps at world and regional scales for students to test their geographic literacy and spatial reasoning skills, and explore the modern geographer's tools.

MapMaster Layered Thematic Interactive Map

Activities act as a mini-GIS tool, allowing students to layer various thematic maps to analyze spatial patterns and data at regional and global scales and answer multiple-choice and short-answer questions organized by region and theme.

NEW! MapMaster has been updated to include:

- 90 new map layers
- Zoom and annotation functionalities
- Current U.S. Census, United Nations, and Population Reference Bureau Data



MapMaster Place Name Interactive Map Activities

have students identify place names of political and physical features at regional and global scales, explore select recent country data from the CIA World Factbook, and answer associated assessment questions.

