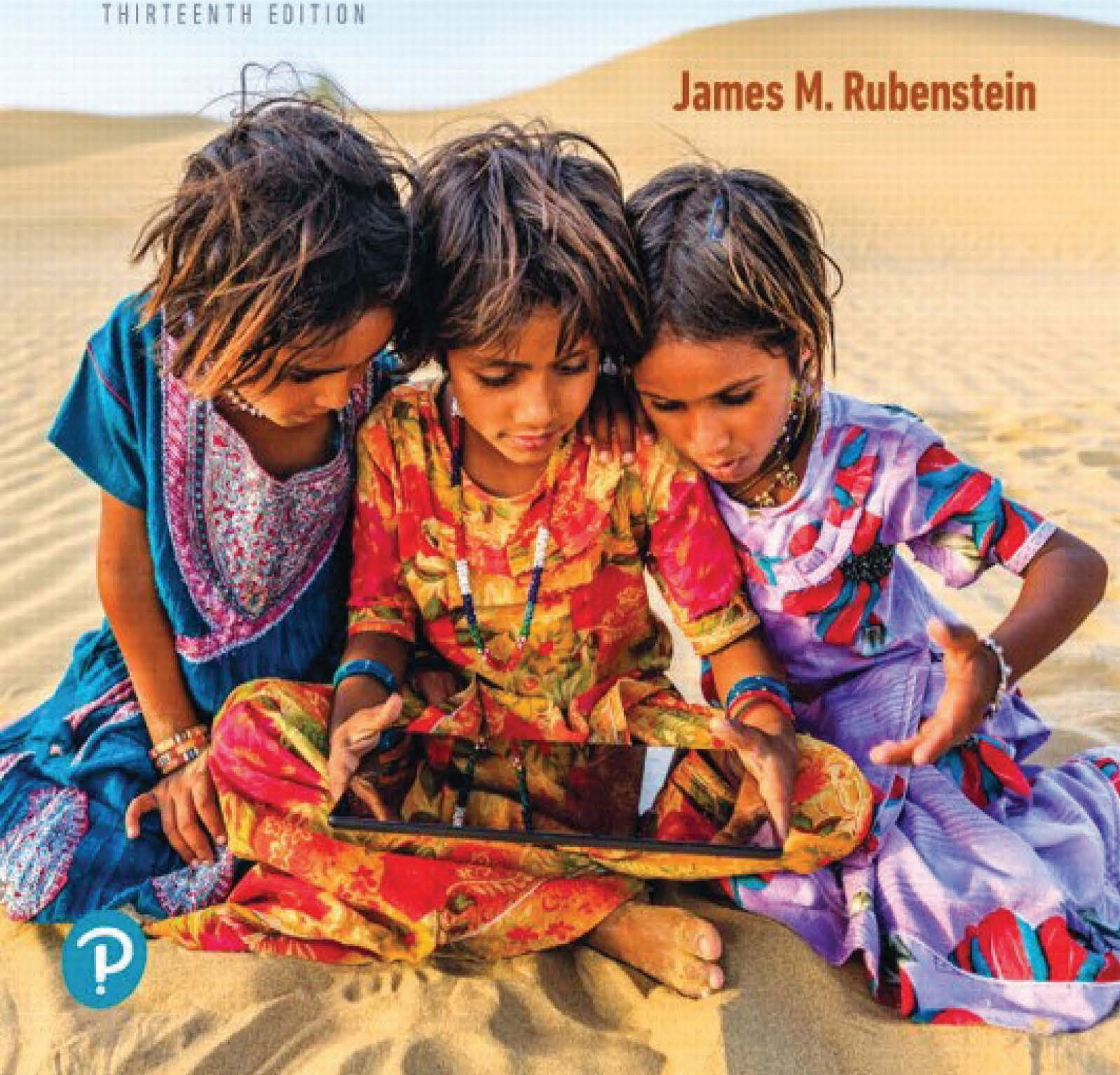


THE CULTURAL LANDSCAPE

An Introduction to
Human Geography

THIRTEENTH EDITION

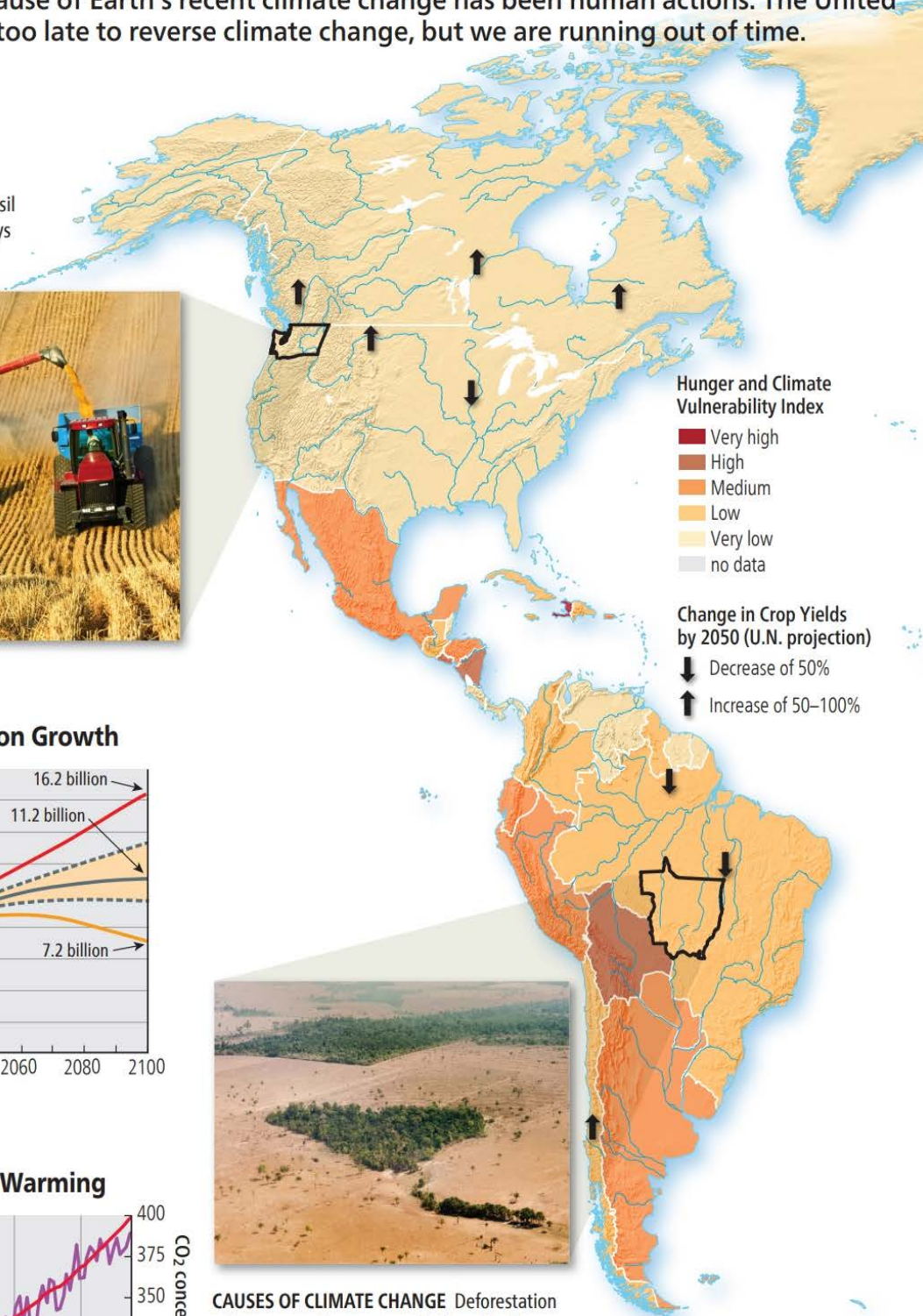
James M. Rubenstein



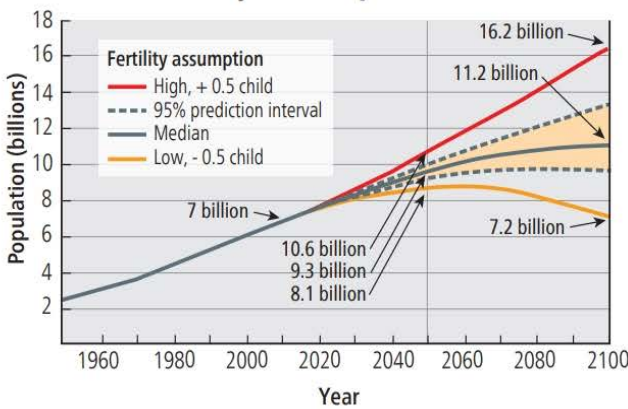
Global Environmental Change: Human Impacts

Earth's temperature has risen an average of 1.5°C (2.8°F) during the past century. Why does this temperature rise matter to us? Earth's changing climate has led to increased global environmental change, and caused a decline in food production and an increase in poverty in some places. Climate change is inducing unprecedented numbers of humans to migrate in search of better living conditions in other places. The principal cause of Earth's recent climate change has been human actions. The United Nations warns us that it is not too late to reverse climate change, but we are running out of time.

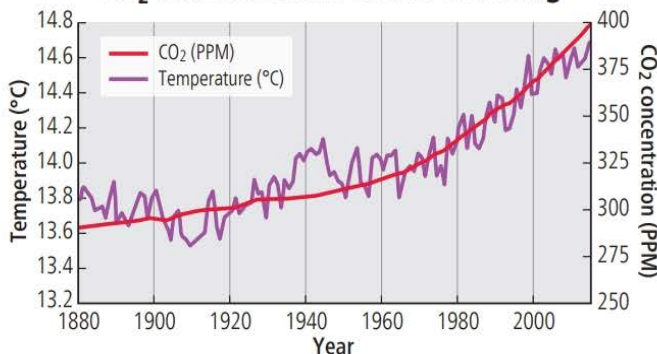
CLIMATE CHANGE AND FOSSIL FUELS A major contributor to climate change is the burning of fossil fuels in motor vehicles, whether on urban highways or rural farms (farm equipment, United States).



Earth's Projected Population Growth



CO₂ Emissions and Global Warming



CAUSES OF CLIMATE CHANGE Deforestation releases greenhouse gases that accelerate climate change (Mato Grosso, Brazil).

CLIMATE CHANGE BY THE NUMBERS

13.3

PERCENT

decrease per decade of Arctic ice since 1980

SEVEN

INCHES

of sea-level rise in the past 100 years

281 BILLION

METRIC TONS OF ICE

lost from the Greenland ice cap annually 2003-2013

406

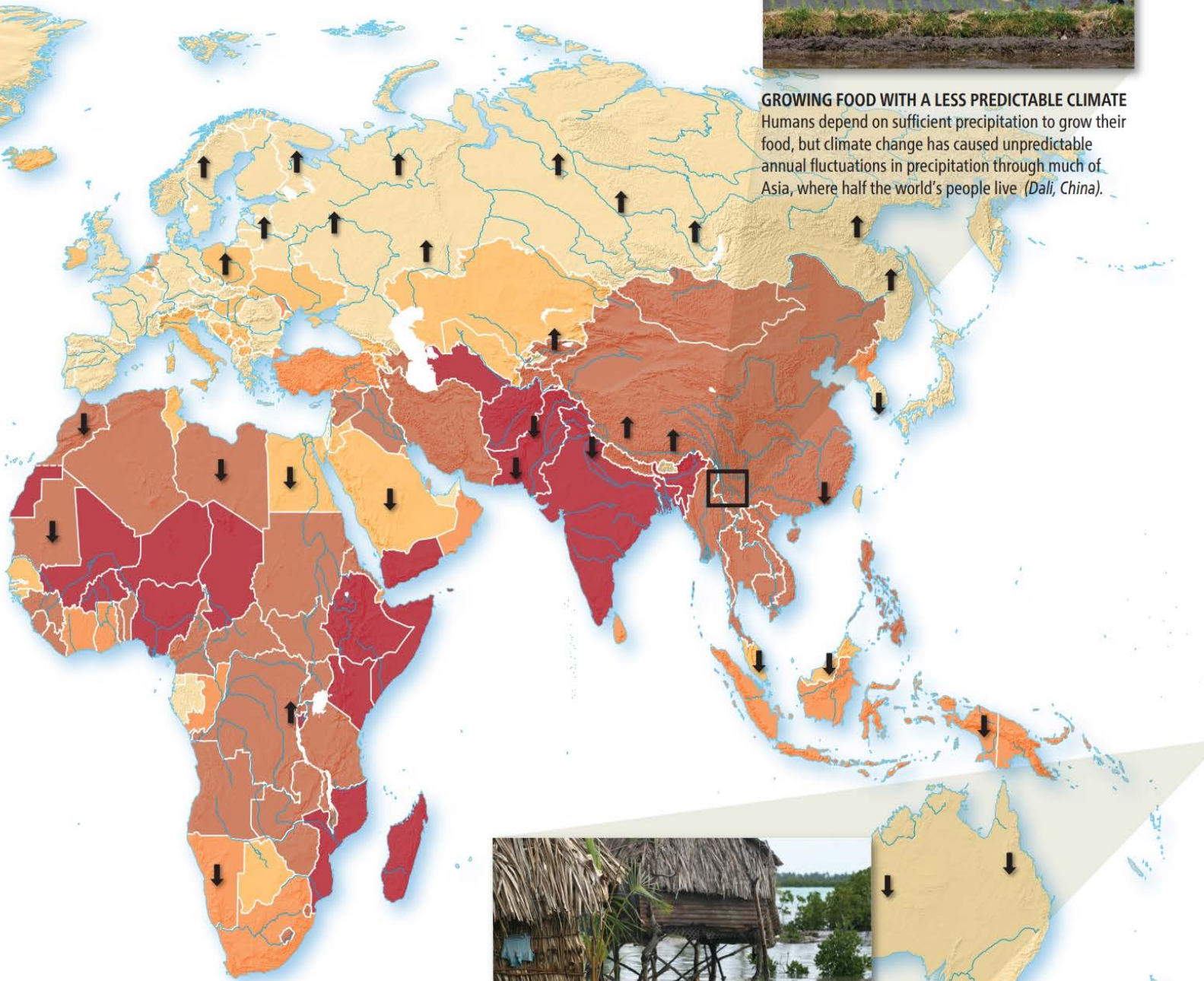
PARTS PER MILLION

of carbon dioxide, the highest levels in 650,000 years

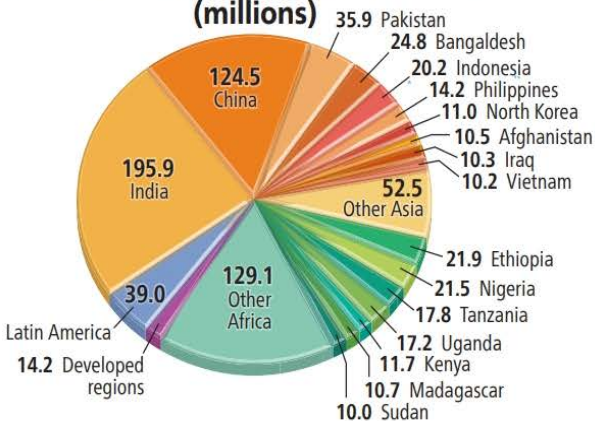


GROWING FOOD WITH A LESS PREDICTABLE CLIMATE

Humans depend on sufficient precipitation to grow their food, but climate change has caused unpredictable annual fluctuations in precipitation through much of Asia, where half the world's people live (*Dali, China*).



Number of Population Undernourished (millions)

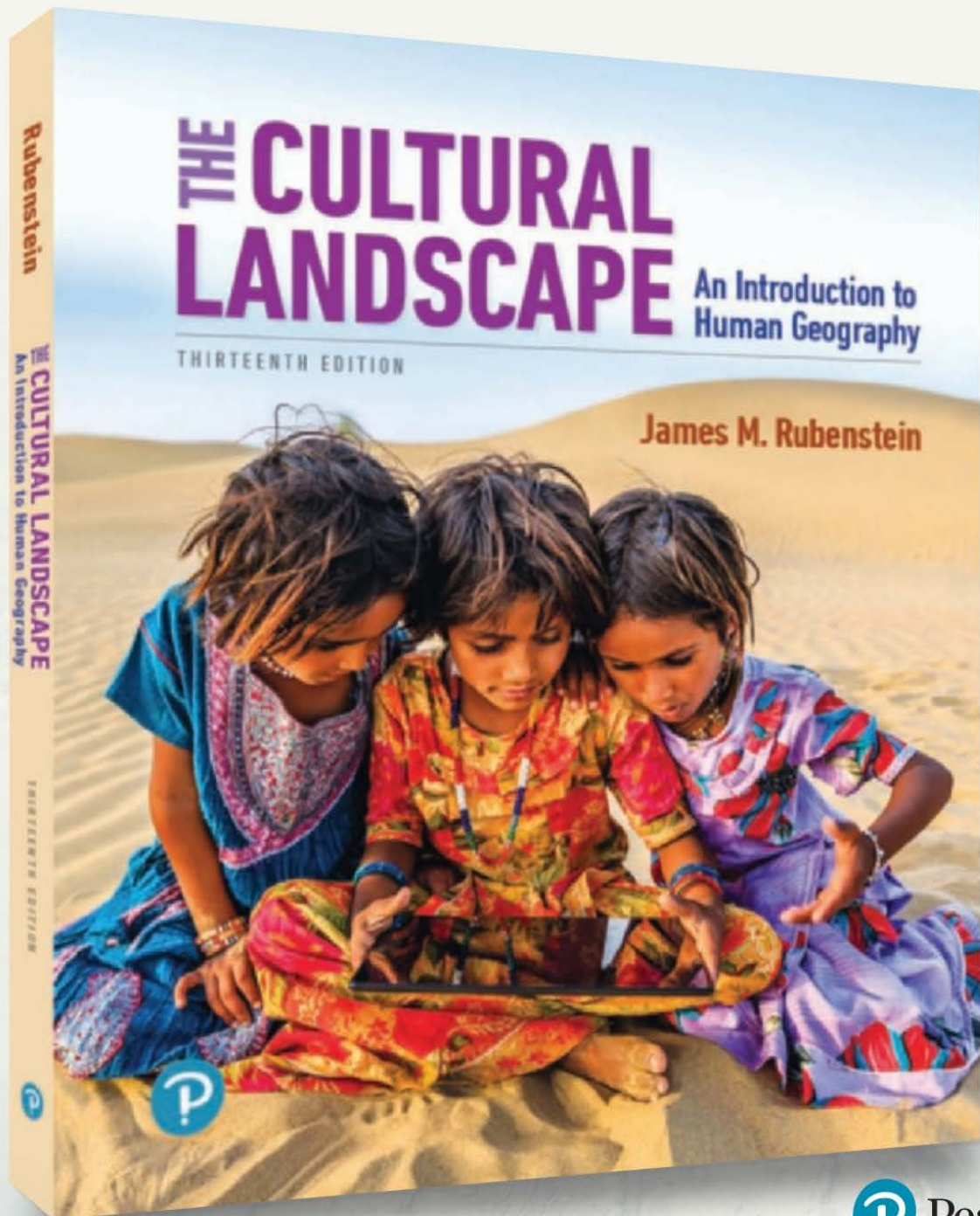


DISAPPEARING COUNTRIES Rising sea levels associated with climate change threaten the very survival of small island countries like Kiribati, which may soon be completely engulfed by the Pacific Ocean (*flooding, Kiribati*).



Global Issues, Local Impacts

The **13th Edition** incorporates the latest data and applied examples of human geography, helps students connect global concepts and phenomena to their local geographies, and engages students in active debate around the most critical topics of human geography.



Support Students with an Updated Learning Path

KEY ISSUE

2.3 | Why Does Health Vary by Region?

KEY ISSUES highlight the four critical "big questions" around which each chapter is organized.

Learning Outcome 2.3.1 Describe differences in health-care services among countries.

Pause & Reflect 2.3.1 Why might levels of hospital beds and physicians in developed countries of Europe be higher than in North America?

UPDATED! Pause & Reflect questions allow student to check and apply their understanding as they read each section.

UPDATED! Learning Outcomes emphasize the knowledge and skills student should gain from each section.

2 Summary & Review

KEY ISSUE

2.1 | Where Are People Distributed?

- ▶ The world's population is highly clustered in four regions: East Asia, South Asia, Southeast Asia, and Europe.
- ▶ The physical environment discourages population concentrations in some regions.
- ▶ Arithmetic, physiological, and agricultural densities represent population distribution in different ways.

KEY ISSUE

2.2 | Why Is Population Increasing?

- ▶ The natural increase rate measures population growth as the difference between births and deaths.
- ▶ The crude birth and crude death rates are the principal measures of population change in a society as a whole.
- ▶ The demographic transition has four stages characterized by varying rates of births, deaths, and natural increase.

KEY ISSUE

2.3 | Why Does Health Vary by Regions?

- ▶ Baby girls and mothers face challenging health risks, especially in developing countries.
- ▶ The percentage of younger and older people varies among countries and impacts the dependency ratio.
- ▶ Health care and medical facilities vary sharply between developed and developing countries.

KEY ISSUE

2.4 | Why Might Population Change in the Future?

- ▶ Neo-Malthusians argue that population is outstripping resources, but others do not agree.
- ▶ The demographic transition may display a possible stage 5 of population decline.
- ▶ Birth rates have declined through the use of two strategies.

NEW! Summary & Review end of chapter features summarize the main points of the Key Issues sections.

Develop Critical Thinking, Writing, & Data Analysis Skills



Thinking Geographically

KEY ISSUE

2.1 | Where Are People Distributed?

Human beings are highly clustered. Scientists disagree about the effects of high clustering on human behavior. Some laboratory tests show that rats display evidence of increased aggressiveness, competition, and violence when very large numbers are placed in a box.

1. Might living in a highly clustered place, such as São Paulo, cause humans to behave especially aggressively or violently? Why or why not?



▶ **FIGURE 2CR-1** SÃO PAULO, BRAZIL

KEY ISSUE

2.3 | Why Does Health Vary by Regions?



Health care varies widely around the world.

3. Health-care indicators for the United States do not always match those of other countries; what reasons might explain these differences?

◀ **FIGURE 2CR-3** FREE EYE CARE CLINIC, MIAMI, FLORIDA

KEY ISSUE

2.2 | Why Is Population Increasing?

Countries display distinctive age structures as a result of their stage in the demographic transition. The United States and other stage 3 and stage 4 countries have relatively large numbers of boomers (born 1946–64). Compared with their parents' generation, boomers received more education and women were more likely to work outside the home. Boomers married later (if at all), and were more likely to cohabit. They had fewer children and more children while unmarried.



2. In what ways do you think the Gen Z generation (born after 1995) might display demographic characteristics similar to, or different from, those of boomers? Why?

▶ **FIGURE 2CR-2** BOOMERS AND GEN Z

KEY ISSUE

2.4 | Why Might Population Change in the Future?

Although authorities on demography such as the Population Reference Bureau (PRB) and the U.N. Population Fund still prefer the four-stage model of the demographic transition, some geographers believe that the demographic transition now has a fifth stage in places such as Japan.



4. What sort of evidence might help to determine the existence of a possible stage 5?

▶ **FIGURE 2CR-4** JAPAN: POSSIBLE STAGE 5

UPDATED! Thinking Geographically questions consist of several visual and thought-provoking “essay-style” questions at the end of each chapter, suggesting directions for further reflection, based on concepts and themes developed in the chapter.



Writing Geographically

Figure 2CR-5 shows government expenditures on health care as a percentage of GDP.

- How do the levels of health-care expenditures in Europe and North America compare with those in South Asia and sub-Saharan Africa?
- How do variations in government health-care expenditures relate to stages of the demographic transition?
- How do variations in government health-care expenditures relate to the share of young and old in various regions?
- What future trends in population might cause changes in demand for health-care expenditures?



NEW! Writing Geographically features are context-rich multi-part essay questions modeled after Advance Placement™ Free Response Questions.

NEW! Geospatial Data Analysis activities leverage GIS-inspired MapMaster 2.0 in Mastering Geography, allowing students to create maps and analyze spatial patterns and data at regional and global scales.

Geospatial Data Analysis *Log in to the Mastering Geography Study Area to access MapMaster 2.0.*

Living with Young People

The percentage of people under age 15 varies considerably among countries. Let's compare Japan and Tanzania.

Select *Population Under Age 15*. Then select *Dependency Ratio* and join the two data layers.

- How do the percent under age 15 and the dependency ratio compare between Japan and Tanzania? How do they compare with the United States?
- Based on these features, what challenges might Japan and Tanzania face with regard to their younger people?

▶ **FIGURE 2CR-7** PERCENT UNDER AGE 15 AND DEPENDENCY RATIO



The Latest Data & Applications

SUSTAINABILITY & OUR ENVIRONMENT



California Agriculture & Water

California's extended drought has called into question the region's ability to sustain the entire country's current system of food production. Agriculture consumes 80 percent of the state's distributed water. The counties with the highest per capita use of water are the major agricultural counties (Figure 9-71). Table 9-2 has examples of the amounts of California water that go into growing some fruits and vegetables. Through consumption of fruits and vegetables, the average American consumes around 40 gallons of California water per day.

TABLE 9-2 Amount of Water Needed to Grow Selected Fruits and Vegetables in California

Fruits and nuts	Gallons
1 apple, peach, pear, or plum, 1/4 melon	7.0
5 strawberries	3.0
1 almond	1.0
1 walnut	5.0
3 grapes	1.0
1 lemon, orange, grapefruit, or clementine	20
1 avocado	40
Vegetables	
1 broccoli or cauliflower floret	0.5
Lettuce, cabbage, spinach (salad portion)	1.0
1 carrot or celery stalk	0.5
1 slice tomato, onion, or potato	0.5

In order to protect California's agriculture as much as possible, homeowners and businesses have been required to make substantial cuts in their water usage. For example, homeowners and municipalities are replacing grass lawns and annual flowers with native landscapes of rocks and desert plants.



California Water & Food
<https://goo.gl/VyDapz>

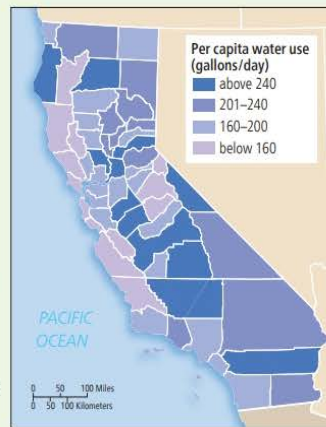


FIGURE 9-71 CALIFORNIA PER CAPITA WATER USE BY COUNTY The lowest per capita water use is in the major cities along the Pacific Coast. The highest demand is in the agricultural counties of the Central Valley.

UPDATED!
Sustainability & Our Environment relates the principal topics of human geography to overarching issues of economic, social, and environmental sustainability for our planet.

UPDATED!
Cartography and Photos With more than 400 maps and 300 photos within the text, the 13th edition provides thoroughly updated maps, optimized for maximum accuracy and clear presentation of current data, along with almost all new photos featuring the latest applied examples of human geography.

FIGURE 3-31 REFUGEES & IDPS, 2017
 Source: United Nations



FIGURE 3-32 REFUGEES FROM SYRIA, 2011-2018
 Sources: United Nations, Pew Research Center



FIGURE 3-33 REFUGEES FROM SYRIA ARRIVE IN JORDAN

Discovery-Based Learning

DOING GEOGRAPHY



Geography Reduces Gerrymandering

Ohio's Congressional map was considered among the most extreme cases of gerrymandering. Democrats were packed into a handful of districts (Figure 8-74). In 2018, Ohio voters approved a process by which the majority and minority parties in the state legislature first tried to agree on a map, and if they could not agree an independent commission would step in.

The amendment to the state constitution approved by the voters specifies numerous geographic features that must be used by the mapmakers to create compact districts. For example:

- A city with a population less than 750,000 cannot be split between two districts (Columbus is Ohio's only city over 750,000).
- Of the 88 counties in Ohio, at least 65 must be entirely within one district, no more than 18 can be split once, and no more than five can be split twice.



▲ FIGURE 8-74 OHIO GERRYMANDERING Ohio's Congressional map between 2012 and 2020 was gerrymandered to pack Democrats into a handful of districts.



Ohio Fights Gerrymandering
<https://goo.gl/x78BpZ>

What's Your **POLITICAL** Geography?

Check out the shape of your state's legislative districts.

1. In your search engine, enter "[your state] congressional district map." If you live in a state with only one state-wide at large Representative (Alaska, Delaware, Montana, North Dakota, South Dakota, Vermont, and Wyoming), enter another state.
2. Are the districts compact and geometrically shaped, or are they irregularly shaped? If irregularly shaped, can you see a geographical reason for the shape, perhaps

a natural feature such as a body of water? Or do you know of a cultural reason, such as a boundary between ethnicities?

3. An overall gerrymandering ranking has been calculated by governing.com for each state (refer to Figure 8-73). Detailed rankings are at <http://www.governing.com/gov-data/politics/gerrymandered-congressional-districts-compactness-by-state.html>. Where does your state rank? Did you expect your state to be heavily gerrymandered or less so? Why?

UPDATED! Doing Geography and the accompanying **What's Your Geography** features discuss geographic tools, techniques, and skills used to address real-world problems, and then ask students to put themselves in the role of geographers by applying these skills and techniques to their real-world experiences and environments, **connecting the global to the local**, and helping students connect the relevance of human geography to their everyday lives.



NEW! Place-based Learning features link maps and photos from the Pearson eText to online Google Maps that include community-contributed photos, introducing students to the practice of Volunteered Geographic Information (VGI).

UPDATED! Debate It! features present two sides of a complex topic to engage students in active debate around the most critical topics of human geography today. The features now conclude with **new Questions for Research & Analysis**. New topics cover the latest nuanced debates in society right now, including Universal Health Care in the U.S., the right to privacy, immigration controls, and more. *Debate It* can be used for homework, group work, or discussion sections.

DEBATE IT!

Regulating social media content Facebook and other social media platforms have grown to several billion users in the absence of government regulation (Figures 4-38 and 4-39).

Governments should not regulate social media platforms

- Social media is used primarily to stay in touch with family and friends in distant locations.
- Social media users expect to receive ads related to their interests.
- Social media providers promise to self-police content.



▶ FIGURE 4-38 SOCIAL MEDIA USERS

Governments should regulate social media platforms

- Social media platforms have not adequately protected individual privacy.
- Some information disseminated through social media is intentionally false.
- Social media companies sell information about us to companies, some of which have used data in order to influence elections and otherwise undermine democratic values.



▶ FIGURE 4-39 PROTESTING FACEBOOK'S PRIVACY POLICY, 2018

QUESTIONS FOR RESEARCH & ANALYSIS

1. Are you familiar with, and have you adjusted, the privacy settings of your favorite social media? If not, why not? If so, are you confident your privacy is adequately protected? Explain.
2. Overall, how do you weigh the benefits and potential risks of your use of social media, given the current amount of government regulation?

Regulating Social Media
<https://goo.gl/G6J8F8>



Get Students Hands-On with Data

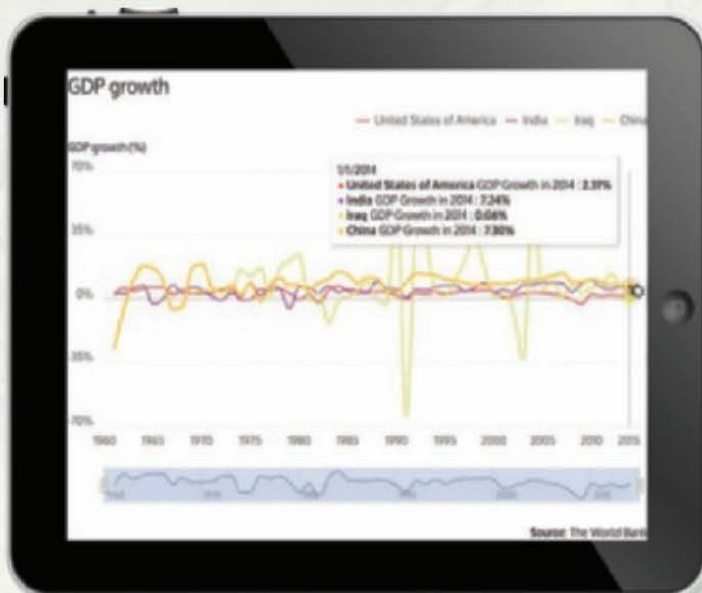


NEW! Interactive Data Visualizations powered by Social Explorer for every Key Issue in the chapter enable students to engage with interactive map stories, predictive graphs, interactive charts, population pyramids, and more. These dynamic media are integrated into the Pearson eText and available for assignment with assessments in Mastering Geography.

NEW! Map Stories present the stories behind the maps with data-rich and narrative-based interactive tours through spatial data.



NEW! Interactive Charts and Graphs allow students to explore and engage with various human geography data related to chapter Key Issues.



Videos that Give Your Students a Sense of Place

GeoVideo

Log in to the *Mastering Geography™ Study Area* to view *this video*.

Rapid Urbanization in Chongqing

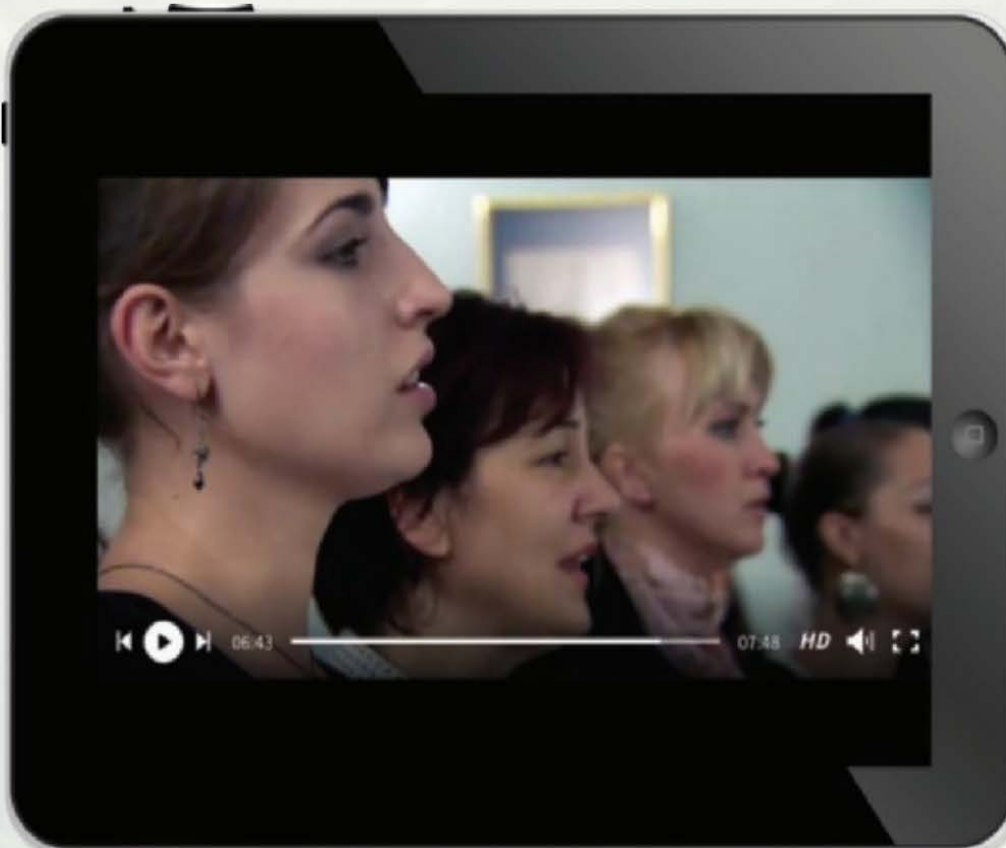
Chongqing is one of the world's largest cities.

1. What accounts for the rapid growth of Chongqing and other China cities?
2. How are consumer services changing in Chongqing to meet the needs of a rapidly growing middle-class population?



► **FIGURE 12CR-5**
CONSUMER SERVICES,
CHONGQING, CHINA

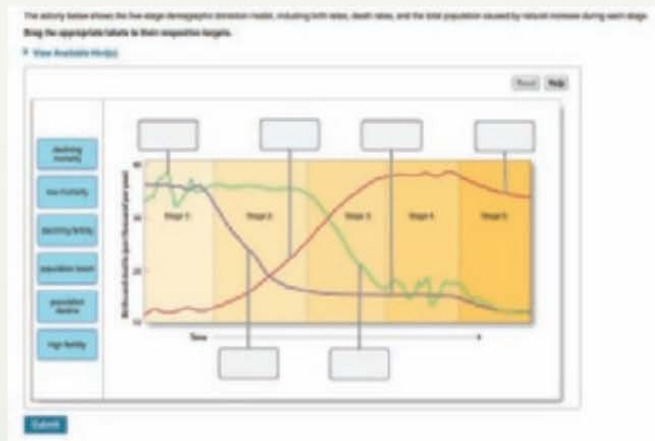
GeoVideos integrate BBC videos at the end of chapters, encouraging students to log into Mastering Geography to view the videos and answer questions. These video clips can be used for self study and can also be assigned for credit with associated assessment.



UPDATED! Video Activities from sources such as the BBC, Financial Times, and Television for the Environment's *Life* and *Earth Report* series, provide students with a sense of place and applied real-world examples of human geography in action, allowing students to explore a range of locations and topics.

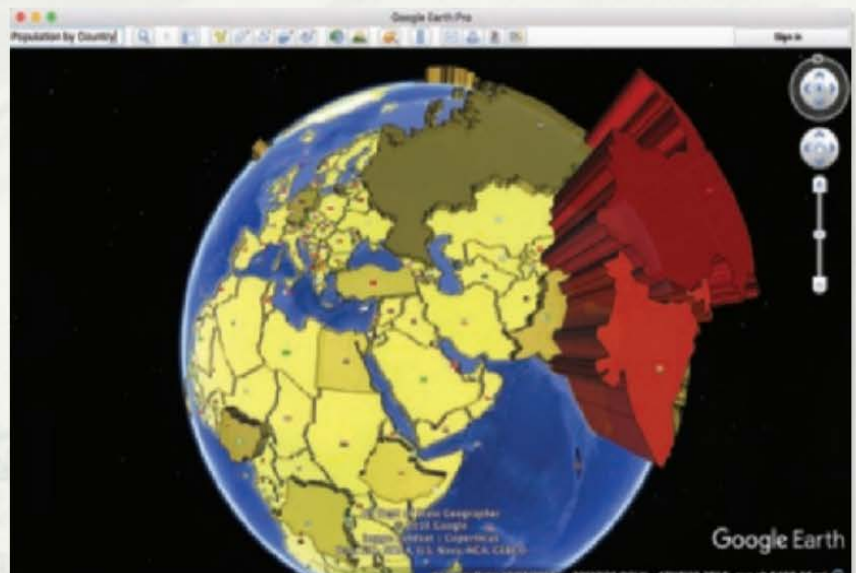
Mastering Geography: Engage & Assess Students

Mastering Geography is the teaching and learning platform that empowers you to reach every student. By combining trusted author content with digital tools developed to engage students and emulate the office-hour experience, Mastering personalizes learning and improves results for each student.



UPDATED!
GeoTutor Activities help students master the most challenging geography concepts with highly visual, kinesthetic activities focused on critical thinking, data analysis, and the application of concepts.

Dynamic Study Modules help students study effectively on their own by continuously assessing their activity and performance. Students complete a set of questions with a unique answer format that asks them to indicate their confidence level. Questions repeat until the student can answer them all correctly and confidently. Once completed, Dynamic Study Modules explain the concept. These are available as graded assignments and accessible on smartphones, tablets, and computers.



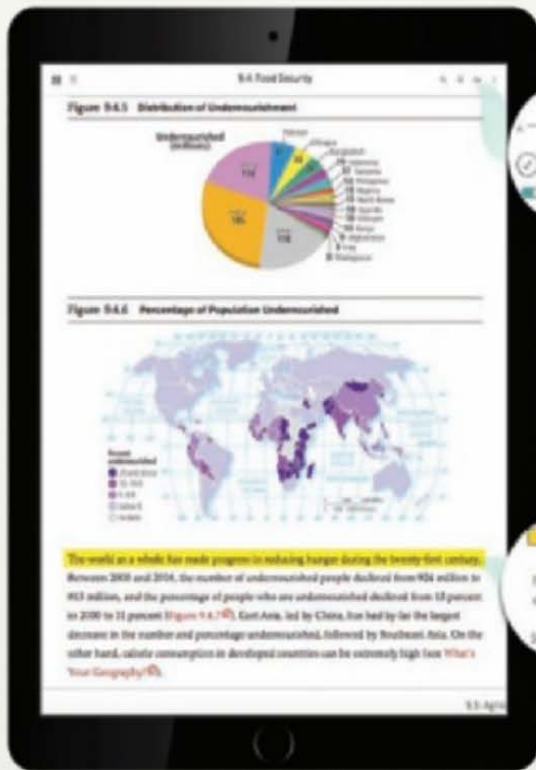
Encounter Human Geography Activities provide rich, interactive Google Earth explorations of human geography concepts, helping students visualize and explore human landscapes around the world. All Explorations include corresponding Google Earth KMZ media files.

MapMaster 2.0: Geospatial Tools at Your Fingertips

NEW! MapMaster 2.0 Interactive Map Activities Inspired by GIS, MapMaster 2.0 allows students to layer various thematic maps to analyze spatial patterns and data at regional and global scales. Now fully mobile, with enhanced analysis tools, the ability for students to upload their own data, and the ability for students to geolocate themselves within the data, this tool includes zoom, annotation, and map-sharing functionality, with hundreds of map layers leveraging recent data from sources such as the PRB, World Bank, CIA, United Nations, NOAA, NASA, USGS, and more.



Pearson eText: An Integrated Learning Experience



Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience available within Mastering. It allows students to easily highlight, take notes, and review key vocabulary all in one place—even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need, when they need it. Pearson eText is available within Mastering when packaged with a new book; students can also purchase Mastering with Pearson eText online.

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The Cultural Landscape: An Introduction to Human Geography

Chapter 1 This Is Geography	Chapter 2 Population & Health	Chapter 3 Migration
10 pages	10 pages	10 pages
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10 pages	10 pages	10 pages
Chapter 7 Identities	Chapter 8 Political Geography	Chapter 9 Food & Agriculture
10 pages	10 pages	10 pages

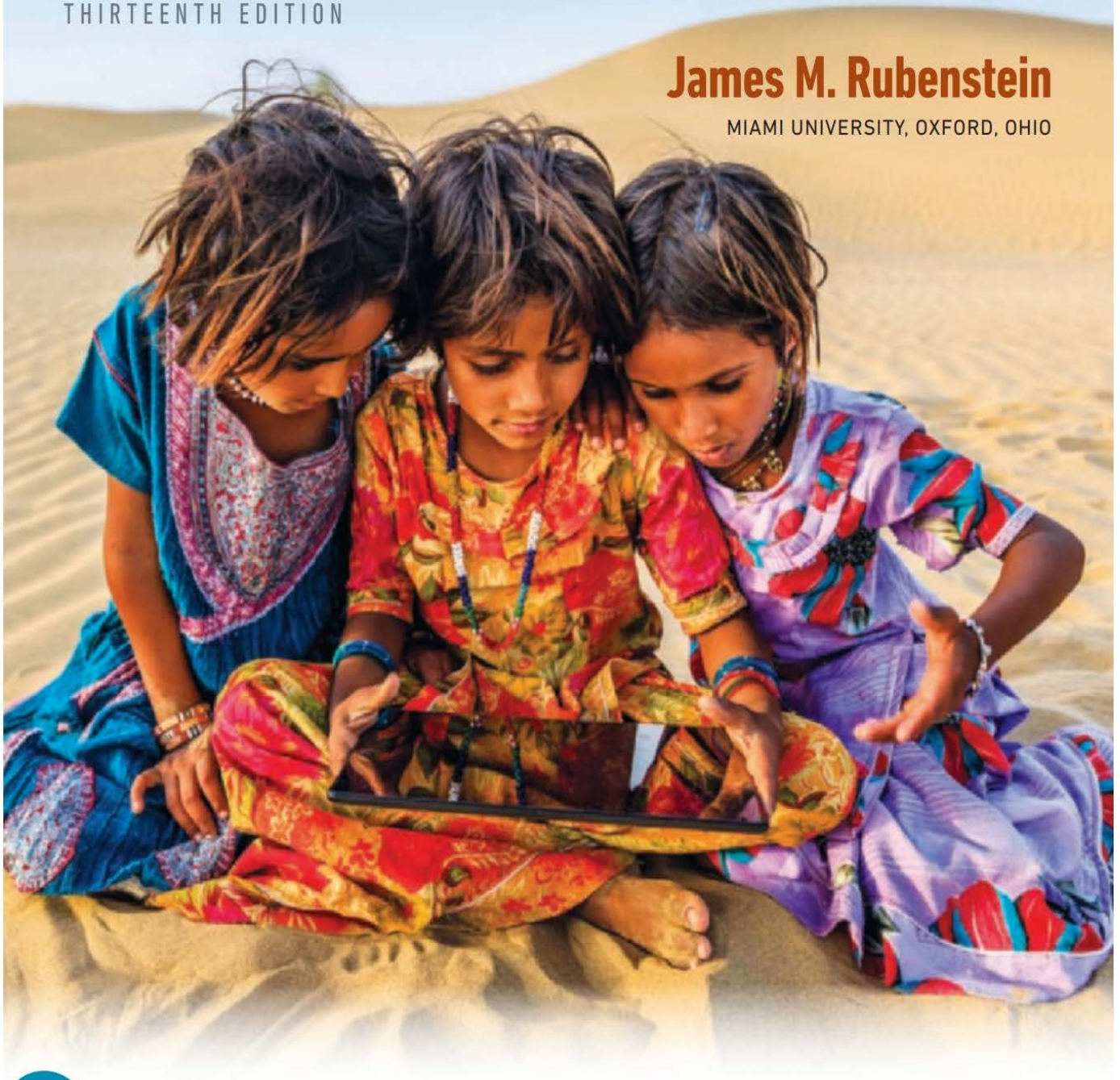
THE CULTURAL LANDSCAPE

An Introduction to
Human Geography

THIRTEENTH EDITION

James M. Rubenstein

MIAMI UNIVERSITY, OXFORD, OHIO



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PREFACE

Geography is the study of where things are located on Earth's surface and the relationships between people and those locations. According to the National Geography Standards, geographers ask two simple questions: "Where is it?" and "Why is it there?" In other words, where are people and activities located across Earth's surface? Why are they located in particular places? *The Cultural Landscape* seeks to answer these questions as they relate to our contemporary world. The book provides an accessible, in-depth, and up-to-date introduction to human geography for majors and non-majors alike.

New & Enhanced Features in the 13th Edition

This edition brings substantial changes in both organization and content, as well as updated information and data. Especially important is the consideration of digital as well as paper versions of the book. This book has been designed to be legible – and attractive – in either paper or electronic format. Several features integrated into the text enhance student understanding and analytic skills.

New Features

- **NEW Geospatial Data Analysis** activities leverage GIS-inspired MapMaster 2.0 in Mastering Geography, allowing students to analyze spatial patterns and data at global and regional scales through overlaying multiple maps. The fully-mobile interactive maps have enhanced analysis tools, such as split screen, bivariate mapping, data probing, map styling, and data filtering. Students can upload their own data for advanced map-making. MapMaster 2.0 includes zoom, annotation, and geolocation functionality, with hundreds of map layers leveraging recent data from sources such as the PRB, World Bank, United Nations, CIA, NOAA, NASA, USGS, and more.
- **NEW Interactive Data Visualizations powered by Social Explorer™** enable students to engage with interactive map stories, predictive graphs, interactive charts, population pyramids, and more. These dynamic media are integrated into the Pearson eText and available for assignment with assessments in Mastering Geography.
- **NEW Writing Geographically** features are multi-part essay end-of-chapter questions, which reference maps or other illustrations. The essay questions are modeled on the format utilized in the Free Response Questions (FRQs) in the Advanced Placement™ Human Geography exam.
- **NEW Maps & Photos.** The 13th edition includes nearly 1,000 figures, 20 percent more than the 12th edition.
- **NEW Online References** are placed throughout the book, using Quick Response (QR) technology to link students to online references and data sources. By scanning the QR code with a smartphone or tablet, students are transferred online to more detailed data or information provided by an authoritative source, such as the U.S. Census Bureau, the Population Reference Bureau, or the United Nations.
- **NEW Word clouds** on the first page of each chapter visually depict the most important concepts and terms addressed in the chapter.
- **UPDATED *Doing Geography*** discusses various geographic tools, techniques, and skills used to address real-world problems related to each chapter's concepts. The feature now includes new QR web links to associated online resources.
- **UPDATED *What's Your Geography?*** Is an active-learning feature that accompanies *Doing Geography*. The *What's Your Geography?* features help students connect the relevance of human geography to their everyday lives. Students use these activities to apply the skills and techniques of geographers to their real-world experiences and environments.
- **UPDATED *Debate It!*** features present two sides of a complex human geography topic and encourages students to engage in active debate and decision-making. Readers may find that they agree with one side of the debate, or they may find merits in both perspectives. The features now include new QR web links to associated online resources and conclude with new *Questions for Research & Analysis*.
- **UPDATED *Sustainability & Our Environment*** features relate the principal topics of human geography to overarching issues of economic, social, and environmental sustainability for our planet. The features now include new QR web links to associated online resources and conclude with new critical thinking questions.
- **UPDATED Location maps** on the first page of each chapter present a spatial overview of each chapter, identifying select places explored in each chapter's applications and case studies.
- **UPDATED Interactive figure captions** consist of one or more questions that accompany a figure in each of a chapter's four Key Issues. The caption questions encourage students to interpret the geographic meaning and significance of the map, graph, or image.

- **UPDATED Summary & Review** now begins on the last page of text of each chapter, with a brief summary that outlines as bulleted items the key points made in each of the chapter's four Key Issues. The end-of-chapter review continues on the final page spread with the following review questions and interactive features:
 - **UPDATED Thinking Geographically** questions consist of several visual and thought-provoking “essay-style” questions at the end of each chapter, suggesting directions for further reflection, based on concepts and themes developed in the chapter. The feature includes images designed to illuminate the thought or suggest directions for reflection.
 - **UPDATED Explore** features have students use Google Earth™ to investigate in more detail a concept or place discussed in the chapter and answer questions based on their observations.
 - **UPDATED GeoVideo** features integrate BBC videos related to core subjects of each chapter. Students are encouraged to log into Mastering Geography to view videos that explore contemporary applications of chapter topics. Teachers can assign videos with quizzes for credit.
 - **NEW Writing Geographically** features as described above.
 - **NEW Geospatial Data Analysis** features as described above.
 - **UPDATED Key Terms**, with glossary of all key terms from the chapter.

New & Enhanced Organization

A long-time strength of this book has been its clear, easy-to-use organization and outline. Electronic versions of the books now coexist with traditional paper format, formatted to facilitate reading on tablets and computers without compromising the pedagogic strengths of traditional paper formats. Valuable organizational features established in previous editions have been retained and considerably strengthened for this electronic age through the addition of several new features.

Chapter opening. Each chapter opens with an introductory paragraph, as well as an outline of four Key Issues along with one or two sentences previewing the Key Issue. The opener also has a word cloud and location map.

Key issues. Each chapter is organized according to an outline based on the four key issues.

Key Issue Introduction. The page in which a key issue begins is numbered in accordance with the chapter and Key Issue number (such as Key Issue 3.1). Immediately following the title of the Key Issue is a paragraph that introduces the Key Issue.

Key Issue Subtopics. Each Key Issue is divided into several principal subtopics. These subtopics are always placed

at the top of an even-numbered page. Each two-page spread is now self-contained. As a result, maps and photos appear next to where they are discussed in the text. No more going through a chapter to find a figure that has been referenced on one page but actually appears on another page.

Learning Outcome. Immediately below the title of a Key Issue Subtopic is a Learning Outcome that summarizes the principal purpose of the two-page spread.

Pause & Reflect. Each two-page spread includes a Pause & Reflect feature that is presented as a question. Each question is designed to stimulate further reflection or discussion on the material being presented in the spread.

End of Chapter. Each chapter ends with a variety of features that review content and offer opportunities for the reader to undertake additional exploration. End of chapter material includes Summary & Review, Thinking Geographically, Key Terms, Writing Geographically, Explore, Geospatial Data Analysis, and GeoVideo.

New & Enhanced Content

Human geography is a dynamic subject. Topics that were central to the discipline a generation ago have faded in importance, while new ones take their place. Each chapter naturally provides updates of the most recently available data. Below are examples of entirely new material included in each chapter.

What basic concepts do geographers use? The first portion of the book welcomes students to the study of human geography and introduces basic concepts that geographers use. Geographers employ several concepts to describe the distribution of people and activities across Earth, to explain reasons underlying the observed distribution, and to understand the significance of the arrangements.

Chapter 1 (This is Geography) provides an introduction to ways that geographers think about the world. Geography's five most basic concepts (place, region, scale, space, connection) are introduced through examples from Panama. New material introduces contemporary issues of concern to geographers, including patterns in space informed by gender identity and spatial associations underlying the opioid epidemic in the United States.

An expanded discussion of maps now explains differences among choropleth, isoline, graduated symbol, dot distribution, and cartogram maps. The discussion of sustainability includes new information on South Africa's water supply crisis.

Where are people located in the world? Why do some places on Earth contain large numbers of people or attract newcomers whereas other places are sparsely inhabited? Chapters 2 and 3 examine the distribution and growth of the world's population, as well as the movement of people from one place to another.

Chapter 2 (Population & Health) includes an expanded discussion of gender- and age-related health issues, as well as the continuing debate over health care in the United States. As the rate of population growth declines from its peak during the second half of the twentieth century, population geography is increasingly concerned with the health of humans, not just their fertility and mortality.

Chapter 3 (Migration) includes contemporary examinations of the U.S.-Mexico border and the surge of migrants into Europe from Africa and Asia. Several new maps of migration patterns in Europe help to illustrate the increased prominence of migration in that region's political debates. In the United States, recent issues related to treatment of Deferred Action for Childhood Arrivals (DACA) immigrants and family-based migration are discussed; the chapter includes an expanded illustration of the diversity of conditions along the U.S.-Mexico border.

How are different cultural groups distributed? Geographers look for similarities and differences in the cultural features at different places, the reasons for their distribution, and the importance of these differences for world peace. Chapters 4 through 8 analyze the distribution of different cultural traits and beliefs and the political challenges that result from those spatial patterns.

Chapter 4 (Culture & Social Media) has a new title, reflecting the central role that social media now plays in contemporary culture, and the usefulness of geographic concepts in understanding features of social media. An entirely new section has been added to this chapter that examines spatial dimensions of cyberattacks, including diffusion of “fake news” and “alternative facts,” as well as origin, destination, and distribution of cyberattacks.

Chapter 5 (Languages) uses *Ethnologue's* latest 5-point classification of languages as institutional, developing, vigorous, in trouble, and dying. Languages in trouble are further classified as critically endangered, definitely endangered, and severely endangered, as per UNESCO. The chapter also expands its coverage of new and revived languages, taking advantage of the author's position at Miami University, where the Myaamia Native American language has been recently reclassified by *Ethnologue* as reawakened.

Chapter 6 (Religions) has been substantially reorganized and rewritten, incorporating extensive detailed input from some of the nation's leading authorities on the geography of religions, as well as individual religions. A new section has been added on utopian communities.

Chapter 7 (Ethnicities) expands to two spreads a discussion of ethnic diversity in Western Asia between Pakistan and Turkey, where many of the world's most challenging

ethnic conflicts are clustered. Brazil's complex treatment of race is expanded to include more urban- and regional-scale mapping. Coverage is provided on the ethnic cleansing of the Rohingya in Myanmar. A new feature shows how the U.S. census has altered its definitions of race and ethnicity over time.

Chapter 8 (Political Geography) includes a new spread on diffusion and distribution nuclear weapons and other weapons of mass destruction. The chapter also considerably expands its coverage of gerrymandering in the United States, including a spread on the districts that are judged to be the most gerrymandered. The chapter also includes a new feature on “Brexit” (Britain's withdrawal from the European Union).

How do people earn a living in different parts of the world? Human survival depends on acquiring an adequate food supply. One of the most significant distinctions among people globally is whether they produce their food directly from the land or buy it with money earned by performing other types of work. Chapters 9 through 12 look at the three main ways of earning a living: agriculture, manufacturing, and services. Chapter 13 discusses cities, where the world's economic and cultural activities are increasingly centered.

Chapter 9 (Food & Agriculture) now precedes the chapter on development, in accordance with the order suggested by the Advanced Placement™ Human Geography course syllabus. The chapter's outline has been altered to start with global patterns of food consumption, a topic that most students will find more familiar than starting with patterns of food production. Key Issue 4 includes expanded information on trade, productivity, biotechnology, and sustainability.

Chapter 10 (Development) reflects recent changes in United Nations development indices and the organization's Sustainable Development Goals. The chapter includes an expanded discussion of gender-related development, including inequality and empowerment. The chapter also addresses current challenges to the international trade development path.

Chapter 11 (Industry & Energy) has been reorganized to first introduce site and situation industrial location factors, then examine connections between industry and resource issues (energy and pollution), then return to current issues in industrial location. Site factors are now introduced prior to situation factors, and energy is reorganized between supply and demand.

Chapter 12 (Services & Settlements) includes expanded discussion of the new sharing economy, such as Uber and Airbnb. New features include an interactive study of food deserts.

Chapter 13 (Urban Patterns) includes updated census definitions of urban settlements of different sizes and areas. A new case study illustrates the CBD (Central Business District) of Mobile, Alabama. The chapter also contains new material on electric vehicles, carsharing, and driverless vehicles – the three principal disruptors in our transportation systems – drawing on the author’s expertise as an auto industry analyst. At the end of the chapter – and the entire book – a new spread has been added relating the five basic concepts introduced in Chapter 1 to urban patterns in China.

The book concludes with a brief **Afterword** that includes an overview of potential career applications of geography in geospatial technology, teaching, government, business, and non profit, as well as an overview of citizen geography and participatory GIS.

New & Enhanced Graphics

The main purpose of this book is to introduce you to the study of geography as a social science by emphasizing the relevance of geographic concepts to human problems. It is intended for use in college-level introductory human or cultural geography courses. The book is written for students who have not previously taken a college-level geography course.

Human geography is distinguished from other social sciences by its reliance on communicating through visual material. As a visual science, geography’s most fundamental tool is the map. This book has been prepared with the visual material front and center.

We live in an electronic age. This book has been designed to be equally usable – and attractive – in both paper or digital formats. Most books are still composed in pages designed for paper – as in the past – and converted to electronic format after printing of the paper version. As a result, the conversion to electronic format is frequently awkward. For example, maps and photos are often placed in the paper version in positions that don’t work well in electronic format.

Not only is this a good-looking human geography textbook, it is also the best-designed book for electronic reading. Furthermore, within the book, some of the learning will take place through accessing information online. Quick Response codes (QRs), URLs, online searches – these are the tools of contemporary teaching.

We live in a visual age. This book has been composed in the reverse order of traditional textbooks. A traditional book has the text written first and the graphic material is added later almost as an afterthought. Instead of beginning with an author’s complete manuscript, this book starts with an outline and a visual concept for each two-page module in the book. What would be the most important geographic idea presented on the spread, and what would be the most effective visual way to portray that idea? The maps, graphs, and photos are placed on the page first, and the text is written around the graphics. Consistent with the importance of visuals, this edition has 20 percent more figures than the previous edition.

New & Enhanced Relevance

Many speculated that geography would be irrelevant in the twenty-first century. Geography’s future was thought to be grim because the diffusion of electronic communications and social media would make it easier for human activities to be conducted remotely. If any piece of information could be accessed from any place in the world (at least where electronic devices work), why live, shop, work, or establish a business in a crowded city or a harsh climate?

In reality, geography has become more, not less, important in people’s lives and the conduct of business. Here are several ways that location matters more now than in the past, because of – not despite – the diffusion of electronic devices:

Geographical smartphone apps. Smartphones and other electronic devices match specific demand to supply in a particular locality. For example: Restaurant apps match hungry people to empty seats in a locality’s restaurants. Real estate apps help people find housing for sale or for rent in a locality. Social apps let people know where their friends in a particular locality are hanging out that night. Transportation apps match vehicles with available seats to people trying to get to specific locations. These sorts of apps generate data on people’s preferences in space, which in turn helps even more location-based business get started and grow. Instead of looking for restaurants in printed “Yellow Pages,” we find places to eat that are mapped on our device and in our locations. No wonder that geography apps, in the form of maps (including navigation) and travel (including transportation), rank as two of the five most frequently used services on smartphones.

Navigation. Electronic devices are essential to the smooth movement of people and goods. For example: Turn-by-turn information can prevent you from getting lost or steer you back if you do get lost. Traffic jams on overcrowded roads can be avoided or minimized. Vehicles in the future will be driverless, so you can spend driving time working, learning, or social networking. Instead of turning on a radio to hear traffic information, we look at the red and green traffic flow patterns on an electronic map.

Ideas. The people who make all of these new location-based apps are themselves highly clustered in a handful of places in the world, such as the San Francisco Bay Area. Ideas – both brilliant and farfetched – are still easier to communicate face-to-face than across long distances. Living and working in places like Silicon Valley, despite high expenses and choking traffic jams, put people next to other like-minded innovators in the electronic-based geography of the twenty-first century.

Cultural diversity. Electronic devices also impact the changing geography of cultural diversity. What if you searched for an available restaurant table in a foreign language? Would you find the same places? What if you conducted an Internet search in a foreign country? Would you find the same information?

The Publishing Team



(left to right) Stuart Jackman, Christian Botting, Erika Nelson, James Rubenstein

The steps involved in creating most traditional textbooks haven't changed much. The book passes from one to another like a baton in a relay race. The author writes a manuscript, which then passes in turn through development, editing, and production specialists on the way to the printing press. The preface typically includes a perfunctory litany of acknowledgments for the many fine people who contribute to the development, editing, and production of the book.

In contrast, this book starts as a genuine partnership among the key development, editorial, and production teams. The traditional separation of development, editorial, and production has been deliberately blurred.

Christian Botting, Executive Editor for Geosciences at Pearson Education, is the captain of this team. He has now been the leader on eight of my book projects. Because Pearson is the dominant publisher of college geography textbooks, the person in charge of geography wields considerable influence in shaping what is taught in the nation's geography curriculum. Christian knows when to lead the market and when to listen to users, when to innovate and when to stick with success, when to let the team do its job and when to step in and make a tough decision. His instincts are infallible.

Erika Nelson, Research Assistant, has an MA in Geography from Miami University, and currently teaches anthropology and geography courses at Miami. I have known Erika for many years as a student and friend, and now as a colleague on this project. I had high expectations for Erika, and she exceeded them. She has played a major role in bringing fresh material to the book, and in maintaining strong quality control during the process.

Stuart Jackman is the creative genius responsible for the spectacular graphics. He deserves the lion's share of the credit for giving Pearson's human geography textbooks the best graphics in geography. Stuart honed his craft as long-time Design Director at DK Education. DK is well-known for producing the best travel guides. The DK "style" is immediately recognizable as distinctive from traditional geography books. You can tell that the graphics are the central element of the book, not an afterthought.

Kevin Lear, Senior Project Manager at International Mapping, and his team produce the outstanding maps for this book. Back in the 1980s, Kevin was the first cartographer to figure out how to produce computer-generated full-color maps that are more accurate and more attractive than hand-drawn ones.

Jonathan Cheney, Content Development Specialist at Pearson Education, plays a key role at the start of the project by reviewing and collating the many reviews and sorting out what needs to be preserved and what needs to be improved. Jonathan reviews the rough drafts of each spread of each chapter that Stuart and I prepare, and helps develop many of the special features. Jonathan retired near the end of this project; he will be missed.

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Reviewers

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