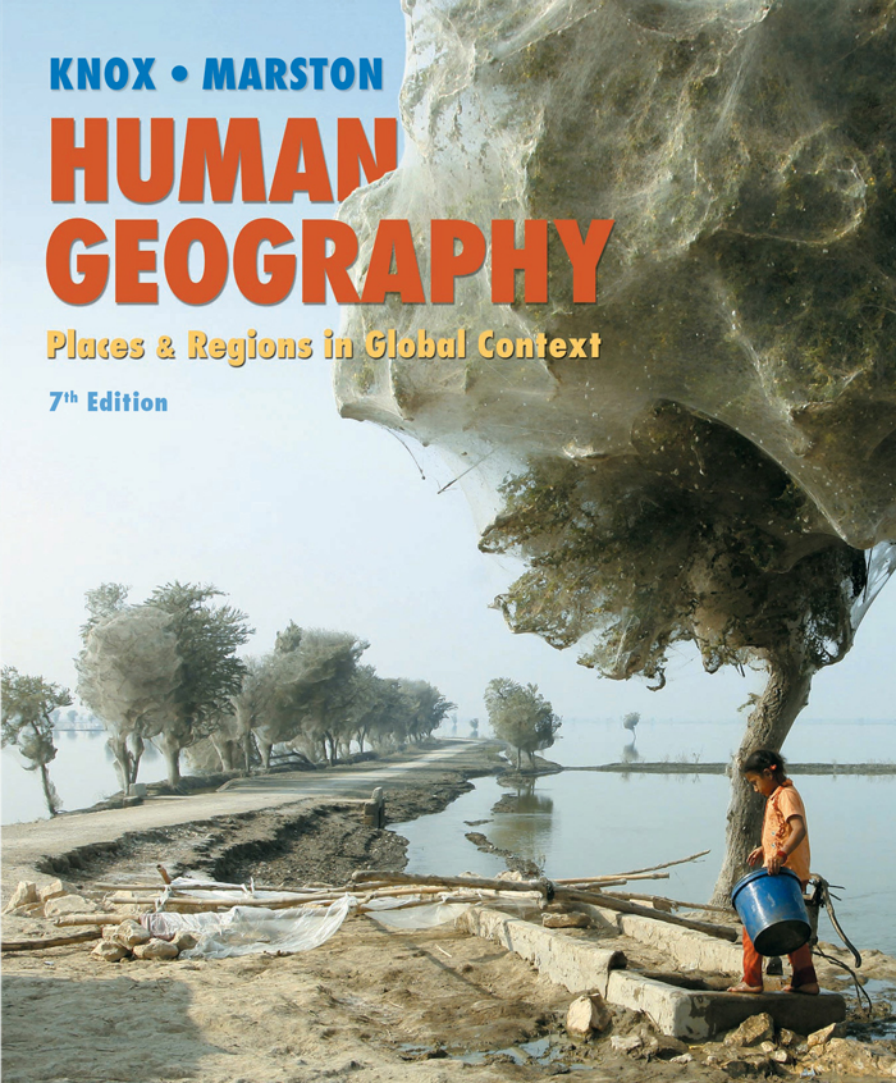


KNOX • MARSTON

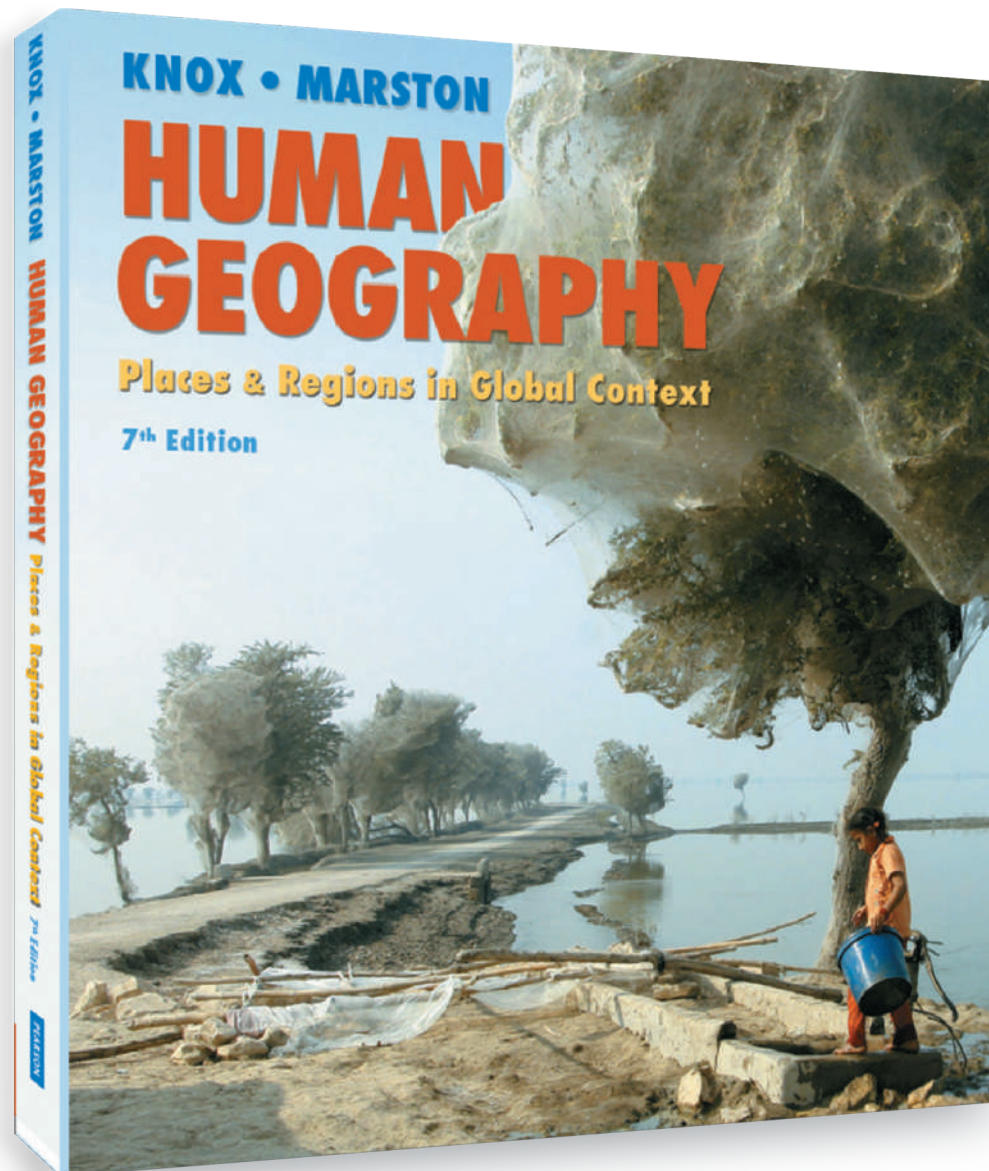
HUMAN GEOGRAPHY

Places & Regions in Global Context

7th Edition



A distinctly modern review of HUMAN GEOGRAPHY



▲
Human Geography: Places and Regions in Global Context, Seventh Edition fosters awareness of current issues and developing trends from a geographic perspective, providing a solid foundation in human geography.

A Critical Exploration of HUMAN GEOGRAPHY

NEW! Chapter 6: Language, Communication, and Belief

focuses on how both language and religion reflect and influence societies, as well as how they spread around the world, and how they permeate politics and social life.



6

LANGUAGE, COMMUNICATION, AND BELIEF

As an infant—as young, perhaps, as 8 months old—you had to determine the internal structure of a system that possesses tens of thousands of individual elements. Each of the elements is derived from the same collection of materials and combined into larger units. Those units can be put together into an infinite set of combinations, although only a limited set of those joined units are correct within the context of the system. How does the system proceed? Fortunately, we tend to learn this system effortlessly: The system is language, and it is composed of words, sounds, and sentences.

But now imagine that you're a deaf child, 6 or 7 years old. You have reached this age not fully understanding what it means to be deaf. Imagine how much more difficult the mission of acquiring language will be for you. Of course, there will not necessarily be sounds involved in forming your language, but there must be something else to take the place of sound that will allow you to communicate the words and the sentences you wish to convey.

Imagine further in this already challenging scenario that it's 1970 and you live in Managua, Nicaragua, and there are no teachers at your school who know sign language. What is perhaps even more remarkable than the capacity of the hearing infant's ability to comprehend and eventually use language is the capacity of a group of deaf children, assembled in a collective but without the aid of a sign language instructor, to develop their own language so they're able to communicate with each other.¹

These children developed the Nicaraguan Sign Language. It is a unique example of how language emerges and becomes populated with a structure, words, and sentences. The deaf children created the language, not with the help of their teachers or their parents or any other adults but through their interactions with each other. Independently, they constructed a natural sign language that contains the kinds of grammatical regularities that are key to all languages. And, since the

¹Adapted from R. Saffran, A. Senghas, and J. S. Truswell, 2001, *The Acquisition of Language by Children*, Proceedings of the National Academy of Sciences, 98, 23: ppn. 187

LEARNING OUTCOMES

- Describe how language both reflects and influences the way different groups understand and interpret the world.
- Compare and contrast different forms of communication, including standard language, slang, dialects, social media, and nonverbal modes of expression.
- Interpret how different geographies impact the spread or preservation of language and how different groups use language to give or change a place's meaning.
- Describe the global distribution of the world's religions—how they developed in specific regions and how they proliferated around the world.
- Recognize the difference between religions and religious movements around the world, and analyze the impacts of both on political and social life.
- Interpret the importance of space to religion in pilgrimages and sacred spaces in every culture.

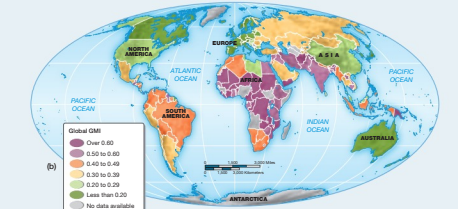
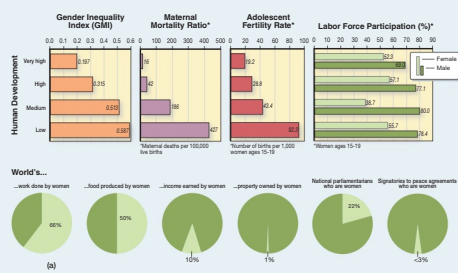
A Speech and hearing impaired students use sign language to answer their teacher's question in a classroom at the Xa Duan school in Hanoi.

5.3 Spatial Inequality

The Global Gender Gap

In 1990, the United Nations published the first of its annual Human Development Reports. The report analyzes how economic growth and human development are inextricably tied and provides statistics about changes in both over time as well as suggestions for how to improve them (Figure 5.D). Since 1990, the report has taken the position that women are at a structural disadvantage compared to men and in its 1997 report, stated baldly, "No society treats its women as well as its men." While the differences between women's and men's pay in the developed world is a common topic of discussion and concern (where in the United States for every \$1 men earn, women earn 77 cents), in the developing world, women experience deep deprivation, exploitation, and harm. The following are ten examples of gender inequality globally.²

1. Women everywhere experience a gender wage gap whether in the developed or the developing world.
2. Women in many parts of the world experience limited mobility from not being allowed to drive on public roads to being cut out by themselves at night for fear of attack or rape.
3. One in every three women around the world is likely to be beaten, coerced into sex, or otherwise abused sometime in her lifetime.
4. In some countries, a male child is more valuable than a female child and parents who don't want a girl may either abort the fetus or kill the child after birth.



5. In some countries, women are legally prohibited from owning land.
6. According to the United Nations, women do two-thirds of the world's work, receive ten percent of the world's income and own one percent of the means of economic production.
7. Women have more limited access to health care than men while one woman dies in childbirth every minute of every day.
8. Forced marriages and the lack of legal access to divorce limits many women's life chances.
9. Despite making up half the global population, women hold only 15.6 percent of elected seats in national parliaments or congresses.
10. Women make up more than two-thirds of the world's illiterate adults.

²Figure 5.D The geography of the global gender gap. Shown in this graphic are (a) key indicators as well as (b) a map of the gender inequality index globally.

¹Adapted from Moly Edmonds, 2014, "Examples of Gender Inequality around the World," <http://www.discovery.com/hv-shows/curiosity/topics/examples-gender-inequality-around-world.htm> (accessed June 29, 2014).

NEW! Spatial Inequality features highlight the growing imbalances and inequalities in today's global society relative to the chapter's major themes.

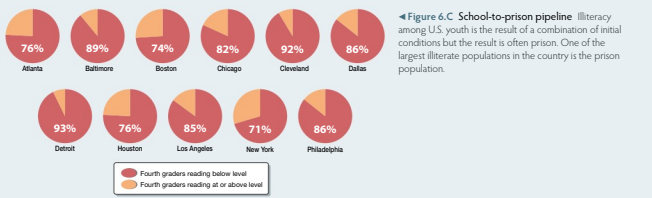
6.2 Spatial Inequality

Geographies of Literacy

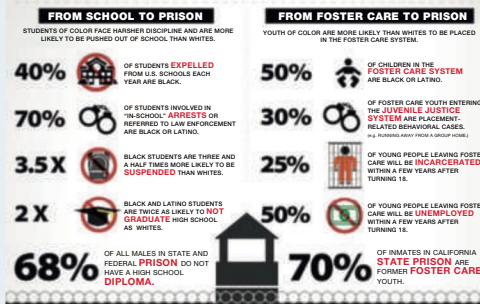
At a very basic level, **literacy** is the ability to read and write. Being able to read and write allows us to determine more readily the course of our lives as we push beyond simply comprehending language and reproducing it to transforming who we are and what we are able to do in the world. UNESCO defines literacy as the "ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling

individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society."²

In the United States, one of the wealthiest countries on Earth, there are 44 million people—many of whom are incarcerated—who are **functionally illiterate**. Functional illiteracy means that an individual's reading and writing skills are inadequate to manage daily living or hold down a job that requires reading skills beyond a basic level. Figure 6.C is a variation



¹Figure 6.C School-to-prison pipeline. Literacy among U.S. youth is the result of a combination of initial conditions but the result is often prison. One of the largest illiterate populations in the country is the prison population.



¹Figure 6.D Race, literacy and prison. Fourth-grade reading level is one of the measures private prison firms use to determine how large to build their prisons. Illiteracy and crime are highly related.



²The Plurality of Literacy and Its Implications for Policies and Programs" UNESCO Education Sector Position Paper, 2004, p. 13.

Structured Learning Path

The Seventh Edition of *Human Geography: Places and Regions in Global Context* provides an active structured learning path to help guide students toward mastery of key human geography concepts.

Learning Outcomes in each chapter opener guide students through the main learning goals for the chapter.

LEARNING OUTCOMES

- Explain why populations change, where those changes occur, and what the implications of population change are for the future of different places around the globe.
- Identify the two most important factors in population dynamics, birth and death, and how they shape population characteristics.
- Analyze how geography is a powerful force in the incidence of health and disease.
- Demonstrate how the movement of populations is affected by both push and pull factors, and explain how these factors are key to understanding new settlement patterns.

APPLY YOUR KNOWLEDGE

1. What can we learn by studying cultural traits? How does looking at cultural complexes help us better understand the relationship between humans and the spaces in which they live?
2. Identify two traits that are characteristic of the cultural group to which you belong. Are the traits related to the country or region in which you live? Describe the relationship or explain why there is none.

UPDATED! Apply Your Knowledge questions are integrated throughout the chapter sections, giving students a chance to stop and practice/apply their understanding. The first of these paired questions is now a lower-level knowledge-based reading question, while the second is a higher-level application question.

1. Look around you both at home and in stores. What souvenirs do you find? What do they remind you of? What geographies—of landscapes, emotions, peoples, and travels—do these material objects recall for you or for their collectors?
2. How else do we connect fact and fiction in our daily lives? Think of an example of something significant and influential that is nevertheless not really “real.” How does this connection between fact and fiction influence you?

NEW! Active learning questions are now included in all boxed features so that students can check their understanding as they read.

LEARNING OUTCOMES REVISITED

- Describe why populations change, where those changes occur, and what the implications of population change are for the future of different places around the globe.
- Demonstrate how the movement of population is affected by both push and pull factors and explain how these factors are key to understanding new settlement patterns.

Population geographers bring to demography a special perspective—the spatial perspective—that emphasizes description and explanation of the “where” of population distribution, patterns, and processes. The distribution of population is a result of many factors, such as employment opportunities, culture, water supply, climate, and other physical environment characteristics. Geographers explore these patterns of distribution and density, as well as population composition in order to comprehend the complex geography of populations. Understanding the reasons for and implications of variation in patterns and composition provides geographers with insight into population change and the potential

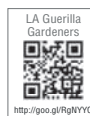
In general terms, migrants make their decisions to move based on push factors and pull factors. Remember that push factors are events and conditions that impel an individual to move from a location. Pull factors are forces of attraction that influence migrants to move to a particular location. Mobility is the capacity to move from one place to another, either permanently or temporarily. Migration, in contrast, is an actual long-distance move to a new location. Permanent and temporary changes of residence can occur for a variety of reasons. Striving for economic betterment or escaping from adverse political conditions, such as war or oppression, are the most frequent causes. Push

Learning Outcomes Revisited found at the end of each chapter summarizes chapter content correlated to the Learning Outcomes stated in each chapter opener.

NEW! The end-of-chapter **Data Analysis** activities feature takes students beyond traditional review material. Students further their understanding as they manipulate media, collect data, and use interactive mapping.

DATA ANALYSIS

In this chapter we have looked at a central component of human-environmental interactions: the geography of food and agriculture, from the global to the household and individual level. In looking at this basic aspect of life—producing and consuming food—the issue of space, economy, and politics play a huge role as seen in the debates over the Green Revolution, the Biorevolution, food sovereignty, anti-GMO resistance movements and the concept of “food deserts.” To look closer at how and where we produce food, watch the story of Ron Finley, a “guerilla gardener” in South Central Los Angeles and answer these questions.]



1. What does Ron Finley say about fast food *versus* drive-by-shootings in his communities?
2. Why is “food the problem, and food is the solution”?

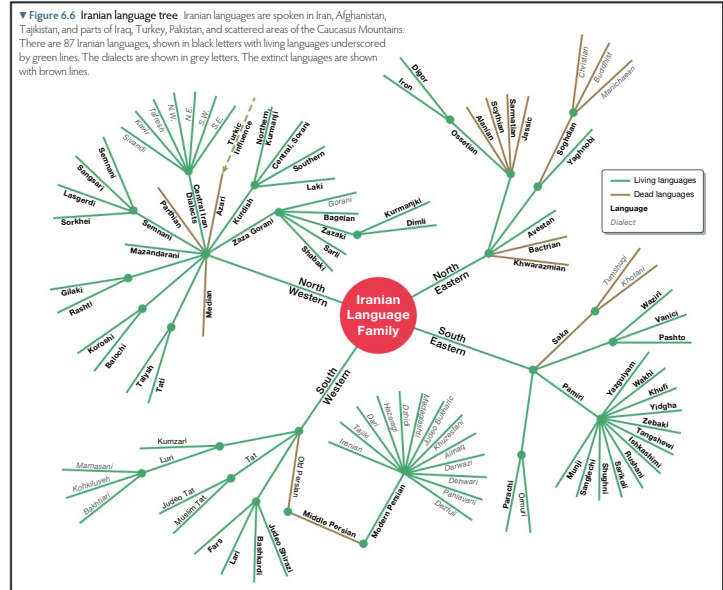
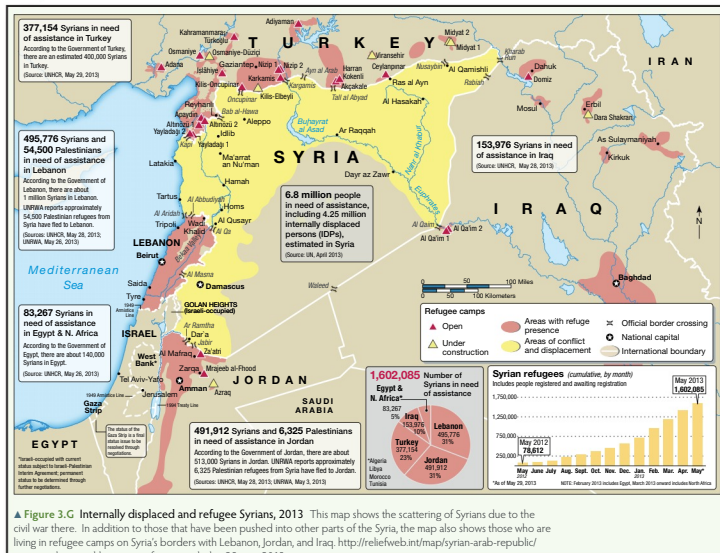
3. Where in the city does Finley plant his gardens?
4. What is Los Angeles Green Grounds and how do they work?
5. How is gardening like art? How does Finley talk about soil?
6. How does guerilla gardening change a community? How are children a vital component of this process?
7. What does Finley say about flipping the script and making gardening “gangster”?
8. Do an Internet search on “guerilla gardeners.” What other cities have guerilla gardener groups? Does your city? Would you consider starting a guerilla garden?

Cutting-Edge Cartography & Visual Program

The superior cartography of *Human Geography: Places and Regions in Global Context* comprises scores of rich, diverse, and fully updated maps that help professors better teach their students the important spatial elements inherent to human geography.

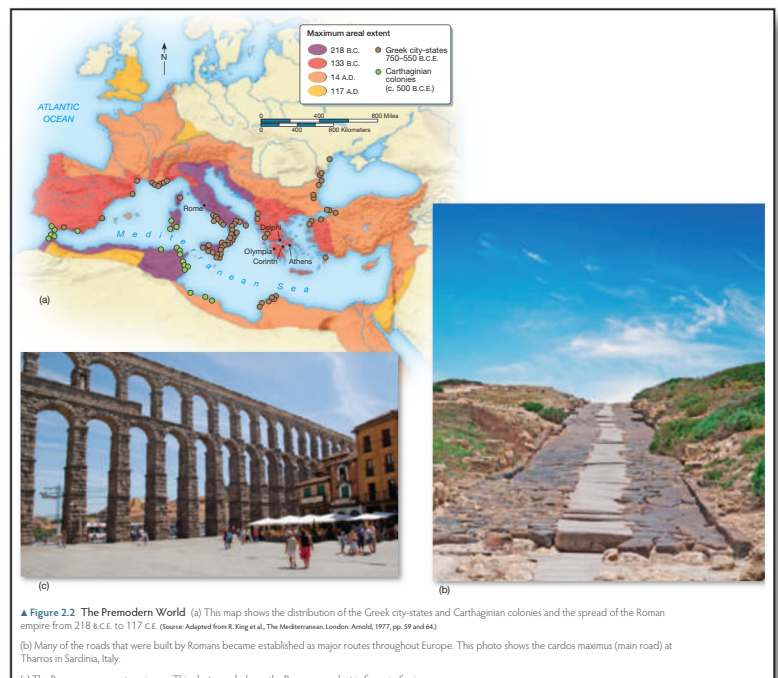
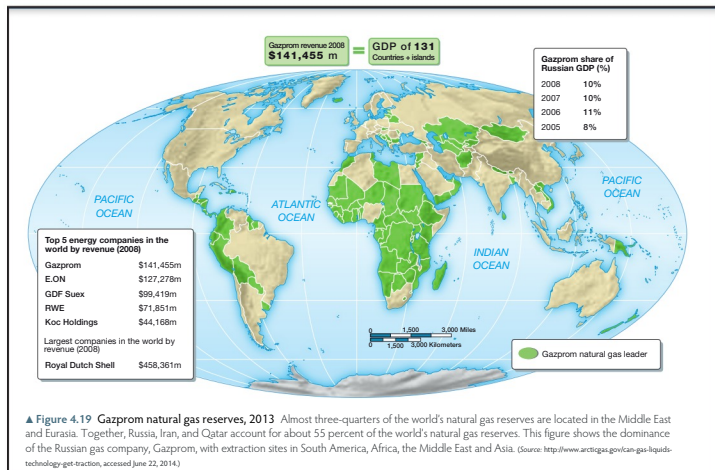
Current data

Up-to-date information gives readers access to the most current demographic statistics and data.



Mental maps & diagrams

These graphics depict people's perceptions of concepts and geography, highlighting the ways in which everyday phenomena and data can be mapped.



Compound figures

The book features many compound figures that combine maps with photographs and/or illustrations. These figures capture student interest by integrating spatial, real-world, and conceptual information.

Engaging, Relevant Applications

Provocative applications increase student interest, fostering awareness of current issues and developing trends that impact the world and their lives.

UPDATED!
Geography Matters
 explore contemporary real-world applications of key chapter concepts and themes. Authored by expert contributors, the *Geography Matters* features demonstrate to students that the focus of human geography is on real-world problems.

1.1 Geography Matters

Why Geography Matters

By Richard Florida, University of Toronto

Since the advent of steam locomotives and the telegraph, there have been countless predictions about how technology will put an end to the constraints of geography. Some believe that day has finally come. The Economist magazine proclaimed the "death of distance" in 1995 (<http://www.economist.com/node/198989>). A decade later, The New York Times columnist Tom Friedman proclaimed: "The World Is Flat (Farrar, Straus, Giroux, 2005). Between airplanes, the Internet, social media, and smart phones, the argument goes, the distance that once separated us has contracted to nothing; no matter where we live, we can all work and compete on the same terms. But dig a little deeper and you'll realize that place and geography matter more today than they ever did. And not just in some abstract academic way, but in your daily lives.

Why Where Matters

We tend to focus on two big decisions, who we choose as our life partner and what we do for work. But there is a third big decision—who you choose to live. The decision about where we may be the most important, because it has a huge bearing on the others (Richard Florida, *Who's Your City?* Basic Books, 2010).

Where you choose to live affects every aspect of your being. It influences the income you can potentially earn, and how far you can develop your skills. It has a bearing on the friends and romantic partners you can potentially meet, the networks you can build, and the options that will be available to your children. It shapes your values and your

politics. It plays a role in how happy and healthy you are, and in your overall quality of life.

It's something of a paradox. As globalized as we may be, wealth and power are more concentrated and clustered than ever before. Location matters. It is true that communications are instantaneous and jumps that used to take months now take only hours, but the key factors that determine whether a place prospers are unevenly distributed, some are more endowed with them than others.

Welcome to the Spiky World

When we create graphs of economic output, population, and innovation on a map, some places, especially those in the United States, Western Europe, and Asia, tower over the rest. Just look at the level of innovation in Tokyo. The world is anything but flat: it is spiky (Figure 1.1).

Those high levels of innovation and a disproportionate share of the world's economic activity occur in the geographic clusters called megalopolis—globally dispersed cities and their suburbs that grow and evolve into coherent geographic entities. These include great Bos-Wash (Boston-New York-Washington) Corridor, which would rank as the world's fourth largest economy, behind the United States itself and China and Japan; Am-Bru-Trip spanning Amsterdam, Antwerp and Brussels; and the area that runs from London to Leeds, Manchester, Liverpool, and Birmingham. It holds the globe's 40 leading megalopolis produce two-thirds of the world's economic output and nine in ten of its technological innovations, while housing less than one in five of its people.



▲ Figure 1.1 A Spiky World.

Urban Planet

Big cities have become the core social and economic organizing units of our time, replacing the farm and the factory of previous epochs. As the great urbanist Jane Jacobs was perhaps the first to document in her book *The Economy of Cities* (Random House, 1969), big cities are cauldrons of innovation, when diverse people live and work in close quarters, they come up with new ideas that improve the productivity of existing relations and generate new ones.

The geographic clustering of diverse and talented people is what makes cities different than all other biological and social organisms. Typically when organisms get bigger their metabolisms slow down, but as cities get larger and larger their "urban metabolism"—measured variously as their economic activity or ability to innovate—speeds up (Bettencourt, Lobo, et al., "Growth, Innovation, Scaling, and the Pace of Life in Cities," *Proceedings of the National Academy of Sciences of the United States of America*, <http://www.pnas.org/content/104/17/3732/1>).

The geographic clustering of people will only grow. Over the course of the next century, the world's urban populations are projected to increase by as many as 5 billion people. Most of that will be happening in the rapidly urbanizing areas of South East Asia and Africa. To accommodate them, existing cities will expand substantially and hundreds of cities are likely to emerge (<http://urbaninstitute.org/visualizing/contemporary/urbanization-as-opportunity-1>). Ensuring that those cities are vibrant, sustainable, and functional

will be the grandest of the grand challenges humanity will ever face. Our success or failure will have a bearing on everything from our ability to mitigate poverty and climate change to how successfully the world continues to democratize.

Distance is not dead and geography is far from over. The fact is, place matters more today than it ever has.

Richard Florida is director of the Martin Prosperity Institute at the University of Toronto's Rotman School of Management, Chalk Board's Research Professor at New York University, and senior editor at *The Atlantic*, where he co-edited *Cities*.

1. Use the online "Place Finder" tool (<http://www.creativeclass.com>). "Who's your city? Place Finder" to identify the city that is best suited to you. Come up with three to five cities you think you might want to live and work in and then use the Place Finder tool to rate and rank them. Which is your best city and why?
2. According to Figure 1.1, neighboring cities in the orange colored areas are growing into large megalopolises. Some of these even cross national boundaries and in some respects have more in common with each other than their respective countries. It is possible that city regions will become more significant units of place than nation states!

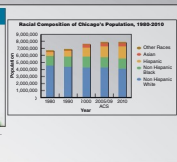
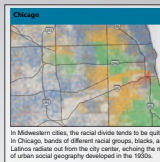
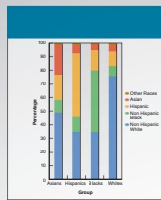
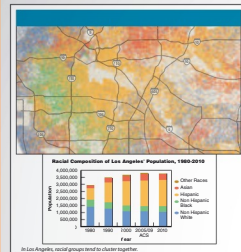


▲ Figure 1.3 Mega-regions.

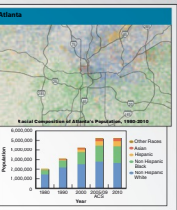
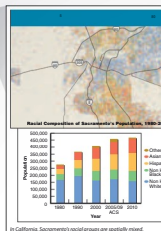
12.1 Visualizing Geography

Spatial Segregation

The racial and ethnic composition of the United States has steadily become more diverse—a result of immigration and differential birth rates. Studies of racial segregation within U.S. metropolitan areas have found that, overall, the degree of segregation peaked between 1960 and 1970. Between 1980 and 2010 racial segregation declined, but at a very slow pace. In 2010 the average white person in metropolitan America lived in a neighborhood that was 75 percent white, while the average African American lives in a neighborhood that was only 35 percent white and as much as 45 percent black. Hispanics and Asians are considerably less segregated than African Americans, and their segregation levels have remained steady for several decades. In addition, since both these groups are growing, there is a tendency for their neighborhoods to become more homogeneous. As a result, these groups live in more isolated settings than they did in the 1980s.



In Midwestern cities, the racial divide tends to be quite sharp. In Chicago, bars of different racial groups, blacks, and Latinos isolate not from the city center, but from the megalopolis of urban social geography developed in the 1950s.



In Atlanta, there is a simple north-south division, with whites (and a few enclaves of Asians) in the northern half of the metro area, and African Americans in the southern half.

11.3 Window on the World

The Pearl River Delta: An Extended Metropolis

The Pearl River Delta (Figure 11.1) is one of the fastest-growing urban regions in the world. Anchored by the major metropolitan centers of Guangzhou, Hong Kong, Macao, Shenzhen, and Zhuhai, it is an extended metropolitan region—being Hong Kong and Shenzhen are the others—that has been followed by the Chinese government to be among of capitalist growth since World War II. Shenzhen was introduced in the late 1970s.

Hong Kong (Figure 11.1) was a British colony until 1997. It is now a metropolis of 7.4 million with a thriving industrial and commercial base that is recognized as a capitalist economic dynamo by the Chinese government, which has created a Special Administrative District for the metropolis. As a result, Hong Kong citizens have retained their British-based legal system and



▲ Figure 11.1 The City of Hong Kong. The city is home to thousands of corporations of various sizes from Hong Kong, China. As a result, Hong Kong remains a major world city—a major financial hub with a thriving commercial sector and a population of 7.4 million.



▲ Figure 11.2 Pearl River Delta. One of the fastest-growing regions of the world, the Pearl River Delta is an extended metropolitan region of more than 50 million people.

guaranteed rights of property ownership and democracy. Hong Kong is the world's largest container port, the third-largest center for foreign exchange trade, the world's largest stock market, and the world's largest free economy. Hong Kong's financial success encouraged the Chinese government to establish two of its first Special Economic Zones (SEZ) in nearby Shenzhen and Zhuhai. Designed to attract foreign capital, technology, and management practices, these SEZs were established as export-processing zones that offered cheap labor and land, along with tax breaks, to transnational corporations. Investors from Hong Kong and Taiwan responded quickly and enthusiastically. By 1995, more than 15,000 manufacturers from Hong Kong alone had set up businesses in Guangdong Province, and a similar number had established subcontracting relationships, converting out assembly-line work to Chinese companies in the Pearl River Delta. Meanwhile, the Chinese government designated the entire delta region an Open Economic Region, where local governments, individual enterprises, and firms households enjoy a high degree of autonomy in economic decision making.

The relaxation of state control over the regional economy allowed the region's dense and growing rural population to migrate to urban areas in search of assembly-line jobs in its own rural areas and thereby agricultural production from peddling-rice cultivation to more profitable activities such as



▲ Figure 11.3 Infrastructure investment. Heavy holiday traffic on the new Guangzhou Metro in central China's Guangdong Province.

modern farming activities, livestock husbandry and fishery. Economic freedom also facilitated rural industrialization—mostly low-tech, small-scale, labor-intensive, and widely scattered across the countryside. The area between Guangzhou, Hong Kong, and Macao has quickly emerged as an especially important area because of its relatively cheap land and labor and because of significant levels of investment by regional and local governments in the transport and communications infrastructure (Figure 11.3).

The metropolitan cores of the region, aiming to increase their competitiveness and prominence in the globalizing world economy, have invested heavily in infrastructure improvements. The Guangdong provincial government, for example, invested more than \$110 billion (between 1998 and 2004) in infrastructure construction—including a metro system and an elevated railway network to link the city's new international airport, value additions, and port. Throughout the region, enormous investments have been made in developing infrastructure projects geared to the needs of local and international capital. These include major airports, high-speed railroads, highways, waterway, ground stations, port installations, metro and light rail networks, and new water management systems. In turn, these projects have attracted business and technology parks, financial centers, and recent companies in a loose but tight urban development.

Today, the Pearl River Delta provides a thriving export-processing platform that has driven double-digit annual

economic growth for much of the past two decades. The region's GDP grew from just over \$150 billion in 1980 to nearly \$152.70 billion in 2010. During that period, the average real rate of GDP growth in the Pearl River Delta Economic Zone exceeded 14 percent, well above the People's Republic of China national figure of 8 percent. By 2010 and with only 5.3 percent of the country's population, the region was contributing 50 percent of the country's GDP and 29 percent of its total trade.

Guangzhou is a metropolis with a 2010 population of around 10 million (Figure 11.4). Shenzhen has grown from a population of just 190,000 in 1975 to 8.1 million in 2010, with an additional 2 million in the surrounding metropolis. The southern border of the Shenzhen Special Economic Zone adjoins Hong Kong, but the northern border is walled off from the rest of China by a classified fence to prevent smuggling and to keep back the mass of people trying to migrate illegally into Shenzhen and Hong Kong.



▲ Figure 11.4 Guangzhou, China. Guangzhou is an ancient Chinese city in Canton by European traders. Guangzhou has grown rapidly in recent decades, its modern architecture almost completely replacing the old city.

Window on the World take a key concept and explore its application in a particular location. This feature helps students to appreciate the relevance of geographic concepts to world events, and brings some far-flung places closer to their comprehension.

UPDATED! Visualizing Geography
 incorporate edge, modern applications and visualizations of geographic data. These interesting and challenging visualizations are unique, and set apart Knox & Marston's visual program.

Continuous Learning Before, During & After Class with MasteringGeography

MasteringGeography™ delivers engaging, dynamic learning opportunities—focusing on course objectives and responsive to each student’s progress—that are proven to help students absorb geography course material and understand challenging geographic processes and concepts.

BEFORE CLASS

Mobile Media & Reading Assignments Ensure Students Come to Class Prepared

NEW! mobile-ready Quick Response (QR) codes integrated throughout the chapters give students instant access to online data sets, readings, and media.

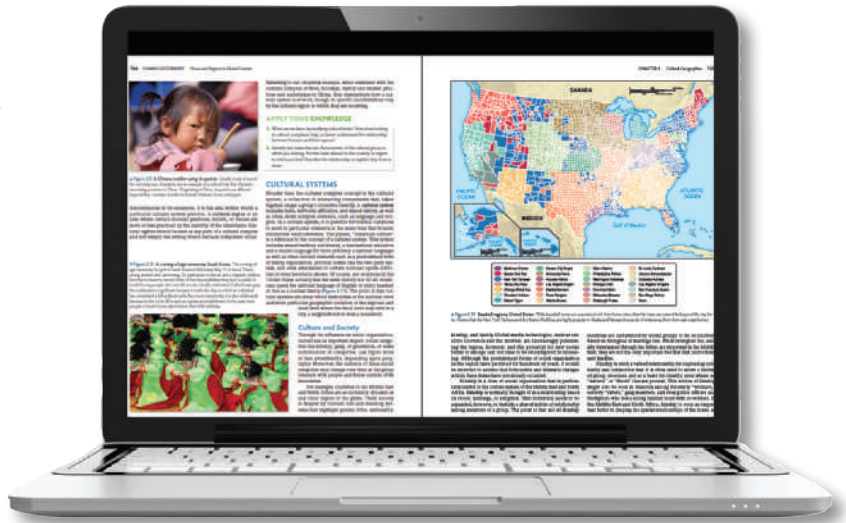


NEW! Dynamic Study Modules personalize each student’s learning experience. Created to allow students to acquire knowledge on their own and be better prepared for class discussions and assessments, this mobile app is available for iOS and Android devices.

Pearson eText in MasteringGeography gives students access to the text whenever and wherever they can access the internet.

Features of Pearson eText:

- Now available on smartphones and tablets.
- Seamlessly integrated videos and other rich media.
- Fully accessible (screen-reader ready).
- Configurable reading settings, including resizable type and night reading mode.
- Instructor and student note-taking, highlighting, bookmarking, and search functionality.



Reading Questions ensure that students complete the assigned reading before class and stay on track with reading assignments. Reading Questions are 100% mobile ready and can be completed by students on mobile devices.

DURING CLASS

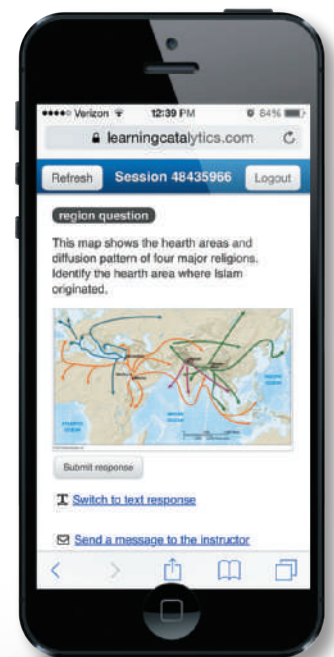
Learning Catalytics & Engaging Media

“My students are so busy and engaged answering Learning Catalytics questions during lecture that they don't have time for Facebook.”

DECLAN DE PAOR,
OLD DOMINION UNIVERSITY

What has professors and students excited? **Learning Catalytics**, a “bring your own device” student engagement, assessment, and classroom intelligence system, allows students to use their smartphone, tablet, or laptop to respond to questions in class. With Learning Catalytics, you can:

- Assess students in real-time using open-ended question formats to uncover student misconceptions and adjust lecture accordingly.
- Automatically create groups for peer instruction based on student response patterns, to optimize discussion productivity.



Enrich Lecture with Dynamic Media

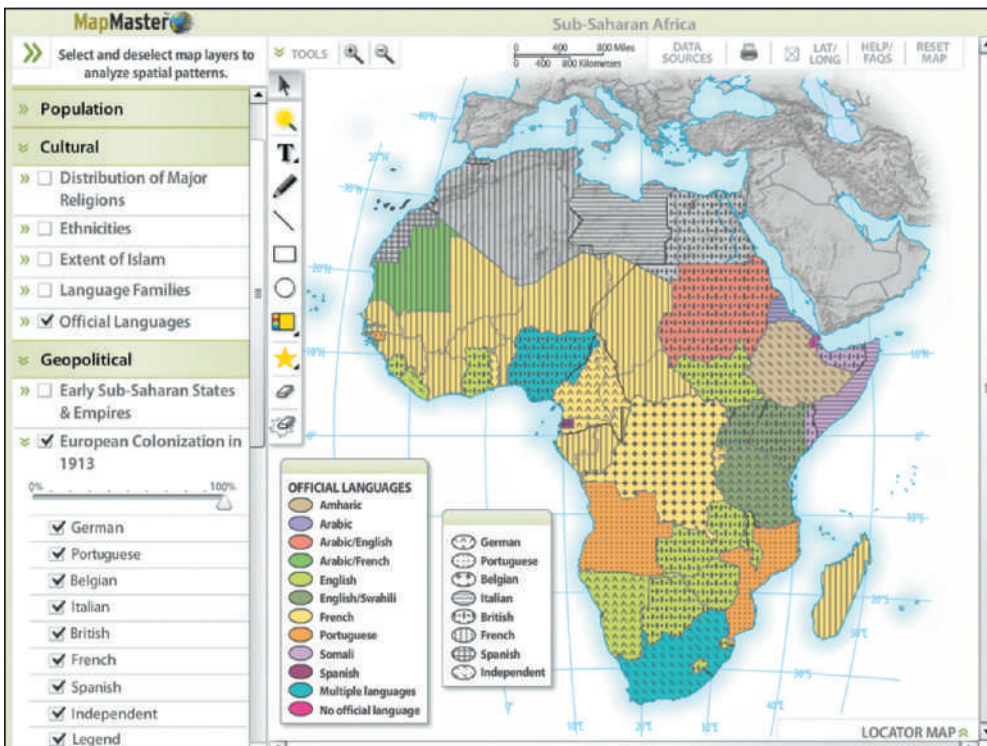
Teachers can incorporate dynamic media into lecture, such as Videos, MapMaster Interactive Maps, and Geoscience Animations.

AFTER CLASS

Easy to Assign, Customizable, Media-Rich, & Automatically Graded Assignments



NEW! Geography Videos from such sources as the BBC and the *Financial Times* are now included in addition to the videos from Television for the Environment's *Life and Earth Report* series in MasteringGeography.

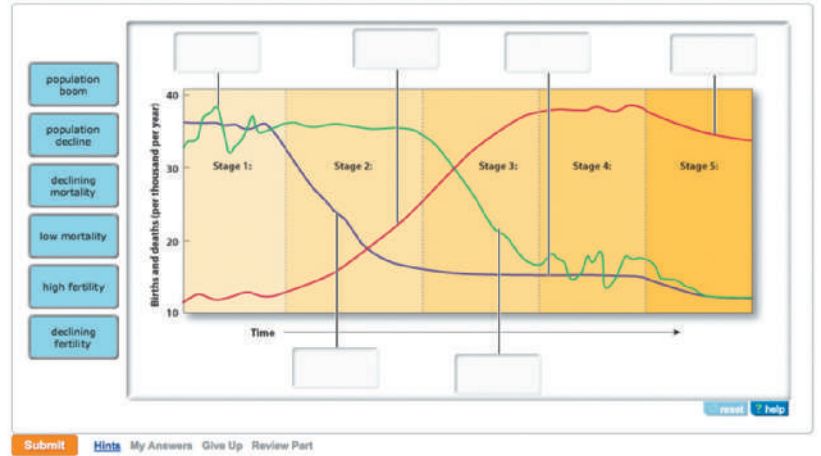


MapMaster Interactive Map Activities are inspired by GIS, allowing students to layer various thematic maps to analyze spatial patterns and data at regional and global scales. This tool includes zoom and annotation functionality, with hundreds of map layers leveraging recent data from sources such as NOAA, NASA, USGS, United Nations, and the CIA.

NEW! GeoTutors. These highly visual & data-rich coaching items with hints and specific wrong answer feedback help students master the toughest topics in geography.

The activity below shows the five-stage demographic transition model, including birth rates, death rates, and the total population caused by natural increase during each stage.

Drag the appropriate labels to their respective targets.

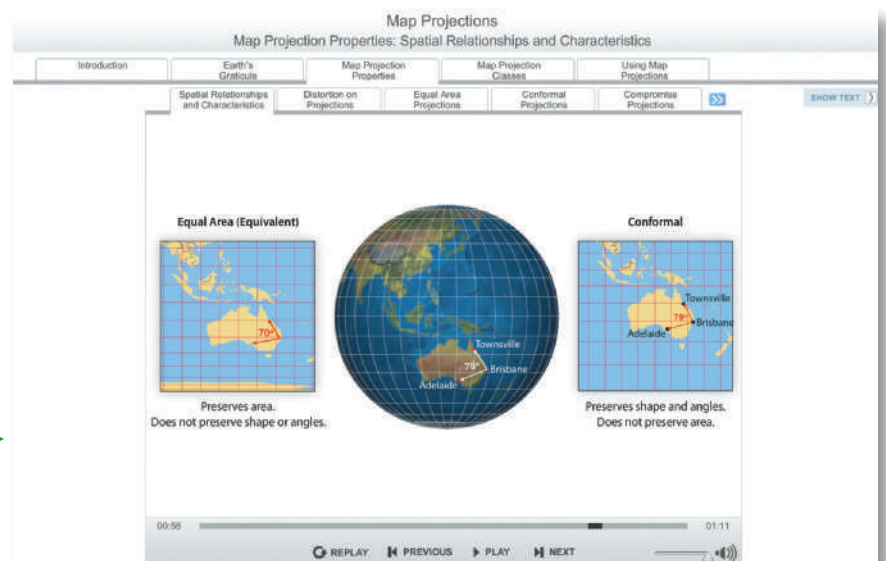


Demographic transition is not simply a theoretical model; it can be effectively applied to understand the state of development in countries.



UPDATED! Encounter (Google Earth) activities provide rich, interactive explorations of human geography concepts, allowing students to visualize spatial data and tour distant places on the virtual globe.

Map Projections interactive tutorial media help reinforce and remediate students on the basic yet challenging fundamental map projection concepts.







HUMAN GEOGRAPHY

Places and Regions in Global Context

7TH Edition

Paul L. Knox
Virginia Tech

Sallie A. Marston
University of Arizona

PEARSON

Senior Geography Editor: Christian Botting
Executive Marketing Manager: Neena Bali
Program Manager: Anton Yakovlev
Director of Development: Jennifer Hart
Development Editor: Karen Gulliver
Media Producer: Ziki Dekel
Project Manager: Sean Hale
Editorial Assistant: Amy De Genaro
Full Service/Composition: Lumina Datamatics, Inc.
Full Service Project Manager: Lindsay Bethoney
Illustrations: Kevin Lear, International Mapping
Design Manager: Derek Bacchus
Interior and Cover Design: Tamara Newnam
Photo & Text Permissions Manager: Rachel Youdelman
Photo Researcher: Lauren McFalls, Lumina Datamatics, Inc.
Text Permissions Researcher: Mark Schaefer
Operations Specialist: © Maura Zaldivar-Garcia
Cover Photo Credit: Russell Watkins/Department for International Development/Reuters

Copyright © 2016, 2013, 2010, 2007, 2004, 2001 Pearson Education, Inc. All Rights Reserved. Printed in the United States of America. This publication is protected by copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise. For information regarding permissions, request forms and the appropriate contacts within the Pearson Education Global Rights & Permissions department, please visit www.pearsoned.com/permissions/.

Acknowledgements of third party content appear on page 468, which constitutes an extension of this copyright page.

PEARSON, ALWAYS LEARNING, MasteringGeography are exclusive trademarks in the U.S. and/or other countries owned by Pearson Education, Inc. or its affiliates.

Unless otherwise indicated herein, any third-party trademarks that may appear in this work are the property of their respective owners and any references to third-party trademarks, logos or other trade dress are for demonstrative or descriptive purposes only. Such references are not intended to imply any sponsorship, endorsement, authorization, or promotion of Pearson's products by the owners of such marks, or any relationship between the owner and Pearson Education, Inc. or its affiliates, authors, licensees or distributors.

Library of Congress Cataloging-in-Publication Data

Knox, Paul L.

Human geography : places and regions in global context / Paul L. Knox, Virginia Tech, Sallie A. Marston, University of Arizona. — Seventh edition.

pages cm

Includes index.

ISBN 978-0-321-98424-1

1. Human geography. I. Marston, Sallie A. II. Title.

GF41.K56 2015

304.2—dc23

2014012298

1 2 3 4 5 6 7 8 9 10—CRK—15 14 13 12 11

PEARSON

www.pearsonhighered.com

ISBN-10: 0-321-98424-2; ISBN-13: 978-0-321-98424-1 (Student Edition)
ISBN-10: 0-321-98761-6; ISBN-13: 978-0-321-98761-7 (Instructor's Review Copy)

Brief Contents

- 1** Geography Matters 2
- 2** The Changing Global Context 30
- 3** Geographies of Population and Migration 64
- 4** People and Nature 106
- 5** Cultural Geographies 152
- 6** Language, Communication, and Belief 186
- 7** Interpreting Places and Landscapes 228
- 8** Geographies of Economic Development 258
- 9** Geographies of Food and Agriculture 298
- 10** Political Geographies 342
- 11** Urbanization and the Global Urban System 392
- 12** City Spaces: Urban Structure 428

Contents

Book & MasteringGeography™ Walkthrough i

Preface xxi

About the Authors xxv

Digital & Print Resources xxvi



1 Geography Matters 3

Why Geography Matters 4

Why Places Matter 4

The Influence of Places 4 • The Meaning of Places 5

Studying Human Geography 6

Geographical Relationships 7

The Basic Tools and Methods of Human Geographers 7

1.1 GEOGRAPHY MATTERS Why Geography Matters 8

1.2 VISUALIZING GEOGRAPHY Maps 10

Geographic Information Systems (GIS) 12

Spatial Analysis 13

Location 13

1.3 WINDOW ON THE WORLD Greenwich, England 14

Distance 15 • Space 17 • Accessibility 17

1.4 SPATIAL INEQUALITY Assessing Spatial Inequality 18

Spatial Interaction 19

xiv

Regional Analysis 21

Regionalization 21 • Landscape 22 • Sense of Place 22

Developing a Geographical Imagination 25

Future Geographies 26

Conclusion 27 • Key Terms 28 •

Review & Discussion 28 • Unplugged 28 • Data Analysis 29

2 The Changing Global Context 31

The Premodern World 32

Hearth Areas 32 • The Growth of Early Empires 33 • The Geography of the Premodern World 35

An Interdependent World Geography 37

2.1 GEOGRAPHY MATTERS The Expansion and Disintegration of States 38

Core and Periphery in the New World-System 42 • Organizing the Periphery 45 • The Struggle for Independence 49

Contemporary Globalization 50

Key Issues in a Globalizing World 51

2.2 VISUALIZING GEOGRAPHY Commodity Chains 52

2.3 WINDOW ON THE WORLD America's Drowning Atlantic Seaboard 56

2.4 SPATIAL INEQUALITY Core-Periphery Disparity 58

Westernization and Cultural Imperialism 59

Future Geographies 60

Conclusion 61 • Key Terms 62 • Review & Discussion 62 • Unplugged 63 • Data Analysis 63





3 Geographies of Population and Migration 65

The Demographer's Toolbox 66

Censuses and Vital Records 66 • Limitations of the Census 67

Population Distribution and Composition 67

Population Distribution 67 • Population Density 69 • Population Composition 69

3.1 SPATIAL INEQUALITY Population Segregation in the United States 71

Age-Sex Pyramids 72 • Population Cohorts 72 • The Effect of Population Cohorts 74

3.2 VISUALIZING GEOGRAPHY Education Abroad 76

Population Dynamics and Processes 78

Birth (or Fertility) Rates 78 • Total Fertility Rate 78 • Death (or Mortality) Rates 78 • Infant Mortality and Life Expectancy 79 • Medical and Health Geographies 81

3.3 GEOGRAPHY MATTERS The Global and the Local in Health and Disease 82

Demographic Transition Theory 85 • The Demographic Trap 85 • Education, Women, and Demographic Transformation 86

Population Movement and Migration 86

Mobility and Migration 86 • Documenting and Explaining Migration 88 • Push and Pull Factors and Types of Migration 88 • International Voluntary Migration 89 • Labor Migration 89

3.4 WINDOW ON THE WORLD Internal Displacement 90

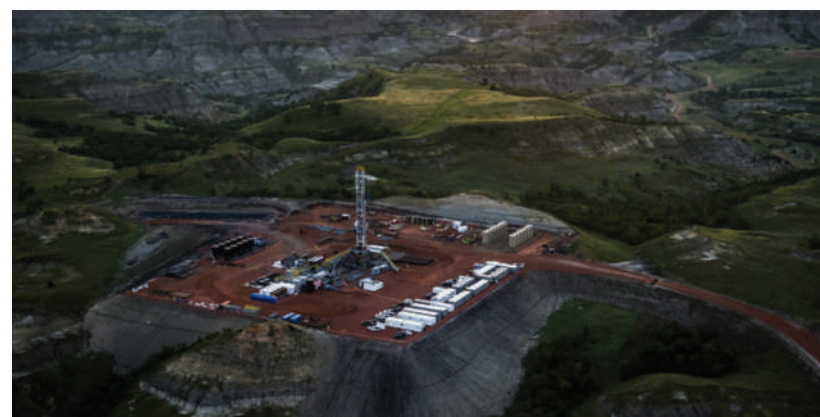
Amenity Migration 93 • International Forced Migration 93 • Internal Voluntary Migration 95 • Internal Forced Migration 95

Population Debates and Policies 97

Population and Resources 97 • Population Policies and Programs 98 • International Population Policies 99 • The UN Millennium Development Goals 100 • Progress on the MDGs 101

Future Geographies 101

Conclusion 103 • Key Terms 104 • Review & Discussion 104 • Unplugged 104 • Data Analysis 105



4 People and Nature 107

Nature as a Concept 108

The Earth Summits 108 • Alternative Solutions to Environmental Problems 110 • Nature and Society Defined 111 • The Complex Relationship of Environmental Impacts, Population, and Affluence 111

4.1 GEOGRAPHY MATTERS The Political Ecology of Carbon Offsets 112

Nature–Society Interactions 115

Environmental Attitudes and Philosophies in the United States 115

Classical Environmental Philosophies 116

Contemporary Environmental Philosophies 117

Global Change in the Anthropocene 118

European Colonial Expansion 118 • Global Climate Change 122 • What is Climate Change? 122 • How Do We Know Climate Is Changing? 123 • What Are Some Projected Impacts of These Changes? 123 • What's to Be Done? 125 • The Climate Change Controversy 125

Energy, Land-Use Change and Environment 127

Energy Needs and Environmental Impacts 127

4.2 SPATIAL INEQUALITY Energy Consumption and Production 128

Biomass and Hydropower 130 • Land Use and Environmental Impacts 134

4.3 VISUALIZING GEOGRAPHY Renewable Energy Resources 136

Water Use and Access 140

The State of the Global Environment 142

Global Environmental Governance 142

4.4 WINDOWS ON THE WORLD Ecotourism 144

Environmental Sustainability 146

Future Geographies 147

Conclusion 148 • Key Terms 150 • Review & Discussion 150 • Unplugged 150 • Data Analysis 151



5 Cultural Geographies 153

Culture as a Geographical Process 154

Culture 154 • Geography and Culture 155 • A Two-Way Relationship 155 • Traditions of Cultural Geography 156

Building Cultural Complexes 157

Cultural Landscape 157

5.1 VISUALIZING GEOGRAPHY UNESCO World Heritage Landscapes 158

Critique of Sauer's Cultural Landscape 160 • European Approaches to Culture and Place 160 • Cultural Traits 161 • Cultural Complexes and Regions 161

5.2 GEOGRAPHY MATTERS Shaping Place through Fact and Fiction, Practice and Representation 162

Cultural Systems 164

Culture and Society 164

Culture and Identity 166

Sex and Gender 166

Feminism and Gender 168 • Gender and Class 168 • Ethnicity 168

5.3 SPATIAL INEQUALITY The Global Gender Gap 169

Race 170 • Whiteness, Blackness, and Rap Music 171 • Geographies of Disability 172 • Children's Geographies and Geographies of Childhood 172

Emergent Cultural Geographies 173

Actor-Network Theory 173 • Non-Representational Theory 173 • Emotional Geographies 174 • Materialism 175

Globalization and Cultural Change 176

Americanization and Globalization 176 • A Global Culture? 177

5.4 WINDOW ON THE WORLD Geographies of Beauty and Plastic Surgery 178

Future Geographies 180

Conclusion 182 • Key Terms 183 • Review & Discussion 184 • Unplugged 184 • Data Analysis 185

6 Language, Communication, and Belief 187

Geographies of Language 188

What Is Language? 188 • The World of Language 189

Language Relationships and Dynamics 193

Language Family 193 • Language Trees 193 • Language Hearths 196 • Identify and Language 197

6.1 GEOGRAPHY MATTERS Language Revival 198



Communication 200**6.2 SPATIAL INEQUALITY** Geographies of Literacy 202

Language of Social Media 204 • Sign
Language 205 • Sensual language 205

Religious Geographies 206

Global Distribution of the World's Religions 206 • Migration
and Religion 206 • The World's Major Religions 207 •
Religiosity 211

6.3 VISUALIZING GEOGRAPHY Belief Systems and
Restrictions on Behavior 212

Other Belief Systems 214

**Globalization, Communication, and
Religion 215**

The Influence of Modern Communications 216

6.4 WINDOW ON THE WORLD Fashion Veiling 217

Reaction: Islam and Cultural Nationalism 218

Religion and Landscape 219

Sacred Spaces and Pilgrimages 220

Future Geographies 224

Conclusion 224 • Key Terms 226 • Review &
Discussion 226 • Unplugged 226 • Data Analysis 227

Place-Making 232

Territoriality 232 • Street Art 233 • People and Places,
Insiders and Outsiders 233

7.1 SPATIAL INEQUALITY Outsider Art 235

Experience and Meaning 235 • Images and Behavior 237

Landscapes as Human Systems 239

The Social Meaning of Landscapes 239 • Landscapes of
National Identity 241

7.2 VISUALIZING GEOGRAPHY Route 66 242**7.3 WINDOW ON THE WORLD** Trafalgar Square and
British National Identity 244**Coded Spaces 247**

Commercial Spaces 247

Globalization and Place-Making 248

Going Slow 248 • Places as Objects of Consumption 249

7.4 GEOGRAPHY MATTERS The Geography of Stardom:
Celebrity and Place 250**Future Geographies 254**

Conclusion 255 • Key Terms 256 • Review &
Discussion 256 • Unplugged 257 • Data Analysis 257

**7** Interpreting Places and
Landscapes 229**Behavior, Knowledge, and Human
Environments 230****8** Geographies of Economic
Development 259**Patterns of Economic Development 260**

Technological Change and Economic Development 260 • The
Unevenness of Economic Development 260 • Measuring
Levels of Economic Development 261 • Resources and
Development 262

8.1 VISUALIZING GEOGRAPHY Technological Change and Economic Development 264
Resources and Development 266

The Economic Structure of Countries and Regions 267

Knowledge and Economics 269 • International Trade 269

8.2 WINDOW ON THE WORLD China's Economic Development 270

8.3 SPATIAL INEQUALITY Gender and Economic Development 272

Interpretations of International Patterns of Development 275

Regional Economic Development 277

The Economics of Location 277 • Regional Economic Linkages 277 • The Modification of Regional Core-Periphery Patterns 278

Globalization and Economic Development 282

Global Assembly Lines and Supply Chains 283 • New Geographies of Office Employment 287 • The Experience Economy and Place Marketing 289

8.4 GEOGRAPHY MATTERS How Geopolitics has Changed the World 290

Future Geographies 292

Conclusion 294 • Key Terms 295 • Review & Discussion 296 • Unplugged 296 • Data Analysis 297



9 Geographies of Food and Agriculture 299

Traditional Agricultural Geography 300

Agricultural Practices 300 • Origins and Change in Agriculture 301 • Shifting Cultivation 301 • Intensive

Subsistence Agriculture 304 • Pastoralism 306 • Culture and Society in Agriculture 306

Agricultural Revolution and Industrialization 307

The First Agricultural Revolution 307 • The Second Agricultural Revolution 308 • The Third Agricultural Revolution 308 • The Industrialization of Agriculture 310 • Nontraditional agricultural exports 311

9.1 WINDOW ON THE WORLD The Green Revolution Then and Now 312

Contract Farming 314 • Biotechnology and Agriculture 314 • Biotechnology 314 • Opposition to GMOs 315 • The Adverse Effects of Biotechnology 316

Global Change in Food Production and Consumption 318

Forces of Change 318 • National and International Agricultural Policy 318 • What Are Some Key Agricultural Policies? 319 • What Are Some Important Impacts of National and International Policies? 319 • Opposition to Globalized Agriculture 319 • Agricultural Subsidies 319 • The Organization of the Agro-Food System 320 • Agribusiness 320 • Food Supply Chain 321 • Food Regimes and Alternative Food Movements 322 • Colonialism and Food Exports 322 • Fresh Fruits and Vegetables 322 • Local Food 324 • Fast Food 325

9.2 VISUALIZING GEOGRAPHY Urban Agriculture 326

Fast Food and its Health Effects 328 • Fast Food and its Environmental Impacts 328

9.3 SPATIAL INEQUALITY Food Deserts 330

The Environment and Agricultural Industrialization 332

How the Environment Shapes Agriculture 332 • How Industrial Agriculture Affects the Environment 332

Emerging Challenges and Opportunities in the Global Food System 333

Food and Hunger 334 • Nutrition Issues 334 • Famine, Food Security and Food Safety 334 • Land Grabs 335

9.4 GEOGRAPHY MATTERS Hunger and Poverty in the United States 336

Addressing Hunger 338

Future Geographies 338

Conclusion 339 • Key Terms 340 • Review & Discussion 340 • Unplugged 341 • Data Analysis 341



10 Political Geographies 343

The Development of Political Geography 344

The Geopolitical Model of the State 344 • Boundaries and Frontiers 344

10.1 GEOGRAPHY MATTERS Politics at the Poles 350

Geopolitics and the World Order 352

States, Nations and Citizenship 352 • What is a citizen? 352 • Multinational States 353 • Russia's State and National Transformation 354 • State Theory 355 • Althusser 355 • Foucault 355 • Deleuze 356 • Biopolitics 356 • Imperialism and Colonialism 356 • Orientalism and Post-colonialism 359

10.2 WINDOW ON THE WORLD The Arab Spring and Its Aftermath 360

China and the East/West Divide 366 • The New World Order 367

10.3 VISUALIZING GEOGRAPHY Global Military Spending 368

10.4 SPATIAL INEQUALITY Global Corruption 372

After the Iraq War 373

International and Supranational Organizations and New Regimes of Global Governance 374

Transnational Political Integration 374 • Globalization, Transnational Governance, and the State 375 • The Two-Way Street of Politics and Geography 378 • The Politics of Geography 378 • The Geography of Politics and Geographical Systems of Representation 383

Future Geographies 387

Conclusion 388 • Key Terms 389 • Review & Discussion 389 • Unplugged 390 • Data Analysis 391



11 Urbanization and the Global Urban System 393

Urban Geography and Urbanization 394

Studying Urbanization 394 • Urbanization and Changing Human Geographies 395

Foundations of the Global Urban System 397

11.1 SPATIAL INEQUALITY The Prosperity of Cities 398

11.2 GEOGRAPHY MATTERS Cities and Economic Development 400

European Urban Expansion 402 • Industrialization and Urbanization 403 • Colonial Cities 405

11.3 VISUALIZING GEOGRAPHY The Urbanization Process 406

Transport Networks and Urban Systems 408 • Primacy and Centrality in the Global Urban System 409

World Urbanization Today 412

World Cities 412 • Megacities 414 • Mature Metropolises 416

11.4 WINDOW ON THE WORLD The Pearl River Delta: An Extended Metropolis 418

Cities and Climate Change 419

Future Geographies 422

Conclusion 424 • Key Terms 426 • Review & Discussion 426 • Unplugged 426 • Data Analysis 427



12 City Spaces: Urban Structure 429

Spatial Patterns and Processes in North American Cities 430

The Multi-Nodal City 430

12.1 VISUALIZING GEOGRAPHY Spatial Segregation 432

The Polycentric Metropolis 434 • Problems of North American Cities 436

12.2 GEOGRAPHY MATTERS Detroit's Open Geography: Problems and potential 438

Urban Design and Planning 440

European Cities 441

Features of European Cities 441 • European Urban Design and Planning 442

Islamic Cities 444

Cities of the Periphery: Dualism 447

The Informal Economy 447 • Slums of Hope, Slums of Despair 449

12.3 WINDOW ON THE WORLD Doha, Qatar 450

12.4 SPATIAL INEQUALITY Garment Workers in Dhaka 453

The Challenges of Growth 454

Future Geographies 455

Conclusion 456 • Key Terms 457 • Review & Discussion 458 • Unplugged 458 • Data Analysis 459

Glossary 460

Photo Credits 468

Index 469

About Our Sustainability Initiatives

Pearson recognizes the environmental challenges facing this planet, as well as acknowledges our responsibility in making a difference. This book is carefully crafted to minimize environmental impact. The binding, cover, and paper come from facilities that minimize waste, energy consumption, and the use of harmful chemicals. Pearson closes the loop by recycling every out-of-date text returned to our warehouse.

Along with developing and exploring digital solutions to our market's needs, Pearson has a strong commitment to achieving carbon-neutrality. As of 2009, Pearson became the first carbon- and climate-neutral publishing company. Since then, Pearson remains strongly committed to measuring, reducing, and offsetting our carbon footprint.

The future holds great promise for reducing our impact on Earth's environment, and Pearson is proud to be leading the way. We strive to publish the best books with the most up-to-date and accurate content, and to do so in ways that minimize our impact on Earth. To learn more about our initiatives, please visit www.pearson.com/responsibility.



Preface

A nation, like a person, has a mind—a mind that must be kept informed and alert, that must know itself, that understands the hopes and needs of its neighbors—all the other nations that live within the narrowing circle of the world.

*Franklin Roosevelt, Third Inaugural Address,
Monday, January 20, 1941*

Most people have an understanding of what their own lives are like and know a good deal about their own neighborhood and perhaps even something of the larger city and state in which they live. Yet, even as the countries and regions of the world become more interconnected, most of us still know very little about the lives of people on the other side of our country, or in other societies, or about the ways the lives of those people connect to our own. To change the world, to make it a better place for all people, we need to understand not just our little corner of it, but the whole of it—the broad sweep of human geography that constitutes the larger world of which our small corners are just a part.

This book provides an introduction to human geography that will help young men and women to understand critically the world in which they live. To study human geography, to put it simply, is to study the dynamic and complex relationships between peoples and the worlds they inhabit. Our book gives students the basic geographical tools and concepts needed to understand the complexity of places and regions, and to appreciate the interconnections between their own lives and those of people in different parts of the world—to make the world a better place.

NEW TO THE SEVENTH EDITION

The seventh edition of *Places and Regions in Global Context* represents a thorough revision. Every part of the book was examined carefully with the goal of keeping topics and data current while also improving the clarity of the text and the graphics. We have also sought to enhance the utility of the book for both instructors and students.

- A new chapter (Chapter 6) on *Language, Communication, and Belief* gives a greater focus on how both language and religion reflect and influence societies, as well as how they spread around the world, and how they permeate politics and social life.
- *Spatial Inequality* features highlight the growing imbalances and inequalities in today's global society relative to the chapter's major themes.
- The reimagined *Geography Matters* features, authored by expert contributors from the community, present contemporary research and hot topics in geography subfields.
- *Data Analysis* activities at the end of each chapter give students the chance to put their understanding of key themes in the chapter into practice. Students further their understanding as they manipulate media, collect data, and use interactive mapping.
- Newly redesigned *Visualizing Geography* features consistently incorporate edgy, modern applications and visualizations of current spatial data.
- Active learning assessments are now included in all boxed features so that students can check their understanding.
- The seventh edition also incorporates a comprehensive updating of all of the data, maps, photographs, and illustrative examples.
- We have added or expanded upon quite a few topics, including climate change and issues of sustainability; rising sea levels; spatial inequality; gender and economic development; place, space and scale; landscape and art; cultural heritage; urban regeneration; and urban environmental problems; conflict zones; changing demographic issues; food, health and place; gender and sexuality; and what the near future is likely to be. These changes are designed to ensure that we offer the most up-to-date coverage in the field of human geography.
- A renewed focus on fundamentals gives students access not only to the new ideas, concepts, and theories that address the changes mentioned earlier in this text, but also to the fundamentals of human geography: the principles, concepts, theoretical frameworks, and basic knowledge.
- Over 150 new Geography Videos from the BBC and the *Financial Times* are now included in MasteringGeography. Students can access the videos on their own in the Study Area, and teachers can assign the videos with assessment activities.
- Learning Catalytics™ is a “bring your own device” student engagement, assessment, and classroom intelligence system. With Learning Catalytics™ you can:
 - Assess students in real time, using open-ended tasks to probe student understanding.
 - Understand immediately where students are and adjust your lecture accordingly.
 - Improve your students' critical-thinking skills.
 - Access rich analytics to understand student performance.
 - Add your own questions to make Learning Catalytics™ fit your course exactly.

- Dynamic Study Modules personalize each student’s learning experience. Created to allow students to acquire knowledge on their own and be better prepared for class discussions and assessments, this mobile app is available for iOS and Android devices.

OBJECTIVE & APPROACH

The objective of the book is to introduce the study of human geography by providing not only a body of knowledge about the creation of places and regions, but also an understanding of the interdependence of places and regions in a globalizing world. The approach is aimed at establishing an intellectual foundation that will enable a lifelong and life-sustaining geographical imagination: an essential tool for today’s students in order to confront tomorrow’s global, national, regional, and local challenges.

The book takes a fresh approach to human geography, reflecting the major changes that have recently been impressed on global, regional, and local landscapes. These changes include the globalization of industry and the related rapid rise of China and India as economic powerhouses, the upwelling of ethnic regionalisms on the heels of decolonization and the formation of new states, the movement of peoples around the world in search of better lives, the physical restructuring of cities, the transformation of traditional agricultural practices throughout much of the world, global environmental change and the movement for sustainability, the eruptions of war and the struggles for peace, and the emerging trend toward transnational political and economic organizations. The approach used in *Places and Regions in Global Context* provides access not only to the new ideas, concepts, and theories that address these changes, but also to the fundamentals of human geography: the principles, concepts, theoretical frameworks, and basic knowledge that are necessary to more specialized studies.

The most distinctive feature of this approach is that it emphasizes the interdependence of both places and processes in different parts of the globe. In overall terms, this approach is designed to provide an understanding of relationships between global processes and the local places in which they unfold. It follows that one of the chief organizing principles is how globalization frames the social and cultural construction of particular places and regions. This approach has several advantages. For example:

- It captures aspects of human geography that are among the most compelling in the contemporary world—the geographical bases of cultural diversity and their impacts on everyday life.
- It encompasses the salient aspects of new emphases in academic human geography—the new emphasis on sustainability and its role in the social construction of spaces and places.
- It makes for an easier marriage between topical and regional material by emphasizing how processes link them—technological innovation and the varying ways technology is adopted and modified by people in particular places.

- It facilitates meaningful comparisons between places in different parts of the world—how the core-generated industrialization of agriculture shapes gender relations in households both in the core and the periphery.

In short, the textbook is designed to focus on geographical processes and to provide an understanding of the interdependence among places and regions without losing sight of their individuality and uniqueness.

Several important themes are woven into each chapter, integrating them into the overall approach:

- the relationship between global processes and their local manifestations;
- the interdependence of people and places, especially the interactive relationships between core regions and peripheral regions;
- the continuing transformation of the political economy of the world system, and of nations, regions, cities, and localities;
- the social and cultural differences that are embedded in human geographies (especially the differences that relate to race, ethnicity, gender, age, and class).

CHAPTER ORGANIZATION

The organization of the book is innovative in several ways. First, the chapters are organized so that the conceptual framework—why geography matters in a globalizing world—is laid out in Chapters 1 and 2 and then deployed in thematic chapters (Chapters 3 through 12). Second, the conceptual framework of the book requires the inclusion of two introductory chapters rather than the usual one. The first describes the basics of a geographic perspective; the second explains the value of the globalization approach.

Third, the distinctive chapter ordering within the book follows the logic of moving from less complex to more complex systems of human social and economic organization, always highlighting the interaction between people and the world around them. The first thematic chapter (Chapter 3) focuses on human population. Its early placement in the book reflects the central importance of people in understanding geography. Chapter 4 deals with the relationship between people and the environment as it is mediated by technology. This chapter explores human–environment relations and establishes a central theme: that all human geographical issues are about how people negotiate their environment—whether the natural or the built environment.

The chapter on nature, society, and technology is followed by Chapter 5 on cultural geography. The intention in positioning the cultural chapter here is to signal that culture is the primary medium through which people operate and understand their place in the world. Chapter 6, new to this edition, gives a focus on how both language and religion reflect and influence societies, as well as how they spread around the world, and how they permeate politics and social life. In Chapter 7,

the impact of cultural processes on the landscape is explored, together with the ways in which landscape shapes cultural processes.

In Chapter 8, the book begins the move toward more complex concepts and systems of human organization by concentrating on economic development. The focus of Chapter 9 is agriculture. The placement of agriculture after economic development reflects the overall emphasis on globalization. This chapter shows how processes of globalization and economic development have led to the industrialization of agriculture at the expense of more traditional agricultural systems and practices.

The final three thematic chapters cover political geography (Chapter 10), urbanization (Chapter 11), and city structure (Chapter 12). Devoting two chapters to urban geography, rather than a more conventional single chapter, is an important indication of how globalization increasingly leads to urbanization of the world's people and places.

Features

The hallmark feature of our book is the global framework that promotes a strong connection between topical and regional material by emphasizing how their processes are linked (e.g., technological innovation and the varying ways technology is adopted and modified by people and places). This makes for a contemporary approach to human geography, reflecting many trends in the discipline, such as the globalization of industry, the upwelling of ethnic regionalisms on the heels of decolonization and new state formation, and the trend toward transnational political and economic organizations. The global framework also facilitates meaningful comparisons between people and places in different parts of the world, such as how the core-generated industrialization of agriculture shapes gender relations in households, both in the core and in the periphery. It allows us to present the relevant aspects of different emphases in academic human geography (e.g., geopolitics and its role in the social construction of spaces and places). At the same time, a focus on fundamentals gives students access not only to the new ideas, concepts, and theories that address the changes mentioned earlier in this text but also to the fundamentals of human geography: the principles, concepts, theoretical frameworks, and basic knowledge. The book's thematic structure weaves several important themes into every chapter: the interdependence of people and places, especially the interactive relationships between the core and the periphery; social and cultural differences that are embedded in human geographies, especially the differences that relate to race, ethnicity, gender, age, and class; the relationship between global processes and their local manifestations; and the continuing transformation of the political economy of the world system and nations, regions, cities, and localities.

To signal the freshness of the approach, the book features a superior cartographic program, consisting of rich, diverse, and fully updated maps that help professors better teach their students the important spatial elements inherent to human geography. The cartography program features numerous compound figures that combine maps with photographs and line drawings.

The pedagogy of the book employs four different boxed features—"Geography Matters," "Visualizing Geography," "Spatial Inequality," and "Window on the World."

Geography Matters features, authored by expert guest contributors, show how geographers are using their unique perspectives and contemporary geographic tools to solve real-world problems, emphasizing how geography and the geographic method matter in the world today.

Visualizing Geography boxes treat key concepts of the chapter through modern applications and visualizations of data, helping students "see" the ways geography shapes their daily lives.

Spatial Inequality features highlight the growing imbalances and inequalities in today's global society relative to the chapter's major themes.

Window on the World boxes take a key concept and explore its application in a particular location. This feature allows students to appreciate the relevance of geographic concepts to world events and brings far-flung places closer to their comprehension.

These features are explored through each chapter's *learning path*, which guides the reader through each chapter's themes, starting with the *Learning Outcomes* at the start of each chapter, and continuing with each *Apply Your Knowledge* question pairing to ensure a student's understanding of key elements of each section. Every chapter includes *Future Geographies*, which details what global and local elements may take shape in the years ahead. We conclude each chapter with *Learning Outcomes Revisited*, designed to encapsulate the imperative elements of the chapter's narrative.

CONCLUSION

The idea for this book evolved from conversations between the authors and colleagues about how to teach human geography in colleges and universities. Our intent was to find a way not only to capture the exciting changes that are rewriting the world's landscapes and reorganizing the spatial relationships between people but also to demonstrate convincingly why the study of geography matters. Our aim was to show why a geographical imagination is important, how it can lead to an understanding of the world and its constituent places and regions, and how it has practical relevance in many spheres of life.

ACKNOWLEDGMENTS

We are indebted to many people for their assistance, advice, and constructive criticism in the course of preparing this book. Among those who provided comments on drafts of the various editions of this book are the following professors:

David Aagesen (*SUNY: Geneseo*)
 Christopher A. Airriess (*Ball State University*)
 Stuart Aitken (*University of California at San Diego*)
 Matthew Anderson (*Montana State University, Billings*)
 Kevin Archer (*University of South Florida*)
 Sarah Bednarz (*Texas A&M University*)

Brian J. L. Berry (*University of Texas at Dallas*)
 Brian W. Blouet (*College of William and Mary*)
 George O. Brown, Jr. (*Boston College*)
 Michael P. Brown (*University of Washington*)
 Henry W. Bullamore (*Frostburg State University*)
 Edmunds V. Bunske (*University of Delaware*)
 Craig Campbell (*Youngstown State University*)
 Dylan Clark (*University of Colorado*)
 David B. Cole (*University of Northern Colorado*)
 Mario Cora (*University of Phoenix*)
 Jerry Crampton (*George Mason University*)
 Christine Dando (*University of Nebraska, Omaha*)
 Fiona M. Davidson (*University of Arkansas*)
 Ronald Davidson (*California State University, Northridge*)
 Jeff DeGrave (*University of Wisconsin at Eau Claire*)
 Daniel Dempsey (*College of the Redwoods*)
 Benjamin Dixon (*SUNY College at Oneonta*)
 Vernon Domingo (*Bridgewater State College*)
 Patricia Ehrkamp (*Miami University*)
 Nancy Ettlinger (*The Ohio State University*)
 Emily Fekete (*University of Kansas*)
 Paul B. Frederic (*University of Maine*)
 Kurtis G. Fuelhart (*Shippensburg University*)
 Gary Fuller (*University of Hawaii at Manoa*)
 Wilbert Gesler (*University of North Carolina*)
 Melissa Gilbert (*Temple University*)
 Jeffrey Allman Gritzner (*University of Montana*)
 David Gwynn (*Michigan State University*)
 Joshua Hagen (*Marshall University*)
 Stephen Healy (*Worcester State University*)
 Douglas Heffington (*Middle Tennessee State University*)
 Andrew Herod (*University of Georgia*)
 Nik Heynen (*University of Georgia*)
 Peter Hugill (*Texas A&M University*)
 David Icenogle (*Auburn University*)
 Mary Jacob (*Mount Holyoke College*)
 Wendy Jepson (*Texas A&M University*)
 Douglas L. Johnson (*Clark University*)
 Jin-Kyu Jung (*University of North Dakota*)
 Colleen E. Keen (*Minnesota State University*)
 Paul Kelley (*University of Nebraska, Lincoln*)
 Thomas Klak (*Miami University*)
 James Kus (*California State University, Fresno*)
 David Lanegran (*Macalester College*)
 James Lindberg (*University of Iowa*)
 Max Lu (*Kansas State University*)
 John C. Lowe (*George Washington University*)
 Donald Lyons (*University of North Texas*)
 Brian McCabe (*University of New Mexico at Valencia*)
 James McCarthy (*Penn State University*)
 Neusa H. McWilliams (*University of Toledo*)
 Katie Meehan (*University of Oregon*)
 John Milbauer (*Northeastern State University*)
 Byron Miller (*University of Cincinnati*)
 Roger Miller (*University of Minnesota*)
 Andrew Milson (*University of Texas at Arlington*)
 Don Mitchell (*Syracuse University*)
 Wendy Mitteager (*SUNY College at Oneonta*)

Woodrow W. Nichols, Jr. (*North Carolina Central University*)
 Richard Pillsbury (*Georgia State University*)
 James Proctor (*University of California at Santa Barbara*)
 Mark Purcell (*University of Washington*)
 Jeffrey Richetto (*University of Alabama*)
 Andrew Schoolmaster (*University of North Texas*)
 David Schul (*The Ohio State University, Marion*)
 Alex Standish (*Rutgers University*)
 Debra Straussfogel (*University of New Hampshire*)
 Amy Trauger (*University of Georgia*)
 Johnathan Walker (*James Madison University*)
 Gerald R. Webster (*University of Alabama*)
 Lisa Westwood (*Ruidoso Branch Community College*)
 Joseph S. Wood (*George Mason University*)
 Wilbur Zelinsky (*Penn State University*)
 Sandra Zupan (*University of Kentucky*)

Special thanks go to our project manager, Sean Hale, and Karen Gulliver, our smart and assiduous development editor, Jay McElroy for his dynamic work on *Visualizing Geography*, as well as to Jennifer McCormack for her swift and insightful research assistance and her contributions to the active learning assessments. We thank as well the rest of our Pearson and wider publishing team, including Christian Botting, Anton Yakovlev, Amy De Genaro, and Lindsay Bethoney at Lumina Datamatics. For photo research we thank Lauren McFalls of Lumina Datamatics, and for the graphics program we thank Kevin Lear of International Mapping.

We are very grateful for the *Geography Matters* expert contributing authors who expanded each chapter's themes in exciting ways for the print and online materials of this seventh edition: Paul Adams (University of Texas, Austin), John Agnew (University of California, Los Angeles), Brian Blouet (College of William and Mary), Tim Creswell (Northeastern University), Elizabeth Currid-Halkett (University of Southern California, Price), Vincent Del Casino (University of Arizona), Dydia DeLyser (California State University, Fullerton), Richard Florida (University of Toronto), Jeffrey Garmany (King's College, London), Nik Heynen (University of Georgia), Ron Johnston (University of Bristol, UK), Tracey Osborne (University of Arizona), Mitch Rose (National University of Wales, Aberystwyth), Phil Steinberg (Durham University, UK), Peter Taylor (Northumbria University, UK).

In addition to his work on the *Geography Matters*, we also would like to acknowledge the terrific help from Paul Adams in helping craft Chapter 6: *Language, Communication, and Belief*.

Finally, a number of colleagues gave generously of their time and expertise in guiding our thoughts, making valuable suggestions, and providing materials: Alejandro A. Alonso (University of Southern California), Martin Cadwallader (University of Wisconsin), John Paul Jones, III (University of Arizona), Cindi Katz (City University of New York), Diana Liverman (University of Arizona), Ian Shaw (University of Glasgow), Harriet Hawkins (Royal Holloway, University of London).

Paul L. Knox
 Sallie A. Marston

About the Authors



Paul L. Knox

Paul Knox received his PhD in Geography from the University of Sheffield, England. After teaching in the United Kingdom for several years, he moved to the United States to take up a position as professor of urban affairs and planning at Virginia Tech. His teaching centers on urban and regional development, with an emphasis on comparative study. He has received the university's award for teaching excellence. He has written several books on aspects of economic geography, social geography, and urbanization; serves on the editorial board of several scientific journals; and is co-editor of a series of books on world cities. In 2008, Professor Knox received the Distinguished Scholarship Award from the Association of American Geographers. He is currently a University Distinguished Professor in the College of Architecture and Urban Studies at Virginia Tech.



Sallie A. Marston

Sallie Marston received her PhD in Geography from the University of Colorado, Boulder. She is a full professor in the School of Geography and Development at the University of Arizona. Her undergraduate teaching focuses on political and cultural geography through innovative forms of pedagogy. She is the recipient of the College of Social and Behavioral Sciences' Outstanding Teaching Award as well as the Graduate College's Graduate Mentor Award. She is the co-editor of five books and author or co-author of over 75 journal articles and book chapters and received the Association of American Geographers Lifetime Achievement Award. She directs a service-learning course at the University of Arizona that places student-interns in school and community gardens as a way of supporting innovative teaching and learning initiatives. She serves on the editorial board of several scientific journals.

Digital & Print Resources

The seventh edition provides a complete human geography program for teachers and students.

For Students & Teachers

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, focuses on course objectives, and is 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 GIS-inspired MapMaster™ interactive maps, Encounter Human Geography Google Earth Explorations, Videos, Geoscience Animations, Map Projection Tutorials, GeoTutor coaching activities on the toughest topics in the geosciences, Dynamic Study Modules that provide each student with a customized learning experience, end-of-chapter questions and exercises, reading quizzes, Test Bank questions, and more.
- A student Study Area with GIS-inspired MapMaster™ interactive maps, Videos, Geoscience Animations, Web links, glossary flashcards, “In the News” RSS feeds, chapter quizzes, an optional Pearson eText, and more.

Pearson eText gives students access to the text whenever and wherever they can access the Internet.

Features of Pearson eText:

- Now available on smartphones and tablets.
- Seamlessly integrated videos and other rich media.
- Fully accessible (screen-reader ready).
- Configurable reading settings, including resizable type and night reading mode.
- Instructor and student note-taking, highlighting, bookmarking, and search.

Teaching College Geography: A Practical Guide for Graduate Students and Early Career Faculty (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 (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.

Practicing Geography: Careers for Enhancing Society and the Environment (0321811151)

This book examines career opportunities for geographers and geospatial professionals in business, government, nonprofit, and educational sectors. A diverse group of academic and industry professionals share 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.

Learning Catalytics™ Learning Catalytics™ is a “bring your own device” student engagement, assessment, and classroom intelligence system. With Learning Catalytics™, you can:

- Assess students in real time, using open-ended tasks to probe student understanding.
- Understand immediately where students are and adjust your lecture accordingly.
- Improve your students' critical thinking skills.
- Access rich analytics to understand student performance.
- Add your own questions to make Learning Catalytics™ fit your course exactly.
- Manage student interactions with intelligent grouping and timing. Learning Catalytics™ has grown out of 20 years of cutting-edge research, innovation, and implementation of interactive teaching and peer instruction. Available integrated with MasteringGeography.

FOR STUDENTS

Goode's World Atlas 23rd Edition (0133864642) *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 23rd edition includes over 160 pages of 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, energy production, and more.

Television for the Environment *Earth Report Geography Videos on DVD* (0321662989) This three-DVD set is designed to help 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.

***Dire Predictions: Understanding Global Warming 2nd Edition* by Michael Mann, Lee R. Kump** (0133909778) Periodic reports from the Intergovernmental Panel on Climate Change (IPCC) 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 of the IPCC's 5th Assessment Report 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.

Pearson's Encounter Series Pearson's Encounter Series provides rich, interactive explorations of geoscience concepts through Google Earth™ activities, covering topics in regional, human, and physical geography. For those who do not use MasteringGeography, explorations are available in print workbooks and in online quizzes at www.mygeoscienceplace.com. Each exploration consists of a worksheet, online quizzes whose results can be emailed to instructors, along with a corresponding Google Earth™ KMZ file.

- *Encounter Human Geography* by Jess C. Porter (0321682203)
- *Encounter World Regional Geography* by Jess C. Porter (0321681754)
- *Encounter Physical Geography* by Jess C. Porter and Stephen O'Connell (0321672526)

FOR TEACHERS

TestGen® Computerized Test Bank (Download Only) (0321987551) TestGen® is a computerized test generator that lets instructors view and edit *Test Bank* questions, transfer questions to tests, and print the test in a variety of customized formats. This *Test Bank* includes over 2,000 multiple-choice, true/false, and short-answer/essay questions. Questions are correlated to the revised US National Geography Standards and Bloom's Taxonomy to help instructors 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. www.pearsonhighered.com/irc

Instructor's Resource DVD (0321987624) The *Instructor Resource Center on DVD* provides high-quality electronic versions of photos and illustrations from the book, as well as customizable PowerPoint™ lecture presentations, Classroom Response System questions in PowerPoint and the *Instructor Resource Manual* and *Test Bank* in Microsoft Word® and TestGen formats. The DVD includes all of the illustrations and photos from the text in presentation-ready JPEG files. For easy reference and identification, all resources are organized by chapter. www.pearsonhighered.com/irc

Instructor Resource Manual (Download Only) (0321987632) For download only, the *Instructor Resource Manual* is intended as a resource for both new and experienced instructors. It includes a variety of lecture outlines, additional source materials, teaching tips, advice about how to integrate visual supplements (including MasteringGeography resources), and various other ideas for the classroom. www.pearsonhighered.com/irc.

Instructor's Resource Materials (Download Only) (0321987578) This Instructor Resource content is also available online via the Instructor Resources section of MasteringGeography and at www.pearsonhighered.com/irc.



LEARNING OUTCOMES

- Explain how the study of geography has become essential for understanding a world that is more complex, interdependent, and changing faster than ever before.
- Identify four examples of how places influence inhabitants' lives.
- State the differences among major map projections and describe their relative strengths and weaknesses.
- Explain how geographers use geographic information systems (GIS) to merge and analyze data.
- Summarize the five concepts that are key to spatial analysis and describe how they help geographers to analyze relationships between peoples and places.
- Describe the importance of distance in shaping human activity.
- Summarize the three concepts that are key to regional analysis and explain how they help geographers analyze relationships between peoples and places.



▲ Flower market in Karnataka, India.



GEOGRAPHY MATTERS

In Buenos Aires, Argentina, rioting teenagers ransacked and robbed working-class neighborhood grocery stores in 2012, leaving 22 dead and more than 200 injured. It was one of more than 50 riots worldwide between 2007 and 2014 where food was the principal issue.¹ The problem of food shortages and rising food prices in Argentina and in many other places is a reflection of the increasing geographic interdependence of the world. The situation is partly the result of increasing food consumption in other parts of the world, especially in booming China and India, where many have stopped growing their own food and have the cash to buy a lot more of it. Increasing meat consumption has helped drive up demand for feed grain, and this in turn has driven up the price of grain everywhere. Speculators in international commodity markets have joined the fray, further accelerating price rises. Another key linkage concerns energy prices: High oil prices push up fertilizer prices, while the cost of transporting food from farm to market adds to food costs. The popularity of biofuels as an alternative to hydrocarbons is straining food supplies, especially in the United States, where generous federal subsidies for ethanol have lured farmers away from growing crops for food. Compounding all this is climate change. Harvests in many countries have been seriously disrupted by more frequent extreme weather events. In 2013–2014, there were prolonged droughts in Argentina, California, eastern Brazil, Texas, parts of the Mediterranean, and the Sahel region of Africa; catastrophic floods in Canada and Central Europe; severe hailstorms in Germany; and a record-breaking typhoon that killed more than 6,000 in the Philippines.

Human geography is about recognizing and understanding the interdependence among places and regions, without losing sight of the uniqueness of each specific place. **Places** are specific geographic settings with distinctive physical, social, and cultural attributes. **Regions** are territories that encompass

¹The World Bank Group, Poverty Reduction and Economic Management Network, *Food Price Watch*, 17, Washington, D.C., May 2014.

many places, all or most of which share attributes different from the attributes of places elsewhere. Maps are also important tools for introducing geographers' ideas about the way that places and regions are made and altered.

WHY GEOGRAPHY MATTERS

The importance of geography as a subject of study is becoming more widely recognized as people everywhere struggle to understand a world that is increasingly characterized by instant global communications, rapidly changing international relationships, unexpected local changes, and growing evidence of environmental degradation. Many more schools now require courses in geography than just a decade ago, and the College Board has added the subject to its Advanced Placement program. Meanwhile, many employers are coming to realize the value of employees with expertise in geographical analysis and an understanding of the uniqueness, influence, and interdependence of places. Through an appreciation of the diversity and variety of the world's peoples and places, geography provides real opportunities not only to contribute to local, national, and global development but also to understand and promote multicultural, international, and feminist perspectives in the world.

Most people want to understand the intrinsic nature of the world in which we live. Geography enables us to understand where we are both literally and figuratively. Geography provides knowledge of Earth's physical and human systems and of the interdependency of living things and physical environments. That knowledge, in turn, provides a basis for people to cooperate in the best interests of our planet. Geography also captures the imagination: It stimulates curiosity about the world and the world's diverse inhabitants and places. By obtaining a better understanding of the world, people can overcome closed-mindedness, prejudice, and discrimination.

APPLY YOUR KNOWLEDGE

1. Why do you think studying geography is critical in today's world?
2. List three reasons why a corporate employer would feel it is important for prospective employees to have some knowledge of geography.

WHY PLACES MATTER

An appreciation of the diversity and variety of peoples and places is a theme that runs through all of *human geography*, the study of the spatial organization of human activity and of people's relationships with their environments. This theme is inherently interesting to nearly all of us. *National Geographic* magazine has become a venerable institution by bringing us monthly updates of the seemingly endless variety of landscapes and communities around the world. More than

5 million households, representing about 19 million regular readers, subscribe to this magazine for its intriguing descriptions and striking photographs. Millions more read it occasionally in offices, lobbies, waiting rooms, or online.

Yet many Americans often seem content to confine their interest in geography to the pages of glossy magazines, to television documentaries, or to one-week packaged vacations. It has become part of the conventional wisdom—both in the United States and around the world—that many Americans have little real appreciation or understanding of people and places beyond their own daily routines. This is perhaps putting it too mildly. Surveys have revealed widespread ignorance among a high proportion of Americans, not only of the fundamentals of the world's geography but also of the diversity and variety within the United States itself. In surveys of young adults in Canada, France, Germany, Great Britain, Italy, Japan, Mexico, Sweden, and the United States, Americans come in next to last in terms of geographic literacy. Neither wars nor natural disasters appear to have compelled the majority of young Americans to absorb knowledge about international places in the news.

So although most people in the United States are fascinated by different places, relatively few have a systematic knowledge of them. Fewer still understand how different places came to be the way they are or why places matter in the broader scheme of things. This lack of understanding is unfortunate because geographic knowledge can take us far beyond a simple glimpse of the inherently interesting variety of peoples and places.

The Influence of Places

Places are dynamic, with changing properties and fluid boundaries that are the product of the interplay of a wide variety of environmental and human factors. This dynamism and complexity is what makes places so fascinating for readers of *National Geographic*. It is also what makes places so important in shaping people's lives and in influencing the pace and direction of change. Places provide the settings for people's daily lives and their social relations (patterns of interaction among family members, at work, in social life, in leisure activities, and in political activity). It is in these settings that people learn who and what they are, how they are expected to think and behave, and what life is likely to hold for them.

Places exert a strong influence, for better or worse, on people's physical well-being, opportunities, and lifestyle choices. Living in a small town dominated by petrochemical industries, for example, means a higher probability of being exposed to air and water pollution, having a limited range of job opportunities, and having a relatively narrow range of lifestyle options because of a lack of amenities such as theatres, specialized stores and restaurants, and recreational facilities (**Figure 1.1**). Living in a central neighborhood of a large metropolitan area, on the other hand, usually means having a wider range of job opportunities and a greater choice of lifestyle options because of the variety of amenities accessible within a short distance (**Figure 1.2**). But it also means, among other things, living with a relatively high exposure to crime.



◀ **Figure 1.1** Quality of life
Heavy industry adjacent to a housing development.

▼ **Figure 1.2** Central city neighborhood Shopping on Newbury Street in Boston.



The Meaning of Places

Places also contribute to people's collective memory and become powerful emotional and cultural symbols. Consider the evocative power for most Americans of places like Times Square in New York; the Mall in Washington, D.C.; Hollywood Boulevard in Los Angeles; and Graceland in Memphis. And for many people, ordinary places have special meaning: a childhood neighborhood, a college campus, a baseball stadium, or a family vacation spot. This layering of meanings reflects the way that places are *socially constructed*—given different meanings by different groups for different purposes. Places exist and are constructed by their inhabitants from a subjective point of view.

The meanings given to a place may be so strong that they become a central part of the identity of the people experiencing them. Your **identity** is the sense that you make of yourself through your subjective feelings based on your everyday experiences and social relations. Your own neighborhood, for example, is probably heavily laden with personal meaning and sentiment for you. But your neighborhood may well be viewed very differently, perhaps unsympathetically, by outsiders. This distinction is useful in considering the importance of understanding spaces and places from the viewpoint of the insider—the person who normally lives in and uses a particular place—as well as from the viewpoint of outsiders (including geographers).

Finally, places are the sites of innovation and change, of resistance and conflict (**Figure 1.3**). The unique characteristics of specific places can provide the preconditions for new agricultural practices (such as the development of seed agriculture and the use of plow and draft animals that sparked the first agricultural revolution in the Middle East in prehistoric times—see Chapter 9); new modes of economic organization (such as the high-tech revolution that began in Silicon Valley



◀ **Figure 1.3** Tahrir Square, Cairo, Egypt
The site of major anti-government demonstrations in 2011 that led to the fall of Egypt’s President Mubarak; and of celebrations in 2014 (shown here) of the inauguration of President el-Sissi.

in the late twentieth century); new cultural practices (e.g., the punk movement that began in disadvantaged British housing projects); and new lifestyles (e.g., the hippie lifestyle that began in San Francisco in the late 1960s). It is in specific locales that important events happen, and it is from them that significant changes spread.

Nevertheless, the influence of places is by no means limited to the occasional innovative change. Because of their distinctive characteristics, places always modify and sometimes resist the imprint of even the broadest economic, cultural, and political trends. Consider, for example, the way that a global cultural trend—rock ‘n’ roll—was modified in Jamaica to produce reggae. And how in Iran and North Korea rock ‘n’ roll has been resisted by the authorities, with the result that it has acquired an altogether different kind of value and meaning for the citizens of those countries. Similarly, Indian communities in London developed Bhangra—a “world beat” composite of traditional Punjabi music, Bollywood (Hindi) movie scores, and Western disco. Cross-fertilization with local music cultures in New York and Los Angeles has produced Bhangra rap.

To consider a different illustration, think of the ways some communities have declared themselves “nuclear-free” zones: places where nuclear weapons and nuclear reactors are unwelcome or even banned by local laws. By establishing such zones, individual communities are seeking to challenge trends toward using nuclear energy and maintaining nuclear arms. They are, to borrow a phrase, “thinking globally and acting locally.” Similarly, some communities have established “GM-free” zones, taking a stance against genetically modified crops and food. In adopting such strategies, they hope to influence thinking in other communities so that eventually their challenge could result in a reversal of established trends.

In summary, places are settings for social interaction that, among other things,

- structure the daily routines of people's economic and social life;
- provide both opportunities and constraints in terms of people's long-term social well-being;

- provide a context in which everyday, commonsense knowledge and experience are gathered;
- provide a setting for processes of socialization; and
- provide an arena for contesting social norms.

APPLY YOUR KNOWLEDGE

1. How does place affect identity?
2. Explain how and why a particular place has mattered to you. How might others' experience or perception of that same place differ from yours? How does your place influence your health or job prospects?

STUDYING HUMAN GEOGRAPHY

The study of geography involves the study of Earth as created by natural forces and modified by human action. This, of course, covers an enormous amount of subject matter. There are two main branches of geography: physical and human. **Physical geography** deals with Earth's natural processes and their outcomes. It is concerned, for example, with climate, weather patterns, landforms, soil formation, and plant and animal ecology. **Human geography** deals with the spatial organization of human activities and with people's relationships to their environments. This involves looking at natural physical environments insofar as they influence, and are influenced by, human activity. To that end, the study of human geography must cover a wide variety of phenomena. These include, for example, agricultural production and food security, population change, the ecology of human diseases, resource management, environmental pollution, regional planning, and the symbolism of places and landscapes.

Regional geography combines elements of both physical and human geography. Regional geography is concerned with the way that unique combinations of environmental and human factors produce territories with distinctive landscapes and cultural

attributes. The concept of region is used by geographers to apply to larger-sized territories that encompass many neighboring places, all or most of which have similar attributes distinct from the attributes of other places.

Geographical Relationships

What is distinctive about the study of human geography is not so much the phenomena that are studied as the way they are approached. The contribution of human geography is to reveal *how and why geographical relationships are important* in relation to a wide spectrum of natural, social, economic, political, and cultural phenomena. Thus, for example, human geographers are interested not only in patterns of agricultural production but also in the geographical relationships and interdependencies that are both causes and effects of such patterns. To put it in concrete terms, geographers are interested not only in what specialized agricultural subregions (e.g., the dairy farming area of Jutland, Denmark) are like but also in the role of subregions such as Jutland in national and international agro-food systems (their interdependence with producers, distributors, and consumers in other places and regions—see Chapter 8).

Geography is to a great extent an applied discipline as well as a means of understanding the world. Geographers employed in business, industry, and government are able to use geographic theories and techniques to understand and solve a wide variety of specific problems. A great deal of the research undertaken by geography professors has an applied focus.

THE BASIC TOOLS AND METHODS OF HUMAN GEOGRAPHERS

In general terms, the basic tools employed in geography are similar to those in other disciplines. Like other social scientists, human geographers usually begin with observation. Information must be collected and data recorded. This can involve many different methods and tools. Fieldwork (surveying, asking questions, using scientific instruments to measure and record things), laboratory experiments, and archival searches all are used by human geographers to gather information about geographical relationships. Geographers also use **remote sensing**, the collection of information about parts of Earth's surface by means of aerial photography or satellite imagery designed to record data on visible, infrared, and microwave sensor systems (**Figure 1.4**). For example, agricultural productivity can be monitored by remotely sensed images of crops, and energy efficiency can be monitored by remotely sensed levels of heat loss from buildings.

Once data have been obtained through some form of observation, the next important step is to portray and describe them through *visualization* or *representation*. This can involve a variety of tools, including written descriptions, charts, diagrams, tables, mathematical formulas, and maps (see Box 1.2: “Visualizing Geography: Maps”). Visualization and representation are important activities because they allow large amounts of information to be explored, summarized, and presented to others. They are nearly always a first step in the analysis of geographical relationships, and they are important in conveying the findings and conclusions of geographic research.

At the heart of geographic research, as with other kinds of research, is the *analysis* of data. The objective of analysis, whether of quantitative or qualitative data, is to discover patterns and establish relationships so that hypotheses can be established and models can be built. Models, in this sense, are abstractions of reality that help explain the real world. They require tools that allow us to generalize about things. Once again, we find that geographers are like other social scientists in that they utilize a wide range of analytical tools, including conceptual and linguistic devices, maps, charts, and mathematical equations.

In many ways, therefore, the tools and methods of human geographers are parallel to those used in other sciences, especially the social sciences. In addition, geographers increasingly use some of the tools and methods of the humanities—interpretive analysis and inductive reasoning, for example—together with ethnographic research (the systematic recording of human cultures) and textual analysis. One of the most distinctive tools in the geographer's kit bag is geographic information systems (GIS).



▲ **Figure 1.4** Remotely sensed images Remotely sensed images can provide new ways of seeing the world, as well as unique sources of data on all sorts of environmental conditions. Such images can help explain problems and processes. Aerial photographs, for example, can be helpful in explaining what would otherwise require expensive surveys and detailed cartography. They are especially useful in working with multidisciplinary teams. This example shows the lower Connecticut River near the town of Old Lyme. The photograph was taken during the Connecticut River Marsh Restoration Project.

1.1 Geography Matters

Why Geography Matters

By Richard Florida, University of Toronto

Since the advent of steam locomotives and the telegraph, there have been countless predictions about how technology will put an end to the constraints of geography. Some believe that that day has finally come. *The Economist* magazine proclaimed the “death of distance” in 1995 (<http://www.economist.com/node/598895>). A decade later, *The New York Times* columnist Tom Friedman proclaimed *The World Is Flat* (Farrar, Straus, Giroux, 2005). Between airplanes, the Internet, social media, and smart phones, the argument goes, the distances that once separated us have contracted to nothing; no matter where we live, we can all work and compete on the same terms.

But dig a little deeper and you’ll realize that place and geography matter more today than they ever did. And not just in some abstract academic way, but in your daily lives.

Why Where Matters

We tend to focus on two big decisions: *who* we choose as our life partner and *what* we do for work. But there is a third big decision—where you choose to live. The decision about *where* may be the most important, because it has a huge bearing on the others (Richard Florida, *Who’s Your City*. Basic Books, 2008).

Where you choose to live affects every aspect of your being. It influences the income you can potentially earn, and how far you can develop your skills. It has a bearing on the friends and romantic partners you can potentially meet, the networks you can build, and the options that will be available to your children. It shapes your values and your

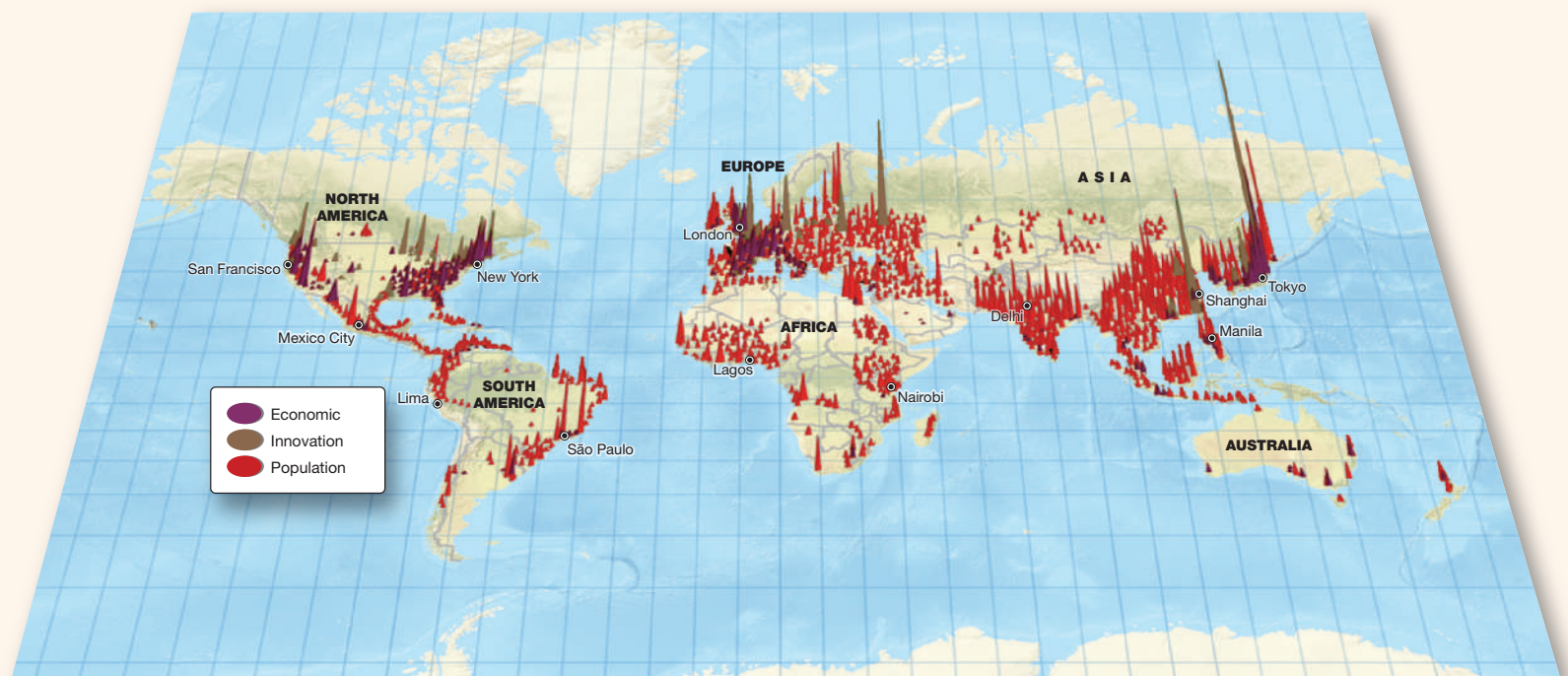
politics. It plays a role in how happy and healthy you are, and in your overall quality of life.

It’s something of a paradox. As globalized as we may be, wealth and power are more concentrated and clustered than ever before. Location matters. It is true that communications are instantaneous and journeys that used to take months now take only hours, but the key factors that determine whether a place prospers are unevenly distributed; some are much more endowed with them than others.

Welcome to the Spiky World

When we overlay graphs of economic output, population, and innovation on a map, some places, especially those in the United States, Western Europe, and Asia, tower over the rest. Just look at the level of innovation in Tokyo! The world is anything but flat; it is spiky (**Figure 1.A**).

Those high levels of innovation and a disproportionate share of the world’s economic activity occur in the geographic clusters called mega-regions—galaxy-like clusters of cities and their suburbs that grow and evolve into coherent geographic entities. These include great Bos-Wash (Boston-New York-Washington) Corridor, which would rank as the world’s fourth largest economy, behind the United States itself and China and Japan; Am-Bruss-Twerp spanning Amsterdam, Antwerp and Brussels; and the area that runs from London to Leeds, Manchester, Liverpool, and Birmingham. All told, the globe’s 40 leading mega-regions produce two-thirds of the world’s economic output and nine in ten of its technological innovations, while housing less than one in five of its people.



▲ Figure 1.A A Spiky World.

Urban Planet

Big cities have become the core social and economic organizing units of our time, replacing the farm and the factory of previous epochs. As the great urbanist Jane Jacobs was perhaps the first to document in her book *The Economy of Cities* (Random House, 1969), big cities are cauldrons of innovation; when diverse people live and work in close quarters, they come up with new ideas that improve the productivity of existing industries and generate new ones.

This geographic clustering of diverse and talented people is what makes cities different than all other biological and social organisms. Typically when organisms get bigger their metabolisms slow down. But as cities get larger and larger their “urban metabolism”—measured variously as their economic activity or ability to innovate—speeds up. (Bettencourt, Lobo, et al., “Growth, Innovation, Scaling, and the Pace of Life in Cities,” *Proceedings of the National Academy of Sciences of the United States of America*, <http://www.pnas.org/content/104/17/7301.full>).

The geographic clustering of people will only grow. Over the course of the next century, the world’s urban populations are projected to increase by as many as 5 billion people. Most of that will be happening in the rapidly urbanizing areas of South East Asia and Africa. To accommodate them, existing cities will expand substantially and hundreds of cities are likely to emerge (<http://marroninstitute.nyu.edu/content/working-papers/urbanization-as-opportunity1>). Ensuring that those cities are vibrant, sustainable, and functional

will be the grandest of the grand challenges humanity will ever face. Our success or failure will have a bearing on everything from our ability to mitigate poverty and climate change to how successfully the world continues to democratize.

Distance is not dead and geography is far from over. The fact is, place matters more today than it ever has.

Richard Florida is director of the Martin Prosperity Institute at the University of Toronto's Rotman School of Management, Global Research Professor at New York University, and senior editor at The Atlantic, where he cofounded CityLab.

1. Use the online “Place Finder” tool (http://www.creativeclass.com/_v3/whos_your_city/place_finder/) to identify the city that is best suited to you. Come up with three to five cities you think you might want to live and work in and then use the Place Finder tool to rate and rank them. Which is your best city and why?
2. According to **Figure 1.B**, neighboring cities in the orange colored areas are growing into large mega-regions. Some of these even cross national boundaries and in some respects have more in common with each other than their respective countries. Is it possible that city regions will become more significant units of place than nation states?



▲ Figure 1.B Mega-regions.