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HUMAN GEOGRAPHY

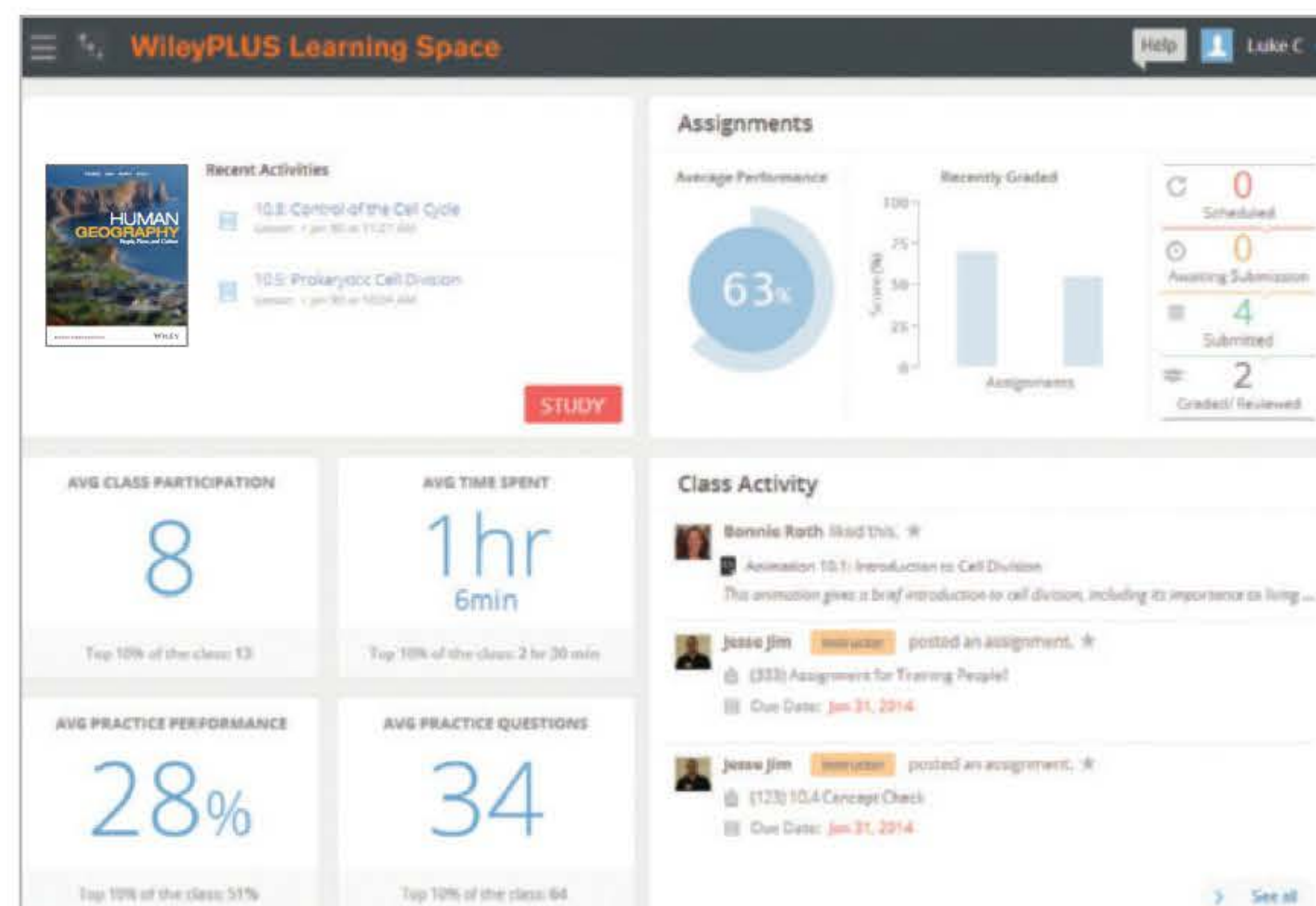
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SECOND CANADIAN EDITION

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People, Place, and Culture

SECOND CANADIAN EDITION

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Northern State University

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WILEY

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PREFACE

Welcome to the second Canadian edition of *Human Geography: People, Place, and Culture*. The goal for this edition was to build on the strengths of the first edition, in light of very helpful and positive feedback from students, professors, and reviewers. A global perspective remains of central and critical importance to our understandings of the intricate and complicated interrelationships between people and places across constantly shifting and multiple scales—the human-environment relationship. In updating the Canadian edition, it was important to ensure that a geographically specific Canadian focus was maintained while positioning that focus within the political, economic, and social global networks. This was achieved in three main ways:

- By using Canadian examples in conjunction with broader international and global illustrations to integrate a sense of the distinctive Canadian geographical circumstances within broader contexts. Most of these examples draw on well-known contemporary and historical events of interest to encourage attentiveness to Canadian histories and geographies.
- By highlighting the research and publications of top Canadian scholars influential in geographical scholarship in the various subdisciplines. These stand side-by-side with references to the leading work in the field, highlighting Canadians' contributions to international research and scholarship.
- By including in each chapter a field note authored by Canadian scholars commenting on how and why they came to do the work they do and a brief discussion of the nature of their research. These are designed to demonstrate the passion and personal commitment scholars bring to their careers and to encourage students to think about their own curiosities and interests.

The perspectives on the processes and impacts of globalization are highly contested but undeniable in both their presence and their influence. Canada occupies a particular (and mobile) place within these processes. Globalization is a set of processes that flow and pulsate across and through country boundaries—processes that have different outcomes in different places and across scales. The second Canadian edition continues to guide students toward an appreciation of the role people play in shaping places and the way that places shape people, while positioning discussions within larger global contexts. The second Canadian edition strives to give students the tools to engage in the complexities of the debates about the political, social, and economic fallout of globalization and to understand the importance of thinking geographically as a way to understand the world.

Most important, perhaps, students today are living in a world that is quite different from what any other generation has experienced; they are living, as geographer Andrew Kirby explains, “not in a world without boundaries or without limits,

but simply a world.” Today’s students engage daily with the world, whether or not they are conscious of that fact. Students are part of the world, and many have a global identity. They need to make sense of themselves not just in their home, college or university, locality, nation, and region, but also beyond their world. Globalization means that people and places across the world are constantly interacting. For good or for ill, each of us is a part of that interaction. Each of us, therefore, must make sense of who we are and what our role is in this globalized world, and we each must think critically about how we can shape our world. With globalization, the way people make places and shape their identities has global, local, and individual implications. What people do today, whether making a pilgrimage to a river or buying a product, happens in a global context.

Hallmark Features

This second Canadian edition integrates text, photos, and illustrations to help students understand the role people play in shaping the world, to provide geographic context to the issues we discuss, to teach students to think geographically and critically, and to explain the complexities of thinking geographically and what that actually means; that is, understanding that “place matters” and that who they are and their possibilities, limitations, and opportunities depend on where they are. For this reason, each chapter begins at the level of the personal, with examples and illustrations that will resonate with most students’ experiences in their everyday lives.

The second Canadian edition strives to cultivate a spatial perspective in students as they study a range of issues from political elections and urban shantytowns to gay urban neighbourhoods and farming life. While there are many possible ways to conceptualize the spatial, this edition uses five themes to organize students’ thinking—location, region, place, landscape, and movement. Throughout the chapters, one or more of these themes is examined within the context of human-environment relations.

In this new edition, Key Questions continue to be used as the organizing principle for each chapter in the text. The Key Questions are listed after the opening field note of each chapter and serve as the outline for the chapter. At the end of each section, the reader is presented with a summary of Main Points that are the key concepts or ideas discussed in that section and that help to answer the Key Questions for that section. Students may use the Key Questions and the Main Points as a convenient summary of the information and for study purposes. Instructors may use the Key Questions and Main Points to prepare lectures, develop examination questions, or generate class discussion.

Several features of the Canadian edition provide context and help students learn to think geographically. Each chapter in this edition includes one or more Field Notes (including

a chapter-opening field note), written by one of the authors, providing context for the particular author's experiences in the field and pulling students into the chapter. Each chapter also includes one or more Guest Field Notes contributed by professionals and researchers in the field. The author field notes serve as models of how to think geographically and the guest field notes detail scholars' commitment to the discipline of geography through their specific research interests. Finally, a series of discussion questions are provided at the end of each chapter to promote discussion and engagement.

The second Canadian edition has several key additions:

- The second Canadian edition of *Human Geography* pays particular attention to incorporating material on the impacts and importance of new technologies and social media on how we understand and experience the geographical. Themes related to this issue are intertwined throughout the text together with pertinent and timely examples. This is particularly important given that this generation of students is thoroughly steeped in the use of digital technologies and understands their spatial interactions through these engagements.
- Each chapter has been updated with new examples drawn from contemporary events from around the globe. This allows for the development of assignments, seminars, and discussions that develop students' abilities to view and understand events and the world from a geographical perspective. Where available and appropriate, updated statistical data, including Canadian census data from 2011, has been included.
- New and relevant visual materials, including images, graphs, charts, maps and other illustrations, have been added to each chapter, enhancing the visual appeal and readability of each chapter and helping to convey the information in a variety of ways that acknowledges distinctive learning styles.

Chapter Organization

This text is organized around the main subdisciplines in geography. The chapter order reflects the desire to introduce students to geographical scholarship through a logical and intuitive structure. The text begins with a discussion in the first two chapters about the processes and debates around the concept of globalization, which provides the wider context for the rest of the book. Chapter 3 introduces the subdiscipline of political geography, providing the pivotal historical background for understanding the current world order, including the political, economic, and social circumstances. We then consider the distribution of human populations over the surface of the earth by examining population geography in Chapter 4 and migration in Chapter 5. The human-environment relationship, the heart of geographical enquiry, is the focus of Chapter 6 as we survey the scholarship on nature, society, and the environment. Chapters 7 and 8 constitute an introduction to the subdisciplines of social and cultural geography, respectively. Chapter 9 focuses on agricultural development and

the emergence of stable human settlements as well as rural life. In Chapter 10, we examine the process of urbanization, a central concern of geographers given that the majority of the world's people live in urban environments. We explore aspects of economic and development geographies in Chapter 11 and make important linkages with those themes of globalization introduced in Chapter 2. In Chapter 12, we examine the important field of transportation geographies, a timely topic given increasing global concerns about pollution, environmental degradation, and the problems of moving people and goods on a variety of scales. Chapter 13 concludes the text with a consideration of the geographies of industrialization and the service sector.

Finally, please note the selective use of Canadian census data in this text. The mandatory long-form questionnaire was replaced with a voluntary national household survey in 2010. As a result, Statistics Canada issued a disclaimer concerning the reliability of certain aspects of the 2011 data and is no longer providing certain previously available data sets (see Chapter 4 for further discussion). For this reason, the text uses 2011 data where appropriate, while continuing to rely on the more detailed, fine-grained data available from the 2006 census.

The Teaching and Learning Package

The second Canadian edition of *Human Geography: People, Place, and Culture* is supported by a comprehensive supplements package that includes an extensive selection of resources.

WileyPLUS Learning Space

The factors that contribute to success—both in college and in life—aren't comprised of intellectual capabilities alone. In fact, there are other traits, strategies, and even daily habits that contribute to the overall picture of success. Studies show that people who can delay instant gratification, work through tasks even if they are not immediately rewarding, and follow through with a plan have the skills that are not only valuable in the classroom, but also in the workplace and their personal lives. A place where students can define their strengths and nurture these skills, *WileyPLUS Learning Space* transforms course content into an online learning community. *WileyPLUS Learning Space* invites students to experience learning activities, work through self-assessment, ask questions and share insights. As they interact with the course content, peers and their instructor, *WileyPLUS Learning Space* creates a personalized study guide for each student.

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RESOURCES THAT HELP TEACHERS TEACH

On-Location Videos. This rich collection of original and relevant footage was taken during H. J. de Blij's travels. These videos, which are available in *WileyPLUS Learning Space*, cover a wide range of themes and locations.

The *Human Geography: People, Place, and Culture* second Canadian Edition **Instructor Site** (www.wiley.com/go/foubergcanada) provides a wealth of resources for instructors to facilitate their teaching and course management and to help enhance their students' learning. The site includes:

- A complete collection of **PowerPoint presentations**. These presentations are intended to enhance lecture presentations and serve as an effective overview and point-form summary of the key concepts of each chapter.
- A comprehensive **Test Bank** with multiple-choice, fill-in, matching, and essay questions. The Test Bank is distributed via the secure instructor website and can be used in all major test application programs.
- A collection of 15 **Clicker Questions** per chapter that can be used with a variety of personal response (or "clicker") systems.
- A comprehensive collection of **additional resources**.

Wiley Faculty Network (WFN). This peer-to-peer network of faculty is ready to support your use of on-line course management tools and discipline-specific software/learning systems in the classroom. The WFN will help you apply innovative

classroom techniques, implement software packages, tailor the technology experience to the needs of each individual class, and provide you with virtual training sessions led by faculty for faculty.

RESOURCES THAT HELP STUDENTS LEARN

The easy-to-use and student-focused website (www.wiley.com/go/foubergcanada) provides **Practice Quizzes** to help students check their understanding and prepare for tests. These quizzes provide immediate feedback to true/false, multiple choice, and short-answer questions. **Web Links** are also provided to put useful electronic resources into context.

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Catherine Nash
St. Catharines, Ontario

April 2015

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Erin Hogan Fouberg grew up in eastern South Dakota. She moved to Washington, D.C. to attend Georgetown University's School of Foreign Service, where she took a class in Human Geography from Harm de Blij. At Georgetown, Erin found her International Relations classes lacking in context and discovered a passion for political geography. She earned her master's and Ph.D. at the University of Nebraska-Lincoln (1997). After graduating, Dr. Fouberg taught for several years at the University of Mary Washington in Fredericksburg, Virginia, where the graduating class of 2001 bestowed on her the Mary Pinschmidt Award, given to the faculty member who made the biggest impact on their lives.

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Professor Murphy served as the President of the Association of American Geographers in 2003. He is also Vice President of the American Geographical Society. For 11 years he was one of the editors of *Progress in Human Geography*; he currently co-edits *Eurasian Geography and Economics*. In the late 1990s, he led the effort to add geography to the College Board's Advanced Placement Program. His interests include hiking, skiing, camping, music, and of course exploring the diverse places that make up our planet.

H. J. DE BLIJ

Harm de Blij received his early schooling in Europe, his college education in Africa, and his higher degrees in the United States (Ph.D. Northwestern, 1959). He published more than 30 books and over 100 articles, and received five honorary degrees. Several of his books were translated into foreign languages.

Dr. de Blij held the position of John A. Hannah Professor of Geography at Michigan State University. He also held the George Landegger Chair at Georgetown University's School of Foreign Service, the John Deaver Drinko Chair of Geography at Marshall University, and faculty positions at the Colorado School of Mines and the University of Miami. He was the Geography Editor on ABC-TV's "Good Morning America" program for seven years and later served as Geography Analyst for NBC News. He was for more than 20 years a member of the National Geographic Society's Committee for Research and Exploration and was the founding editor of its scholarly journal, *National Geographic Research*. In recognition of his service, he became an honorary lifetime member of the Society. Professor de Blij was a renaissance man. He was a soccer fan, an avid wine collector, an amateur violinist, and an inveterate traveller.

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HUMAN GEOGRAPHY

People, Place, and Culture

CHAPTER

1

INTRODUCTION TO HUMAN GEOGRAPHY

The Geographical Imagination

IN APRIL 2007, the Canadian Broadcasting Corporation (CBC) launched the *Seven Wonders of Canada* event. The organizers challenged Canadians to nominate their choice for the top Canadian *wonder*. They defined a wonder as either a spectacular physical site or an amazing human creation. Contestants had to demonstrate how their choice reflected an essential Canadian-ness. Submissions were judged on their uniqueness and originality,

their historical significance, and their ability to inspire and to provoke emotion and pride in our Canadian places.

The event drew some 25,000 nominations and over one million votes. In on-line voting through the CBC website, six of the top seven wonders were Niagara Falls, the northern lights, the Cabot Trail, Nahanni National Park, the Canadian Rockies, and the Sleeping Giant. The top pick was the Bay of Fundy (**Figure 1.1**), with the highest tides in the world; spectacular marine, animal, and plant life; and distinctive tidal bores, mud flats, and marshes. Human creations were also showcased: the Green Gables House, the Library of Parliament, the Spiral Tunnels of the Canadian Pacific Railway in British Columbia, Château Montebello, and the Canadian National Vimy Memorial.

In formal judging, the final list was an eclectic mix of human-made and physical sites. Taking top spot was the canoe, arguably the quintessential Canadian icon and a truly inspired choice. It speaks of our colonial history of exploration and settlement and our connections with Canada's indigenous peoples and wilderness landscapes. Many of our well-known writers, artists, and politicians—such as Bill Mason, E. Pauline Johnson, and Pierre Elliot Trudeau—sought inspiration, comfort, and solitude by canoeing our lakes and rivers. Today, no summer camp, cottage, or recreational area—from Canada's national parks to the Rideau Canal—is likely to be without a canoe (**Figure 1.2**).

Mike Grandmaison/Corbis



(a)

Paul Thompson/Corbis



(b)

© Joe Fox/Alamy



(c)

FIGURE 1.1 Wonders of Canada. (a) Bay of Fundy, New Brunswick. (b) Canadian National Vimy Memorial, France. (c) Niagara Falls, Ontario.

The runners-up also reflected Canadians' connections with places of both natural beauty and architectural wonder: the Rockies, Pier 21, Prairie skies, Niagara Falls, the igloo, and Old Quebec City. Even if we have never been to Niagara Falls, for example, it is part of our imagined sense of Canada, giving us a collective sense of connection to well-known places, including those we haven't seen. What it means to be Canadian is, for many of us, deeply attached to these everyday landscapes in which we live, be they urban or rural, natural or human built.

For a human geographer, the *Seven Wonders of Canada* competition illustrates the multiple interests of geographical

studies—the political, the social, the economic, and the cultural. Human geography is about the ties that bind us to place and the emotions that drive us apart. It is about how we interact with our environment, how we change it, and how our landscapes have an impact on us. For human geographers, then, the relationship between the human and natural worlds is a constant preoccupation, providing us with never-ending possibilities for exploration and study.

Source: *Seven Wonders of Canada*, www.cbc.ca/sevenwonders.



© Canadian Canoe Museum

(a)



Peter Bregg/The Canadian Press

(c)



© Photo by Fred C. Sears/Library and Archives Canada PA-148593

(b)

FIGURE 1.2 The canoe in Canada. The canoe and canoeing are intrinsic to Canada. (a) The Canadian Canoe Museum, Peterborough, Ontario. (b) Innu making canoes near Sheshatshiu, Newfoundland, ca. 1920. (c) Pierre Trudeau paddles a canoe in 1968, in the waters off Baffin Island's Clearwater Fiord.

KEY QUESTIONS FOR CHAPTER 1

1. What is human geography?
2. What are geographic questions?
3. Why do geographers use maps and what do maps tell us?
4. Why are geographers concerned with scale and connectedness?
5. What does it mean to “think geographically” and how do we do it?

1.1 What Is Human Geography?

It's not the land that has made our country what it is . . . it's the way we've shaped it and the things we've built on it, the monumental achievements of engineering and imagination in which we took a wilderness and forged it into a nation.
(Christopher Hume, *Toronto Star*, June 9, 2007)

Human-environment The reciprocal relationship between humans and environment.

Human geography One of the two major divisions of geography; the spatial analysis of human population, its cultures, activities, and landscapes.

Physical geography One of the two major divisions of geography; the spatial analysis of the structure, processes, and location of the Earth's natural phenomena, such as climate, soil, plants, animals, and topography.

Geographers study **human-environment** relationships. In this context, “environment” refers to both the natural world and the myriad places created or built by humans. The field of **human geography** focuses on how humans create places in the natural or physical world, how we interact with each other in and across different places, and how we make sense of others and ourselves. We are all geographers at heart as we navigate through our everyday lives, creating our own private spaces of

“home,” perhaps travelling to faraway lands, and carefully negotiating the best route to ensure that we get our chores done.

While the disciplines of human and **physical geography** are closely related areas of study, physical geographers explore the processes and patterns at work in the physical world, while human geographers examine human activities interacting with that physical world. Human geography is also concerned with the processes of change. We examine past activities to see how they affect contemporary places, and we consider how both past and present activities might shape our world, for better or for worse, in the future.

Anthropocentric view A view in which human interests and perspectives are highlighted.

The quotation from Christopher Hume, a *Toronto Star* architecture and urban affairs columnist, at the beginning of this chapter highlights our dynamic impact on the world around us. But in writing about the winners of the Seven Wonders of Canada contest, Hume's focus was the nation-building activities of Canada's colonizing peoples. He did not mention the presence and activities of First Nations peoples in North America. Also, the quotation suggests that human-environment interaction operates in one direction: humans, through their ingenuity, alter their environment for their own benefit. This is an **anthropocentric view**—one in which human interests and perspectives alone are highlighted. Most human geographers take a relational view, arguing that just as human activities constantly change our physical and built environment, so too do the physical and built environments have a profound effect on us as individuals and as a society. The places we grow up, and the places we experience, in positive or negative ways,

influence our sense of self and our norms, values, and beliefs. Our sense of self and our norms and values, in turn, affect how we see others and how we understand the world.

Human geographers use the term **sense of place** to highlight our relationships to the places we build and inhabit. This term suggests that we not only think about a location's physical or material characteristics, but we also consider the sentiments we feel and meanings we hold for particular places. This sense of place underpins our everyday decisions, including where we want to live and work and, perhaps, have a family. Our sense of place is also pivotal when we make our most important decisions, such as whether we consider a place worth dying for if we face the choice of defending that place in a war.

Sense of place State of mind derived through the infusion of a place with meaning and emotion by remembering important events that occurred in that place or by labelling a place with a certain character.

One deceptively simple concept in human geography is the idea that “place matters.” Where we are literally affects our life chances—the possibilities for success or failure, health and happiness, life or death. Place has an impact on our ability to access public services, such as health care, or to find employment, afford a house, or breathe less polluted air. Whether we live in Newfoundland or Alberta affects whether we can find a job, what kind of job we will work at every day for many years, and our resulting quality of life. Place determines whom we meet and get to know and whom we do not. The familiar phrase “a place for everything and everything in its place” tells us something about our expectations—about whom we should expect to find in certain places and when people might be seen as “out of place”—which in turn have serious implications for individuals and groups that might be regarded as being in places where they do not belong. In South Africa, for example, between 1948 and 1994, those populations classified as other than “white” experienced diminished rights as citizens and often experienced restrictions in travel, including the places in which they could participate (**Figure 1.3a**). In a different example, women in Ottawa held a “flash feed-in” at a local IKEA in March 2014 to publicly breastfeed their children (**Figure 1.3b**). The *Ontario Human Rights Act* protects the right of mothers to breastfeed in public, although some people may not be comfortable with the practice. Often, whom we expect to see and where we expect to see them depends on our ideas about age, race, ethnicity, gender, and other markers of the self. The geography of our everyday lives is pivotal in influencing who we are and what we might become.

No place on Earth is untouched by people. As people explore, travel, migrate, interact, play, live, and work, they make places. They organize themselves into communities, nations, and broader societal networks, establishing political, economic, religious, linguistic, and cultural systems that enable them to function in space. People adapt to, alter, manipulate, and cope with their physical geographic environment and are, in turn, influenced by their experiences in that environment. No place stands apart from human action, nor is human action undertaken apart from place.



UN Photo

(a)



Ashley Fraser, Ottawa Citizen

(b)

FIGURE 1.3 (a) A segregated beach in South Africa, 1982. (b) Breastfeeding in public at IKEA, Ottawa, Ontario.

Clearly, places do not exist in splendid isolation, and human geographers are interested in the interconnections between different places. Throughout human history, advances in communication and transportation technologies have made places and people more interconnected. Only 100 years ago, the fastest modes of transportation were the steamship, the railroad, and the horse and buggy. Today we can cross the globe in record time, with easy access to automobiles, airplanes, and ships. Added to this, the Internet and mobile technologies are changing the ways in which we connect across time and space, through constant connection and instantaneous communication. Increased interconnections between people can now happen through on-line education, e-mail, text messaging, and the development of virtual communities on the Internet, to name but a few. Geographers are increasingly interested not only in the emergence of virtual places on the Internet, but also in how these on-line communities and social activities shape, and are shaped by, our off-line, physical lives.

The interconnections between places are not only about how humans move from one place to another. Aspects of popular culture, such as fashion and architecture, are in some ways making many people and places seem more alike. Despite all these changes, our world still encompasses a multitude of ways in

which people identify themselves and others. Nearly 200 countries, a diversity of religions, thousands of languages, and any number of settlement types, from small villages to enormous cities, come together in different ways around the globe to create a world of endlessly diverse places and people. Understanding and explaining this diversity is the mission of human geography.

One term used frequently to describe the contemporary interconnections between places is *globalization*, a concept discussed in detail in Chapter 2. For now, we can think about globalization as a set of processes that reflect increasing interactions and heightening interdependence among and between places, with diminishing regard for national borders. Globalization also refers to a set of outcomes that result from these processes. These outcomes are unevenly distributed—that is, the processes of globalization are experienced differently in different locations, with different results across the world. For example, the fashion industry encompasses a far-reaching set of global processes that include consumerism, advertising, manufacturing, and shipping. However, the fashion industry experienced by a garment worker in Cambodia (Figure 1.4) is significantly different from that experienced by a teenager in Winnipeg, Manitoba.

Discussions about the processes of globalization often focus on the pull between the global—seen as a blanket covering the world—and the local—seen as a continuation of the traditional despite the blanket of globalization. Geographers are well positioned to understand globalization as much more than this. When they describe the outcomes of globalization as unevenly distributed, they are not only talking about effects and changes at the local level. Geographers use the concept of **scale** to understand the networked interrelationships among individual, local, regional, national, and global. Globalizing processes

Scale (1) Representation of a real-world phenomenon at a certain level of reduction or generalization. In cartography, the ratio of map distance to ground distance, indicated on a map as a bar graph, representative fraction, and/or verbal statement. (2) The territorial extent of something. When we refer to scale throughout this book, we are generally using the second of these definitions.



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FIGURE 1.4 Garment workers in Cambodia.

MAIN POINTS 1.1 What Is Human Geography?

- Human geographers study human-environment relations—both the impact we have on the physical and built environment and the interrelated impact the physical and material world has on us, individually and collectively.
- Human geographers are concerned with our sense of place—that is, how we make sense of place and our emotions, sentiments, and attachments to place.
- Human geographers argue that “place matters.” Where we are affects our sense of self (individually and also collectively, as a society), determines our ability to access

services such as education and health care, and influences whom we expect to see in which places.

- Places are interconnected in complex ways. One of those ways is through globalization, which can be understood as a set of processes that reflect increasing interactions, deepening relationships, and heightening interdependence among and between places without regard to national borders. It also refers to a set of outcomes that are felt from these global processes—outcomes that are unevenly distributed and differently manifested across the world.

occur at the world scale and are visible in such things as the global financial markets or even global environmental change. However, the processes of globalization do not magically appear at the global scale: *what happens at other scales (individual, local, regional, national) helps create the processes of globalization and shape the outcomes of globalization.* To reduce our understanding of the world to a consideration of only the local and the global is to miss all the complex interactions across, and cutting through, a multiplicity of scales. In this book, we study these processes and outcomes of globalization, and we use scale to assess the dynamic effects and impacts on place.

1.2 What Are Geographic Questions?

Geographer Marvin Mikesell defines geography succinctly as the “why of where.” Why and how do things come together in certain places to produce particular outcomes? Why are some things found in certain places but not in others? To what extent do things in one place influence those in other places? To these questions, we add “so what?” Why does it matter that things are different across space? What role does a place play in its region and in the world, and what does that mean for people there and elsewhere? Questions such as these are at the core of geographic inquiry—whether human or physical—and they are of critical importance in any effort to make sense of our world.

Spatial Pertaining to space on the Earth’s surface; sometimes used as a synonym for geographic.

If the field of geography deals with so many aspects of our world, ranging from people and places to coastlines and climates, what do the vari-

ous facets of this wide-ranging discipline have in common? The answer lies in a perspective that both human and physical geographers use: the **spatial**. Virtually all geographers are interested in the spatial arrangement of places and phenomena: how they are laid out, organized, and arranged on the Earth, and how they appear in the landscape.

THE SPATIAL PERSPECTIVE

Geography, and being geographically literate, involves much more than memorizing places on a map. In this sense, the disciplines of geography and history have much in common. History is not merely memorizing dates. To understand history is to appreciate how events, circumstances, and ideas came together at particular times to produce certain outcomes. Knowledge of how events have developed over time is critical to understanding who we are and where we are going.

Understanding change over time is critically important, and understanding change across space is equally important. The great German philosopher Immanuel Kant argued that we need to pay scholarly attention not only to particular phenomena (such as economics and sociology), but also to the perspectives of time (history) and space (geography). The disciplines of history and geography have intellectual cores defined by perspective rather than by subject matter.

Human geographers use a **spatial perspective** as they study a multitude of phenomena, ranging from political elections and shantytowns to gay urban neighbourhoods, on-line communities, and folk music. The goal here is for you to develop a spatial perspective on the world around you and the everyday spaces you experience. While there are many possible ways to conceptualize the spatial, we have selected **five themes** derived from the spatial perspective in geography to organize this book.

Spatial perspective Observing variations in geographic phenomena across space.

Five themes (of geography) The five themes derived from the spatial perspective of geography: location, region, place, landscape, and movement.

THE FIVE THEMES

Throughout this book, we draw in five major themes or concepts: location, region, place, landscape, and movement. This means that in every discussion about human-environment relations, we will use one or more of these themes. Several of them overlap or have similarities in meaning, and human geographers use the concepts in different combinations as they think about the geographical.

Location The geographical situation of people and things.

Thinking about location highlights how the geographical position of people and things on the Earth's surface matters in terms of what happens where, how, and why. A concern with location underlies almost all geographical work, as location helps to establish the context within which events and processes are situated.

Location theory A logical attempt to explain the locational pattern of an economic activity and the manner in which its producing areas are interrelated. The agricultural location theory contained in the von Thünen model in Chapter 9 is a leading example.

Some geographers develop elaborate (often quantitative) models describing the locational properties of particular phenomena—even predicting where things are likely to occur. Such undertakings have fostered an interest in **location theory**, an element of contemporary human geography that seeks answers to a wide range of questions—some of them theoretical, others highly practical—such as, why are villages, towns, and cities spaced or located the way they are? A geographer versed in location theory might make a decision about where a Canadian Tire store or Tim Hortons should be built, based on an assessment of the demographics and median income of the surrounding neighbourhoods, the locations of other shopping areas, and the existing and future road system. Similarly, a geographer could determine the best location for a wildlife refuge, given existing wildlife habitats and migration patterns, human settlement patterns, and road networks.

Region An area on the Earth's surface marked by a degree of formal, functional, or perceptual homogeneity of some phenomenon.

From our spatial perspective, we can determine that phenomena are not evenly distributed on the surface of the Earth. Instead, features tend to be concentrated in particular areas, which we call **regions**, the second concept we will draw on in this text. Novelist James Michener once wrote that whenever he started writing a new book, he first prepared himself by turning to books written by regional geographers about the setting for his story. Understanding the regional geography of a place allows us to make sense of much of the information we have about that place and to digest new information as well.

Formal region A type of region marked by a certain degree of homogeneity in one or more phenomena; also called uniform region or homogeneous region.

In geography, an area characterized by shared physical or cultural attributes constitutes a region. To identify and delimit a region, geographers must establish the criteria that will define it. Those criteria can be physical, cultural, functional, or perceptual. A physical region, such as the Canadian Shield, is defined by a shared physical geographic criterion. When geographers choose one or more physical or cultural criteria to define a region, they are looking for a **formal region**. A formal region has a shared

trait—it can be a shared cultural trait or physical trait. In a formal cultural region, people share one or more cultural traits. For example, the region of Europe where the majority of people speak French can be thought of as a French-speaking region. When the scale of analysis shifts, the formal region changes. If we shift scales to the world, the French-speaking formal region expands beyond France into former French colonies of Africa and into the overseas departments that are still associated politically with France.

A **functional region** is defined by a particular set of activities or interactions that occur within it. Places that are part of the same functional region interact to create connections. They also share a political, social, or economic purpose. Functional regions are not necessarily culturally homogeneous. Instead, the people within the region function together politically, socially, or economically. The city of Toronto is a functional region, and the city itself has internal functional regions, such as the central business district. Alternatively, the city of Mississauga is nested within the Golden Horseshoe, a larger functional region linked politically, economically, and socially. The name reflects a geographical shape and a consolidated economic region.

Functional region A region defined by the particular set of activities or interactions that occur within it.

Regions may be primarily in the minds of people—a product of our imagination (think, for example, about our perceptions of Newfoundland, the North, or the Maritimes). This does not mean the region is not “real.” Rather, such a region has less to do with material locations and more to do with how we understand a place. **Perceptual regions** are intellectual constructs designed to help us understand the nature and distribution of phenomena in human geography. As **Figure 1.5** demonstrates, perceptual regions can sometimes take on a comedic character. Geographers

Perceptual region A region that exists only as a conceptualization or an idea and not as a physically demarcated entity—for example, the North or the Maritimes.

Perceptual regions are intellectual constructs designed to help us understand the nature and distribution of phenomena in human geography. As **Figure 1.5** demonstrates, perceptual regions can sometimes take on a comedic character. Geographers



FIGURE 1.5 Perceptual regions of Canada.



FIGURE 1.6 Regional distinctions within Canada. From Robert M. Bone, *The Regional Geography of Canada* (3rd ed.), Figure 1.2, p. 11.

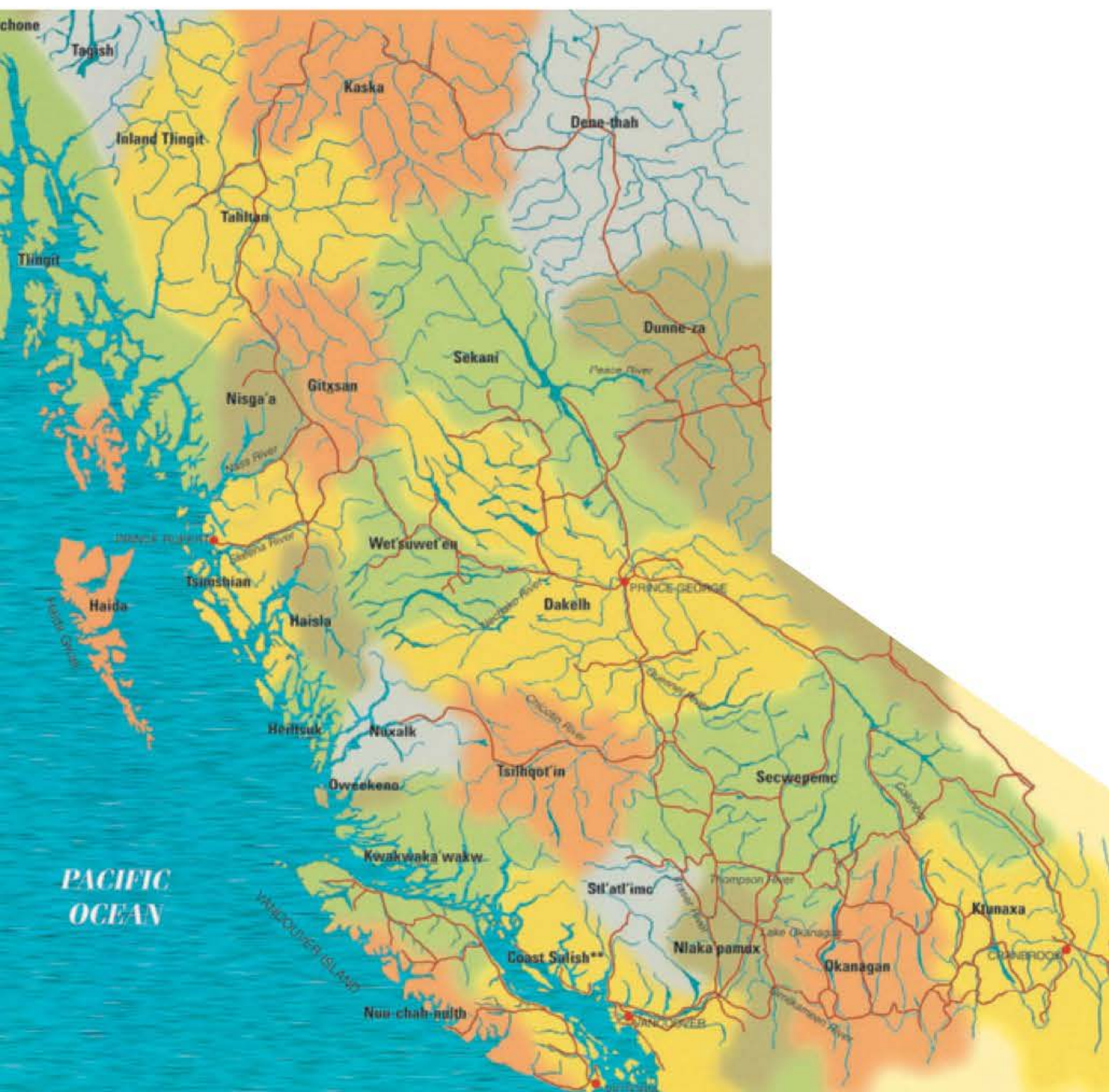


FIGURE 1.7 Boundaries between First Nations territories in British Columbia. In this presentation, the boundaries are deliberately blended to show the complex territorial relations being negotiated. Retrieved from Government of British Columbia website, www.bced.gov.bc.ca/abed/map.htm.

do not agree entirely on regional properties, but we do concur that we all have impressions and images of various regions and cultures. How people think about regions has influenced everything from daily activity patterns to large-scale international conflict. A perceptual region can include people, their cultural traits (such as dress, food, and religion), economic indicators (such as corporate locations or industrial base), places and their physical traits (such as mountains, plains, or coasts), and built environments (such as windmills, barns, skyscrapers, or beach houses).

Regions, whether formal, functional, or perceptual, are a form of spatial classification. They provide a means by which we can organize humans geographically or handle large amounts of information so we can make sense of it.

In her classic study of the forces of regionalism in Canada, Mildred Schwartz argues that regionalism in the Canadian context is shaped by shared past economic experiences, which have led to unequal development and political and social relationships. Regions in Canada have developed as a result of distinctive settlement patterns, distinctive cultural groups, and the ensuing economic and political regionalization. As **Figure 1.6** illustrates, many of us have a collective sense of Canadian regions that are a blend of these various factors. In thinking about Canada and its regions, we can consider the physical characteristics of regions, such as the Rockies or the Canadian Shield, or the cultural and social history of a place, such as the unique history of the peoples of Quebec or the North. We can also consider economic structures and political identities as well as transportation systems and urban development.

It is important to remember, however, that these political, cultural, physical, and perceptual regions are largely based on British and French colonial settlement patterns and not on an understanding of underlying indigenous populations. Ongoing land claims disputes remind us that First Nations' histories and understandings of the Canadian landscapes may be different from those reflected in our standard textbooks (**Figure 1.7**).

Place. The third theme arising from our spatial perspective is the seemingly simple idea of **place**, which is a key concept in geography. Geographers tend to distinguish the notion of “space” from that of “place,” although there are different ways of understanding this distinction. Generally, when we speak of “space” we are referring to a more mathematical or abstract sense of space, such as identifying a location by latitude or longitude or indicating that a city is so many

Place The uniqueness of human experience, including sights, smells, emotions, and experiences of a specific area or location on Earth.

kilometres from another city. When we speak of place, we are usually referencing some uniquely human experience of place—that is, how we experience a place through sights, sounds, and smells; our emotional attachment to place; and the meanings we give to places. All places have uniquely human and/or physical characteristics, and one of the purposes of geography is to study the special character and meaning of places for various individuals and groups of people. While place may be thought of as a bounded area or territory, it may also be a location with no clear boundaries that is part of our collective or imagined memory. We can, therefore, be interested in place as a point on a map, or we can study individual experiences of place in terms of emotions and attachments. People individually and collectively develop a sense of place based on the ways in which places take on meaning and emotion in various ways—we can remember important events that occurred in a place, or we can imbue a place with a certain character. Canadian geographer Edward Relph has argued that our sense of place is “an innate faculty, possessed in some degree by everyone, that connects us to the world” (1997, p. 208).

Some geographers note that we may also be developing a sense of “placelessness” because of the way so many landscapes seem similar or indistinguishable. For example, the layouts of airports, strip malls, food chains, and shopping centres have become largely interchangeable, so that no matter where we are in the world, these spaces may seem exactly the same. Geographer Yi-Fu Tuan coined the term “topophilia” to describe the emotional bond people have to place and to highlight his argument that the loss of the diversity and authenticity of place may lead to forms of alienation. We will explore the intricate relationships between people, place, identity, and social relations more deeply in chapters 7 and 8, on social geography and cultural geography, respectively.

Landscape. **Landscape** is the fourth core theme related to a spatial perspective. Human geographers generally understand landscapes to be the visible imprint of human activity

Landscape The overall appearance of an area. Most landscapes comprise a combination of natural and human-induced influences.

on the physical environment. It is important to note that the term is also used in different ways by others, such as physical geographers or ecologists. Carl Sauer, formerly a professor at the University of California at Berkeley, is the geographer whose name is most closely identified with this concept (we consider Sauer’s work in more detail in Chapter 8). In 1927, Sauer wrote an article, “Recent Developments in Cultural Geography,” in which he argued that cultural landscapes comprise the “forms superimposed on the physical landscape” by human activity. We will delve into this more deeply in Chapter 8.

The Tanzanian city of Dar-es-Salaam provides an interesting urban example of a landscape possessing visible imprints of changing occupancy. Arabs from Zanzibar first chose the African site in 1866 as a summer retreat. Next, German colonizers imprinted a new layout and architectural style (wood-beamed Teutonic) when they chose the city as the centre of their East African colonies in 1891. After World War I, when the Germans were ousted, a British administration took over the city and began yet another period of transformation. The British encouraged immigration from their colony in India to Tanzania. The new Asian migrant population created a zone of three- and four-storey apartment houses, which look as if they were transplanted from Mumbai, India (**Figure 1.8**). Then, in the early 1960s, Dar-es-Salaam became the capital of newly independent Tanzania. Thus, the city experienced four stages of cultural dominance in less than one century, and each stage of the sequence remains imprinted in the cultural landscape.



(a)



(b)

FIGURE 1.8 (a) Mumbai, India. Apartment buildings throughout Mumbai (formerly Bombay), India, are typically four storeys with balconies. **(b) Dar-es-Salaam, Tanzania.** This four-storey walk-up stands where single-family African dwellings once stood, reflecting the sequential occupancy of the city.

The cultural landscape can be seen as a kind of book offering clues into each chapter of the cultural practices, values, and priorities of its various occupiers. As geographer Peirce Lewis explained in *Axioms for Reading the Landscape* (1979), “Our human landscape is our unwitting autobiography, reflecting our tastes, our values, our aspirations, and even our fears, in tangible, visible form.” Lewis recommends looking for layers of history in cultural landscapes, adding that most major changes in the cultural landscape occur after a major event, such as a war, an invention, or an economic depression.

Movement. The fifth theme drawing on a spatial perspective is **movement**, which refers to the mobility of people, goods, and ideas across the surface of the planet. Movement is an expression of the interconnectedness of places. **Spatial interaction** between places depends on the **distance** (the measured physical space between two places) between places, the **accessibility** (the ease of reaching one location from another) of places, and the transportation and communication **connectivity** (the degree of linkage between locations in a network) among places. Interactions of many kinds shape the human geography of the world, and understanding these interactions is an important aspect of comprehending the global spatial order.

Movement The mobility of people, goods, and ideas across the surface of the planet.

Spatial interaction The nature and extent of interconnections and linkages. This depends on the distance between places, the accessibility of places, and the transportation and communication connectivity among places.

Distance Measurement of the physical space between two places.

Accessibility The degree of ease with which it is possible to reach a certain location from other locations. Accessibility varies from place to place and can be measured.

Connectivity The degree of direct linkage between one particular location and other locations in a network.

Transportation has become an important site of geographic inquiry that focuses on the movement of people and goods, the infrastructure to support that movement, and the interconnectedness of transportation systems with other aspects of human geography. Chapter 12 provides a detailed analysis of transportation geography. Moreover, there has been considerable scholarly inquiry into geographies that focus specifically on movement. Scholars interested in the “new mobilities paradigm” suggest that it is helpful to understand geography not as static, but in a constant state of movement and flux. As geographers Tim Cresswell and Peter Merriman state, “geographical knowledge often assumes a stable point of view, a world of places and boundaries and territories rooted in time and bounded in space. A new focus on mobilities in geography allows us to re-centre it in the discipline” (Cresswell & Merriman, 2011: 4). Mobilities research, therefore, asks geographers to think about being “on the move,” linking transportation and communication technologies including mobile phones, mobile computing, and Internet-based devices, and considering how these changes are (re)shaping our experiences across time and space.

MAIN POINTS 1.2 What Are Geographic Questions?

- Human geographers are concerned with questions arising from a spatial perspective. The discipline of geography has an intellectual core defined by perspective rather than by subject matter.
- A spatial perspective can be developed through attention to five basic themes: location, region, place, landscape, and movement.
- Using these themes, human geographers work to make sense of the complexities of human-environment relations. Many of these themes overlap or have similarities in meaning, and human geographers use the concepts in different combinations as they think about the geographical.

1.3 Why Do Geographers Use Maps and What Do Maps Tell Us?

Maps are an incredibly powerful geographic tool, and **cartography**, the art and science of making maps, is as old as geography itself. (For details on the cartographic arts, see Appendix A.) Maps have countless purposes—they can be used to wage war, promote political propaganda, solve medical problems, locate shopping centres, guide refugees, and warn of natural hazards. There are many distinctive kinds of mapping that convey incredible amounts of information. In our daily lives, most of us make use of several relatively common types of maps: reference maps, thematic maps, and mental maps help us make sense of the world. New technologies such as remote sensing and the Global Positioning System (GPS) add to our arsenal of technical tools for navigating our physical world.

Cartography The art and science of making maps, including data compilation, layout, and design. Also concerned with the interpretation of mapped patterns.

It is important to bear in mind that all maps simplify the world. A reference map of the world cannot show every place there is. Likewise, a thematic map of hurricane tracks in the Atlantic Ocean cannot pinpoint every hurricane and its precise path for the last 50 years. The very act of mapping—that is, putting pen to paper—erases some places from human memory and brings others into being. This is also illustrated in Figure 1.7, which details indigenous territorial understandings in British Columbia. When they map data, geographers make decisions about what information to include and generalize the information they present on maps. Many of the maps in this book are thematic maps of the world in which shadings show how much or how little of some phenomenon can be found on a part of the

Earth's surface. While these generalized maps help us see broad trends, we cannot see all cases of a given phenomenon. For example, the map of world precipitation (**Figure 1.9**) is a generalized map of mean annual precipitation received around the world. The areas shaded burgundy, dark blue, and vibrant green indicate places that receive the most rain, and those shaded orange receive the least rain on average. Take a pen and trace along the equator on the map. Notice how many of the high-precipitation areas on the map are along the equator. The consistent heating of the equator over the course of the year brings consistent precipitation to the equatorial region. At the scale of the world, we can see general trends in precipitation like this, but it is difficult to see the micro-scale areas of intense precipitation everywhere in the world.

REFERENCE MAPS

Reference maps Maps that show the absolute location of places and geographic features determined by a frame of reference, typically latitude and longitude.

Absolute location The position or place of a certain item on the surface of the Earth as expressed in degrees, minutes, and seconds of latitude, 0° to 90° north or south of the equator, and longitude, 0° to 180° east or west of the Prime Meridian passing through Greenwich, England (a suburb of London).

number the same coordinate system on both oranges, the task of drawing the absolute location on each orange is not only doable but also simple. The most frequently used coordinate system is latitude and longitude. For example, the absolute location of Mogadishu, the capital of Somalia, is 2° 04' N and 45° 22' E. Using these coordinates, you can plot the location of Mogadishu on any globe or map that is marked with latitude and longitude.

Relative location The regional position or situation of a place relative to the position of other places. Distance, accessibility, and connectivity affect relative location.

physical features. Descriptors such as “The city of Ottawa is located at the confluence of the Ottawa, Rideau, and Gatineau rivers” or “Calgary is the hub of the oil, gas, and wheat markets in western Canada” locate a place relative to other features. In eastern Ontario, all roads lead to Ottawa (**Figure 1.10**), and many of the people within that region would define much of their lives relative to Ottawa because of the tight interconnectedness between Ottawa and the eastern Ontario region.

Reference maps focus on accuracy in showing the **absolute locations** of places and geographic features. These maps use a coordinate system that allows you to plot precisely where something is on Earth. Imagine taking an orange, drawing a dot on it with a marker, and then trying to describe the exact location of that dot to someone who is holding another orange so she can mark the same spot on her orange. If you draw and

While reference maps show absolute locations, we often want to know where we are in terms of our relationship to other places. **Relative location** describes a place in relation to other human and

THEMATIC MAPS

Thematic maps tell stories, typically showing the degree of some attribute or the movement of a geographic phenomenon. Although humans have used maps for navigation for thousands of years, it is only in more recent times that we have begun to appreciate how mapping the **spatial**

distribution of a phenomenon is the first step to understanding it. By looking at a map that shows how something is distributed across space, we can raise questions about how the arrangement came about, what processes create and sustain the particular **pattern** of the distribution, and what relationships exist between different places and things. Thematic maps portray the social, political, economic, physical, agricultural, and other aspects of a particular place, region, or area. A unique example of thematic mapping is shown in **Figure 1.11**. Using data obtained from the Wikipedia data dump in November 2009, this map has been created to reveal the number of Wikipedia articles tagged to each country. There are approximately 500,000 Wikipedia articles that are about either a place or an event that occurred in a particular location, which include the absolute location coordinates for geotagging. Mapping the tags reveals the extent to which Wikipedia is dominated by U.S. and western European countries. Nearly 90,000 articles are tagged to the United States, for example. This map reveals how information itself is geographical and how the Internet (and Wikipedia in particular) is colonized in particular ways, and calls into question the neutrality of data found on-line.

An excellent example of how the mapping of patterns can lead to valuable discoveries

Pandemic An outbreak of a disease that spreads worldwide.

is found in the work of Dr. John Snow. In 1854, Dr. Snow, a noted anesthesiologist in London, England, mapped cases of cholera in London's Soho district. Cholera refers to a set of diseases in which diarrhea and dehydration are the chief symptoms. Up until the early 1800s, cholera had been confined to India, but it began to spread to China, Japan, East Africa, and Mediterranean Europe in the first of several **pandemics**, worldwide outbreaks of the disease. This initial wave had abated by 1823, but by then the very name of cholera was feared throughout the world, for it had killed people everywhere by the thousands. A second cholera pandemic struck North America between 1826 and 1837, and during a third pandemic, England was severely hit and the disease again spread into North America.

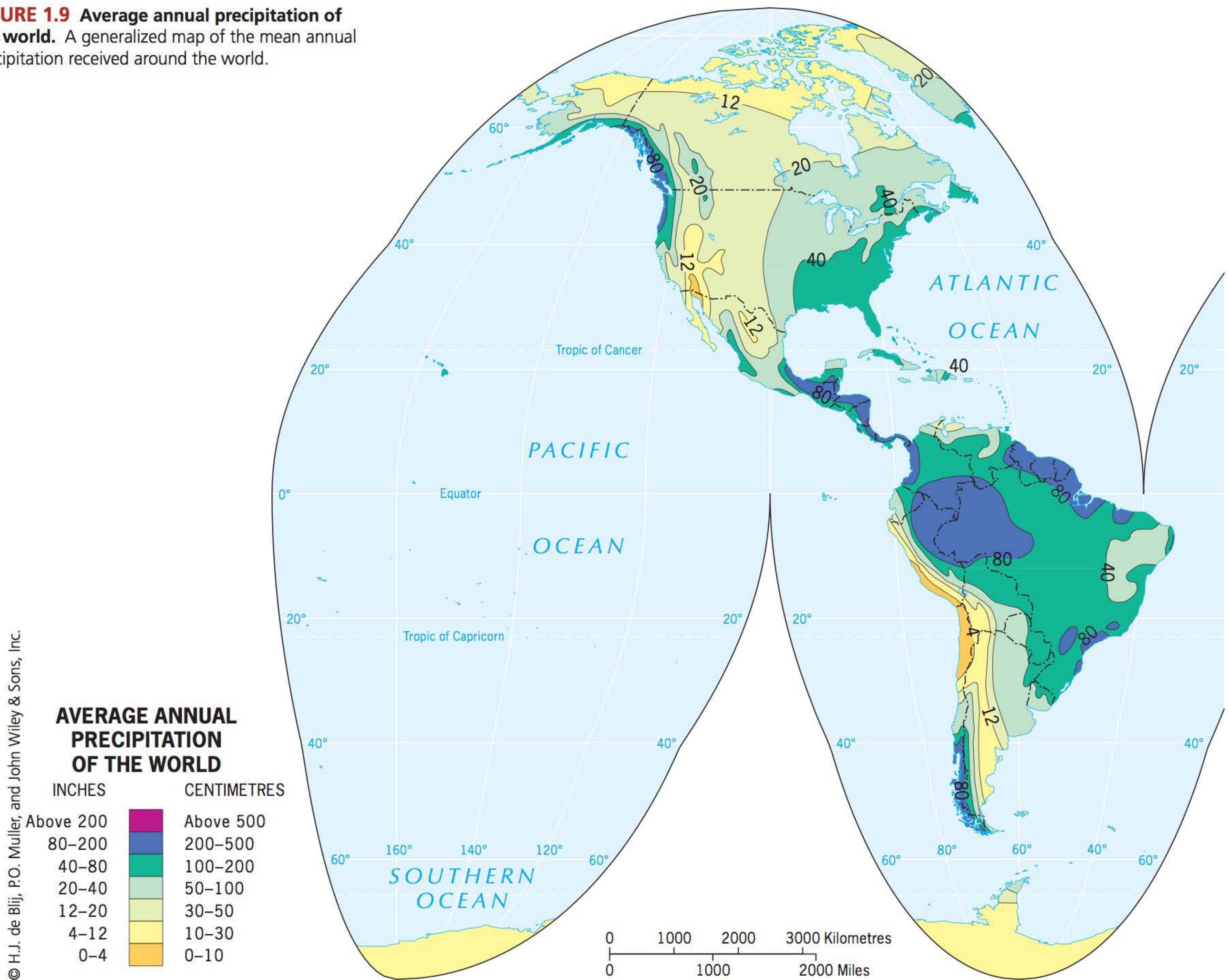
When the pandemic that began in 1842 reached England in the 1850s, cholera swept through Soho. In an effort to understand the disease, Dr. Snow mapped London's Soho district, marking all the area's water pumps, where residents obtained their water supply for home use. Dr. Snow marked these pumps with the letter P and also marked with a dot the residence of each person who died from cholera (**Figure 1.12**). Approximately

Thematic maps Maps that tell stories, typically showing the degree of some attribute or the movement of a geographic phenomenon.

Spatial distribution Physical location of geographic phenomena across space.

Pattern The design of a spatial distribution (e.g., scattered or concentrated).

FIGURE 1.9 Average annual precipitation of the world. A generalized map of the mean annual precipitation received around the world.

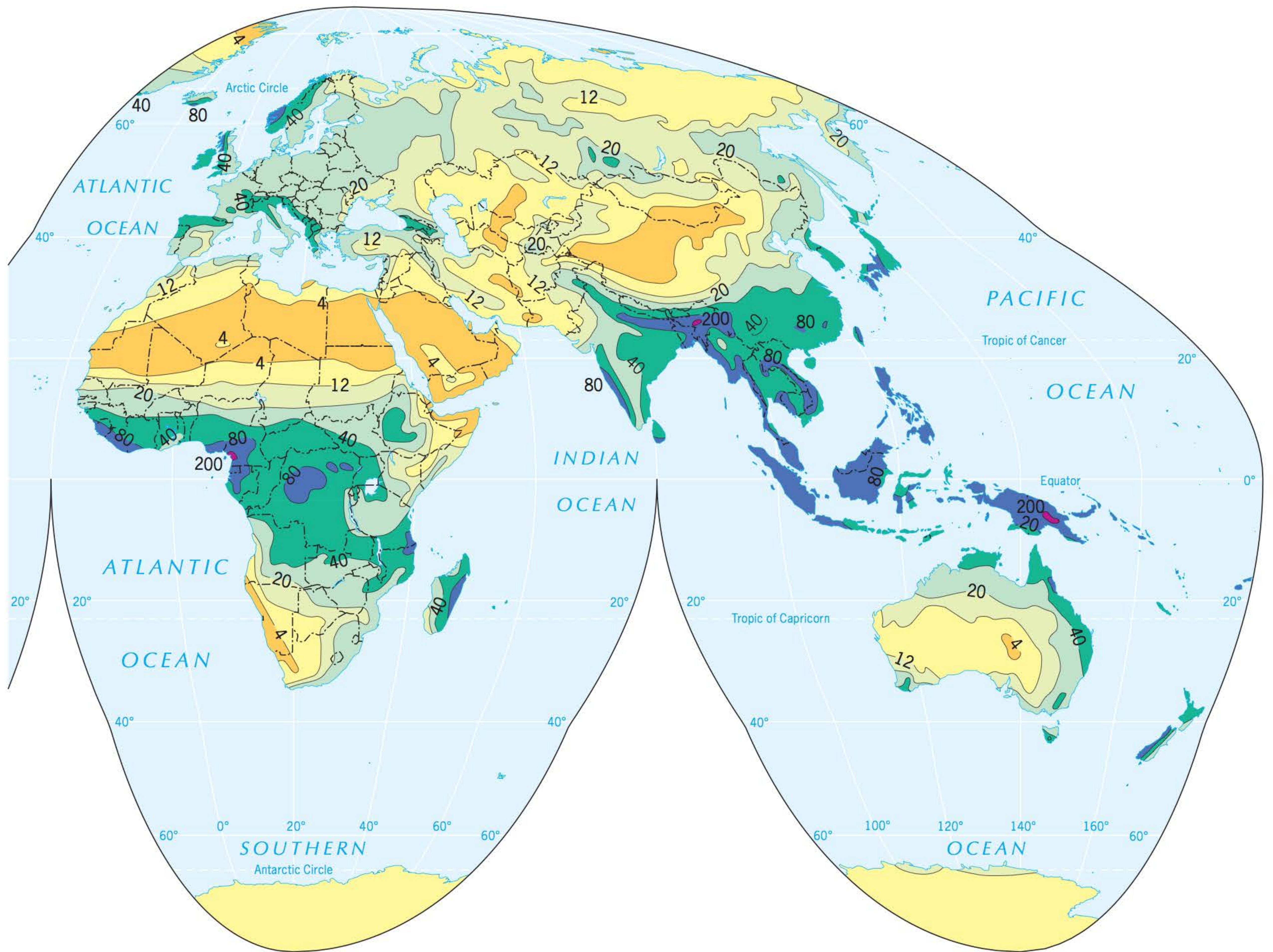


500 deaths occurred in Soho, and as the map took shape, Snow noticed that an especially large number of those deaths clustered around the water pump on Broad Street. Plotting the spatial distribution of the phenomenon made visible certain patterns that had previously been undetected. At Snow's request, city authorities removed the handle from the Broad Street pump, making it impossible to get water from that pump. The result was dramatic: almost immediately the number of reported new cases fell to nearly zero. Snow's theory about the role of water in the spread of cholera was confirmed, partly through the use of a thematic map.

Cholera has not been defeated completely, however, and in some ways the risks have risen in recent years. In the teeming shantytowns of the growing cities of the developing world, and in the refugee camps of Africa and Asia, cholera remains a threat. For example, in the aftermath of the Haitian earthquake in January 2010, damage to water supply systems and deteriorating sanitary conditions led to an outbreak of cholera in that country for the

first time in 100 years. Until the 1990s, major outbreaks remained few and limited (after remaining cholera-free for a half century, Europe had its first reappearance of cholera in Naples in 1972), and most cases were reported in Africa. But an outbreak in the slums of Lima, Peru, in December 1990 became a fast-spreading **epidemic** (regional outbreak of a disease) that, although confined to the Americas, touched every country in the hemisphere, infected more than one million people, and killed over 10,000. In 2006, a cholera outbreak in Angola spread quickly, abruptly ending Angola's civil war. The end of the war allowed people to move around the country more easily, which in turn inadvertently helped spread the disease. Proper hygiene prevents cholera, but contaminated water abounds in many of the tropical world's cities. A cholera vaccine exists, but it is costly and remains effective for only six months. Dr. Snow achieved a victory through the application of geographical reasoning, but the war against cholera is not yet won.

Epidemic Regional outbreak of a disease.



MENTAL MAPS

Mental map Image or picture of the way space is organized as determined by an individual's perception, impression, and knowledge of that space.

While we often think about maps as something we can hold and touch, it is also important to think about how we all carry maps in our minds of places we have been and places we have merely heard of—our internal **mental maps**. Even if you have never been to the Maritimes, for example, you may have studied wall maps and atlases or come across descriptions of the region in books, magazines, newspapers, websites, or television advertisements frequently enough to envision the provinces of the region (Nova Scotia, Prince Edward Island, and New Brunswick) in your mind. If you hear on the news that a hurricane caused damage in Halifax, you use your mental map of the region to make sense of where the hurricane occurred and its impact.

Our mental maps of the places within our **activity spaces** (those places we travel to routinely in our rounds of daily activity) are more accurate and detailed than our maps of places we have never been (**Figure 1.13**). If your friend calls and asks you to meet her at the movie theatre you go to all the time, your mental map will engage automatically. You will envision the hallway, the front door, the walk to your car, the lane to choose in order to be prepared for the left turn you must make, the spot where you will park your car, and your path into the theatre and up to the popcorn stand.

Geographers who study human-environment behaviour have made extensive studies on how people develop their mental maps. The earliest humans, who were nomadic, had incredibly accurate mental maps of where to find food and shelter. Today, people use mental maps to find their way through the intricacies of cities and suburbs. Geographers have also studied how children, people who are blind, new residents to cities, and men

Activity space The space within which daily activity occurs.