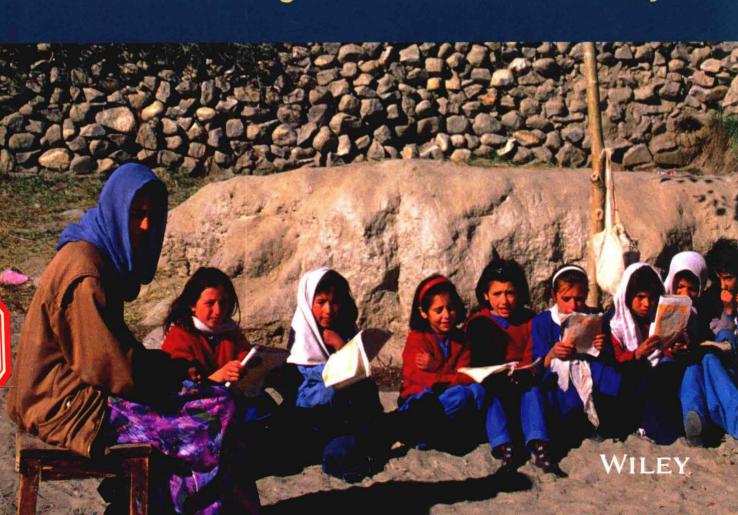


World Regional Geography



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UNDERSTANDING WORLD REGIONAL GEOGRAPHY

Five hundred years ago, the greatest library in Europe was at Queens' College in Cambridge and had only 199 books in the entire collection. In 2013, publishers released more than 300,000 new titles or editions of books, and authors selfpublished more than 390,000 books in the United States alone. Even more remarkably, more than 1.1 million print on-demand or Internet-access only books were published, with marketing done chiefly on the Internet. Five hundred years ago, a scholar could claim to have read every book in Europe's greatest library. Today, no one can claim to have read each of the more than 36 million books in the Library of Congress in the United States. At the turn of the millennium, Librarian of Congress James Billington quipped that we are no longer in the Age of the Renaissance or the Information Age; rather, we currently live in a "Too Much Information Age."1

Too much information. Your generation, which cannot remember a time before the Internet and may have never used a card catalog in a library, is adept at quickly finding information. The vast majority of the information you find on the Internet is less than 15 years old. All of this recent information can give society a short-term memory that lacks the depth of geographic context and historical knowledge. Does all of the information with which you are inundated each day seep into your brain and improve your understanding of the world? Not likely.

One goal of this book is to help you sort through the "too much information" and gain understanding by thinking geographically about the world. Many general education curriculums at colleges and universities throughout North America require students to take "globalization" courses or to become better "global citizens." We are biased, as geographers, but we contend that the best possible way to gain a global perspective and to organize the vast amount of information that floods your lives each day is through world regional geography.

Understanding World Regional Geography helps students begin to grasp the complexities of our world. If you have ever watched the news or read a newspaper and thought, "I cannot possibly understand what is going on in Syria;" I cannot understand how China became so economically powerful in the last 30 years;" or "Why are some people and places incredibly poor while others are ridiculously

¹Achenbach, Joel. "The Too-Much-Information Age: Today's Data Glut Jams Libraries and Lives. But Is Anyone Getting Any Wiser?" *Washington Post*, March 12, 1999, A1.

wealthy?" you know the feeling of thinking the world is simply too complex to understand.

How can *Understanding World Regional Geography* help you on your journey of better understanding our complex world? We designed this book and the corresponding online content to introduce you to the integrative way geographers gather and process information. To do this, we build from the geography education literature, which has established that thinking geographically requires two things: applying geographic concepts to real-life situations and going into the field and seeing the world as geographers.

Understanding World Regional Geography introduces you to dozens of geographic concepts that you can integrate and apply to real-world situations. Across 14 chapters we highlight 25 **Threshold Concepts** that will help you learn to think geographically. Once you learn one of these concepts and apply it yourself, you will begin to integrate the concept in your thinking and can draw from it

Threshold Concepts in Geography

CHAPTER	THRESHOLD CONCEPTS
Introduction to World Regional Geography	Context Region Cultural Landscape Scale
Global Connections	Anthropocene Globalization Networks
Geography of Development	Development Unequal Exchange Mental Map
Subsaharan Africa	Situation
Southwest Asia and North Africa	Diffusion Hearth
South Asia	Green Revolution
Southeast Asia	Tourism Authenticity
East Asia	Commodity Chain
Europe	Population Pyramid
North and Central Eurasia	Identity
North America	Migration
Latin America and the Caribbean	Race Gender
Pacific	Time-Space Compression
World Regions and World Cities	World Cities

to learn new material and think geographically. When a Threshold Concept is introduced in depth, an icon appears in the margin and a definition is given at the bottom of the page. At the end of each chapter, the **Creative and Critical Thinking Questions** each integrate Threshold Concepts, which affords you an opportunity to apply Threshold Concepts to your surroundings and case studies from each world region.

WileyPLUS Learning Space includes to a matrix for the 25 Threshold Concepts that links you through to a variety of case studies from *Understanding World Regional Geography* that use each threshold concept.





MAPS.com

We established the mapping program in *Understanding World Regional Geography* through partnerships with Esri and Maps.com. Maps.com used ArcGIS to create six thematic maps for print and digital in each chapter of *Understanding World Regional Geography*. Clicking on a webmap in the *Understanding World Regional Geography* online environment opens the map in ArcGIS Online, making the map dynamic and interactive.

Dynamic webmaps give students ownership of their learning. In the ArcGIS Online environment, students can interact with the maps, turning on and off layers, zooming in and out, panning across maps, adding their own layers of data, and using spatial analysis tools in ArcGIS Online to ask and answer questions. An expert in geography education and spatial thinking designed map exercises in each chapter that take students through steps in Bloom's taxonomy, first asking students to look for patterns on a map, then asking students to compare and contrast different data or different areas of the map, and later asking students to infer and predict based on the map.

ArcGIS Online is simple to use while also being robust. Students can work through map questions using really basic commands in ArcGIS Online. Students who grow curious and explore ArcGIS Online or whose professors or discussion leaders create their own assignments using *Understanding World Regional Geography's* dynamic webmaps can ask and answer new questions by adding layers from outside, creating class (virtual) field trips, designing Esri storymaps to track a history, pattern, or phenomenon, and using ArcGIS Online's spatial analysis tools to ask and answer complex questions.

As students interact with the maps, they learn how to think geographically by asking geographic questions and using webmaps to find answers. Instead of telling students geography is something you memorize, we show students that geography is something you do.

UNDERSTANDING WORLD REGIONAL GEOGRAPHY FEATURES:

- Chapter Opener Featuring a single photograph and a short vignette, the authors draw students into reading the chapter. The goal of each chapter opener is to get students to think twice about their existing perception of a region.
- Guest Field Notes: The authors invited colleagues to discuss their fieldwork-based research. Each guest field note includes a photograph and a vignette describing the fieldwork.
- Using Geographic Tools This feature demonstrates, through real-world examples, how geographers use tools, including regions, mental maps, GIS, crowdsourced maps, statistics, surveys, landscape analysis, and planning, to do geography. Each Using Geographical Tools entry includes a photo or map and two Thinking Geographically questions.
- Reading the Physical Landscape Students are walked through the process of examining a physical landscape, identifying physical features, and understanding the processes that created the features in the landscape.
- Reading the Cultural Landscape Students are walked through the process of examining a cultural landscape, identifying the visible imprint of humans and cultures on the landscape, and understanding the processes that shaped the landscape.
- Your Turn: Geography in the Field Students are given the opportunity to analyze a photograph, make observations, ask questions, and think through answers. Each Your Turn: Geography in the Field feature includes at least two Thinking Geographically questions.

Learning to think geographically requires practice. The Guest Field Notes, Reading the Cultural Landscape, Reading the Physical Landscape, and the Your Turn: Geography in the Field features may inspire you to look at your campus or neighborhood in a new light. Start making observations, asking why something is where, and seeking answers.

A global perspective is not easily achieved. It may take you a lifetime. Our hope is that this class and this book will set you on the path to seeing how you fit into the world, to becoming curious about the varied people and places in our world, and to gaining a deeper understanding of this vast place we call home.

ACKNOWLEDGMENTS

We began work on *Understanding World Regional Geography* about eight years ago when Erin envisioned designing a book around how students learn. Inspired by the National Research Council's *How Students Learn: History, Mathematics, and Science in the Classroom*, by articles and presentations in geography education emanating from the National Council for Geography Education

and the Association of American Geographers, and by her own research in geography education based on metacognition assignments she has used for approximately 2,000 students in her introductory geography classes over the last 20 years, Erin wrote the outline for the book and the introductory chapter around the best practices she had found to help students understand world regional geography.

At the time, Erin was already working with Ryan Flahive, Wiley Geosciences editor, on *Human Geography: People, Place, and Culture* (with Alexander B. Murphy and H. J. de Blij), and Ryan called Erin and asked that she consider writing a world regional geography book. The project started in earnest in 2006.

Dozens of people at Wiley have played a hand in bringing this book to fruition. Ryan Flahive was a partner in developing Understanding World Regional Geography from the beginning. Ryan recognized and helped refine Erin's vision for a book designed around how students learn. He and Erin engaged in countless discussions about the limitations of a PDF-based, traditional e-textbook. Ryan played a central role in developing Wiley's dynamic learning platform, WileyPLUS Learning Space, and we are proud that Understanding World Regional Geography is the pioneer first edition book to be designed and published using WileyPLUS Learning Space. Erin met with Jay O'Callaghan at the Association of American Geographers meeting in 2012. Erin and Jay were walking through the convention center and mulling over how to make maps with which students could take ownership of their learning. Erin was lamenting the fact that ArcGIS would be the best possible platform but that it would have too high of a learning curve for an introductory class, when they were drawn into the Esri booth to watch a demonstration of ArcGIS Online. As Erin soon discovered, Esri's ArcGIS Online is perfectly suited for the novice, armchair user with no background in GIS. This generation of college students, the Millennials, can navigate well-designed software intuitively, and ArcGIS Online is a well-designed, dynamic geographic information systems (GIS) environment. Jay gave his support to a revolutionary mapping program designed to fully function in ArcGIS Online, and Ryan and Erin met with Esri in Redlands, California.

David DiBiase, Esri Director of Education, and the education team at Esri, including Charlie Fitzpatrick, Angela Lee, and Joseph Kerski, have given exceptional support to the *Understanding World Regional Geography* mapping program. Sean Breyer, Esri Program Manager for Online Content, and his team searched for hard to find data and vetted layers for the best sources to integrate into our maps. We thank Jack Dangermond, founder and president of Esri, for his continually evolving and progressive vision of maps as spatial thinking, analysis, and decision-making tools and for his unwavering support for our project. David DiBiase served as lead vocal and Ryan Flahive was lead guitar for the mapping program band. Erin periodically beat the drum to keep moving us forward, but it was the trust established

between David and Ryan that allowed Esri, the leading GIS company, and Wiley, the leading geography publishing company, to take a leap of faith and provide the resources and effort necessary to make our robust mapping program. We thank them for creating a partnership that made our groundbreaking mapping program possible. In a conversation in 2014, David quipped, "Maps are not trivial things." Thanks to David's guidance and the support of the education team at Esri, students will recognize how maps can transform their learning of facts into an understanding of connections, patterns, and context, while using the dynamic webmaps and accompanying exercises in WileyPLUS Learning Space.

Wiley has been incredibly supportive of *Understanding* World Regional Geography since its inception. We were assigned several of the best development editors in the business. Mary O'Sullivan, Ellen Ford, and Nancy Perry helped envision the flow of the chapters, adeptly coordinated reviews, thoughtfully guided our progress, and learned to think geographically along the way. Once we moved from development to production, Sandra Dumas and Janet Foxman served as production editors, organizing the manuscript schedule and map and art programs to bring the book together. Jackie Henry stepped in, and we benefitted from her organization, support, and ability to juggle. While moving Understanding World Regional Geography through production, Jackie also served as production editor for Human Geography: People, Place, and Culture. Dennis Free was the final production editor. His pragmatism, communication skills, and organizational abilities brought the book to print, and we are thankful for his work.

Wiley Vice President and Director Petra Recter championed this first edition. Petra recognized potential bandwidth issues and supported us through periods of overload. Wiley Geosciences editor Jess Fiorillo hit the ground running in fall 2014. We appreciate her candor, intelligence, kindness, and optimism. Veronica Armour has a keen sense of curiosity, which helped improve this book. Darnell Sessom's kindness and support are truly appreciated. Julia Nollen adeptly handled the guest field notes and stepped up in the last few weeks to help us reach our goal. Kathryn Hancox was invaluable to Erin as coordinator for permissions, art, and photos. The amount of work that goes into permissions has increased significantly since the beginning of this project, and Kathryn and permissions editor Craig Leonard were thorough. Photo editor Billy Ray was a delight to work with, as he took the time to really think about how a photo needed to be framed to convey a certain geographic concept. He has a great eye for photography and displayed a willingness to dig when we asked him to do so. After working on a book so long, the authors hope that the designer will present the material in an engaging manner. Senior designer Wendy Lai created a layout that engages the reader, and she drew from her impeccable taste and aesthetic to design a beautiful book. Behind the scenes, Geraldine Osnato, Kevin Holm, and Harry Nolan moved

our book forward, and we are so thankful for their work. Suzanne Bochet and Christine Kushner developed a marketing plan that conveyed the message of our goal—to help students understand world regional geography. We tell our students that they can only improve their writing by being open to review, and we appreciate Karen Fein took the time to read our every word and give us constructive feedback. Both of us improved our writing thanks to Karen's guidance. During the production process very little can make an author laugh as the stress level builds, but Betty Pessagno, who served as copyeditor and proofreader, made Erin laugh out loud, alone in her basement at 4 in the morning many times. Erin actually looked forward to getting Betty's edits because they were always spot on and were often tinged with a sarcasm that made the process so much more enjoyable.

Erin's dear friend and past president of the National Council for Geography Education, Jan Smith, authored a white paper on best practices for textbook maps that informed our mapping program. Jan and Erin engaged in research in threshold concepts to test the pedagogy of *Understanding World Regional Geography* among faculty, instructors, and students. We thank Jan for stepping up every time she was asked, participating in conference calls and coffee meetings and responding to emails and phone calls.

We are indebted to all our colleagues who served as reviewers or in focus groups. At the very beginning, Jason Dittmer, Cary Komoto, and Eric Fournier gave us valuable feedback that helped establish a sound footing for our writing. Thank you to Alan Arbogast who wrote the drafts of "Reading the Physical Landscape" throughout the 14 chapters. Thank you to every reviewer who took the time to read carefully, critically analyze, and offer suggestions for our chapters:

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After establishing the Esri-Wiley partnership, we needed to find the best possible cartographers to create our maps. We were aided by two well-respected cartography teams: Maps.com and Mapping Specialists. Bennett Moe at Maps.com worked with Esri and Wiley and other data vendors to create systems that made our maps work in ArcGIS Online and took the lead on creating the dynamic webmaps. Cartographer Martha Bostwick designed the map palette and design specifications based on Wendy Lai's book design. Martha designed the six print thematic maps and Jesse Wickizer created the dynamic webmaps for each chapter, and we appreciate the thought they put into designing them. Erin has worked with Don Larson at Mapping Specialists since 2004, and we appreciate his ability to convey data and concepts through beautifully designed maps. We trusted Don's team, including Beth

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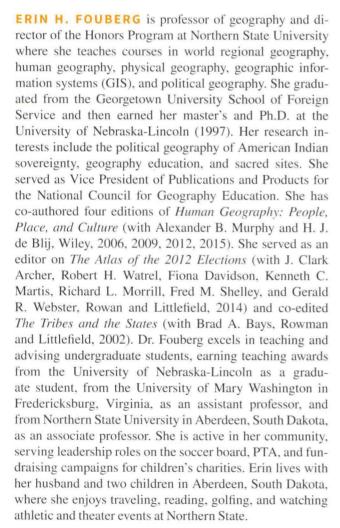
Erin thanks her professor, mentor, and colleague, H.J. de Blij, from whose unwavering support she drew strength. She also wishes to acknowledge the influence of her colleagues and mentors, Alec Murphy, Clark Archer, Marshall Bowen, David Wishart, Dawn Bowen, Stephen Hanna, Fred Shelley, Jason Dittmer, David Grettler, and Jonathan Leib. Erin is grateful for her husband, Robert, who would listen to a particular concern of hers and say "How can I help?" Erin recognizes that many of the formative years of her children's (Maggie and Henry) lives were punctuated by replies of "As soon as I finish this chapter." They likely think the book is 500 chapters long, not recognizing that each chapter was "finished" several times before it went to print. In numerous ways, Maggie and Henry are in this book, as they described what they saw in photos to help with photo selections, gave feedback on drafts of maps, and even listened to passages and suggested revisions. A special thanks to Amanda Jacobs, who along with Maggie, helped explain how a Millennial would interpret a particular passage. Every academic needs friends who can appreciate their nerdiness, and Erin relies on Barb Magera and Molly Richter to accept her for who she is-in panic and in calm. Erin's father, Ed, who is a geographer, trained her to think geographically while she sat in the backseat of the family station wagon on long drives around the country. The results of his encouragement to ask questions, make connections, and reason through answers and his tip to read certain geographers whom he considered "mad geniuses" are found throughout this book. Erin's mother, Joan, knew exactly when to ask about the project and when to step back. Her constant intercession to "Keep the faith" propelled her forward during some dodgy parts of the process. Thank you to Glenna and Rod, who lovingly provided for the "care and keeping of Maggie and Henry" many times over the course of this project. Erin thanks her sisters, Molly and Bridget, and her brothers, Tim and Eddie, for believing in her.

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Finally, we thank the professors who taught us, the colleagues who challenged us, and the students who inspired us, each helping to shape us into the geographers we are.

> Erin H. Fouberg Aberdeen, South Dakota William G. Moseley St. Paul, Minnesota







WILLIAM G. MOSELEY is a professor and chair of geography, and director of African studies, at Macalester College where he teaches courses on human geography, environment, development, and Africa. His research interests include political ecology, tropical agriculture, environment and development policy, and livelihood security. His research and work experiences have led to extended stays in Mali, Zimbabwe, South Africa, Botswana, Malawi, Niger, and Lesotho. He is the author of over 70 peer-reviewed articles and book chapters. His books include: An Introduction to Human-Environment Geography: Local Dynamics and Global Processes (with Eric Perramond, Holly Hapke, and Paul Laris) (Wiley-Blackwell, 2013); four editions of Taking Sides: Clashing Views on African Issues (McGraw-Hill/Dushkin, 2004, 2006, 2008, 2011); Hanging by a Thread: Cotton, Globalization and Poverty in Africa (with Leslie Gray) (Ohio University Press, 2008); The Introductory Reader in Human Geography: Contemporary Debates and Classic Writings (with David Lanegran and Kavita Pandit) (Wiley-Blackwell, 2007); and African Environment and Development: Rhetoric, Programs, Realities (with B. Ikubolajeh Logan) (Ashgate, 2004). His fieldwork has been funded by the National Science Foundation and the Fulbright-Hays program. He has served as editor of the African Geographical Review, as a national councilor to the Association of American Geographers, and as chair of the cultural and political ecology specialty group. In 2011, he won the Educator of the Year award from students at Macalester College, and in 2013 he won the Media award from the Association of American Geographers for his work communicating geography to the general public via essays that have appeared in outlets such as the New York Times, Washington Post, and Al Jazeera English. Bill lives with his wife and two children in Saint Paul, Minnesota, where he enjoys running, cross-country skiing, and camping in his spare time.

DEDICATION



For
Robert John Fouberg
my husband and best friend
and
James F. Moseley
my little brother and inspiration

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