Mirror for Humanity

A Concise Introduction to Cultural Anthropology

Thirteenth Edition

Conrad Phillip Kottak
University of Michigan

Mc Graw Hill

MIRROR FOR HUMANITY: A CONCISE INTRODUCTION TO CULTURAL ANTHROPOLOGY, THIRTEENTH EDITION

This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 LCR 27 26 25 24 23 22

ISBN 978-1-260-72920-7 (bound edition)
MHID 1-260-72920-6 (bound edition)
ISBN 978-1-265-71407-9 (loose-leaf edition)
MHID 1-265-71407-X (loose-leaf edition)

Portfolio Manager: *Sarah Remington*
Product Developer: *Elisa Odoardi*
Marketing Manager: *Nancy Baudean*
Content Project Managers: *Maria McGreal, Katie Reuter*
Senior Buyer: *Laura M. Fuller*
Content Licensing Specialist: *Carrie Burger*
Cover Image: *Sirisak_baokaew/Shutterstock*
Compositor: *MPS Limited*

Library of Congress Cataloging-in-Publication Data

Names: Kottak, Conrad Phillip, author. | McGraw-Hill Education (Firm)
Title: Mirror for humanity : a concise introduction to cultural anthropology / Conrad Phillip Kottak, University of Michigan.
Description: Thirteenth edition. | New York, NY : McGraw Hill LLC, [2023] | Previous editions 2019, 2018, 2016, and 2014. | Includes bibliographical references and index.
Identifiers: LCCN 2021034860 | ISBN 9781260729207 (hardcover) | ISBN 9781265714079 (spiral bound) | ISBN 9781265801656 (epub)
Subjects: LCSH: Ethnology.
Classification: LCC GN316 .K66 2023 | DDC 306–dc23
LC record available at https://lccn.loc.gov/2021034860

mheducation.com/highered

To my daughter,
Dr. Juliet Kottak Mavromatis

Also available from McGraw Hill by Conrad Phillip Kottak:

Window on Humanity: A Concise Introduction to Anthropology, 10th ed. (2023)

Anthropology: Appreciating Human Diversity, 19th ed. (2022)

Cultural Anthropology: Appreciating Cultural Diversity, 19th ed. (2022)

CULTURE, 2nd ed. (2014) (Lisa Gezon and Conrad Phillip Kottak)

On Being Different: Diversity and Multiculturalism in the North American Mainstream, 4th ed. (2012) (with Kathryn A. Kozaitis)

Brief Contents

Contents

Anthropology Today Boxes

Preface

Mirror for Humanity is intended to provide a concise, readable introduction to cultural anthropology. Its shorter length increases the instructor's options for assigning additional reading—case studies, readers, and other supplements—in a semester course. *Mirror* also can work well in a quarter system, for which traditional texts may be too long.

Just as anthropology is a dynamic discipline that encourages new discoveries and explores the profound changes now affecting people and societies, this edition of *Mirror for Humanity* makes a concerted effort to keep pace with changes in the way students read and learn core content today. Our digital program, **Connect Anthropology,** includes assignable and assessable quizzes, exercises, and interactive activities, organized around course-specific learning objectives. **Connect** also includes **SmartBook,** the adaptive reading experience. The tools and resources provided in Connect Anthropology are designed to engage students and enable them to improve their performance in the course. This 13th edition benefited from feedback from more than 2,000 students who worked with these tools and programs while using previous editions of *Mirror* or one of my other recent texts. We were able to respond to specific areas of difficulty that students encountered, chapter by chapter. I used this extensive feedback to revise, rethink, and clarify my writing in almost every chapter. In preparing this edition, I benefited from both students' and professors' reactions to my book.

As I work on each new edition, it becomes ever more apparent to me that while any competent and useful text must present cultural anthropology's core, that text also must demonstrate the field's relevance to the twenty-first-century world we inhabit. Accordingly, each new edition contains content changes as well as specific features relevant to our changing world. One of my primary goals is to help students make connections between what they read and their own lives. Accordingly, the "Anthropology Today" boxes placed near the end of each chapter examine recent developments in anthropology as well as contemporary topics and issues related to anthropology's subject matter. Almost half (6 of 13) of these "Anthropology Today" boxes are new to this edition. Each chapter also contains a feature that I call "Think Like an Anthropologist," which attempts to get students to do just that—to apply their critical thinking skills as an anthropologist might.

I realize that most students who read this book will not go on to become anthropologists, or even anthropology majors. For those who do, this book should provide a solid foundation to build on. For those who don't—that is, for most of my readers—my goal is to instill a sense of understanding and appreciation of human diversity and of cultural anthropology as a field. May this course and this text help students think differently about, and achieve greater understanding of, their own culture and its place within our globalizing world.

McGraw Hill Connect Anthropology

Connect Anthropology is a premier digital teaching and learning tool that allows instructors to assign and assess course material. Connect Anthropology includes assignable and assessable quizzes, exercises, and interactive activities, organized around course-specific learning objectives. **NewsFlash** activities, which are updated regularly, bring in articles on current events relevant to anthropology with accompanying assessment.

The system is praised by users—faculty and students alike—for helping to make both teaching and learning more efficient, saving time and keeping class time and independent study time focused on what is most important and only those things that still need reinforcing, and shifting the teaching/learning process away from memorization and cramming. The result is better grades, better concept retention, more students staying in class and passing, and less time spent preparing for classes or studying for tests.

Provide a Smarter Book and Better Value with SmartBook

SMARTBOOK® Available within Connect, SmartBook makes study time as productive and efficient as possible by identifying and closing knowledge gaps. SmartBook identifies what an individual student knows and doesn't know based on the student's confidence level, responses to questions and other factors.

SmartBook builds an optimal, personalized learning path for each student, so students spend less time on concepts they already understand and more time on those they don't. As a student engages with SmartBook, the reading experience continuously adapts by highlighting the most impactful content a student needs to learn at that moment in time. This ensures that every minute spent with SmartBook is returned to the student as the most value-added minute possible. The result? More confidence, better grades, and greater success.

New to this edition, SmartBook is now optimized for digital devices like phones and tablets; SmartBook also offers greater accessibility for students with disabilities.

Chapter-by-Chapter Changes

This 13th edition of *Mirror for Humanity* has been extensively informed by student data, collected anonymously by McGraw Hill Education's SmartBook. Using this data, we were able to graphically illustrate "hot spots," indicating content area students struggle with. This data provided feedback at the paragraph and even sentence level. Conrad Kottak relied on this data when making decisions about material to revise, update, and improve. Professor Kottak also reviewed and, when necessary, revised probes to make SmartBook an even more efficient and effective study tool. This revision has also been informed by reviews provided by faculty at 2- and 4-year schools across the country.

The following are this edition's major or significant changes:

Chapter 1: What Is Anthropology?

- This chapter's new "Anthropology Today–Words of the Year," focusing on how changes in vocabulary reflect cultural changes, illustrates common ground between linguistic and cultural anthropology.

Chapter 2: Culture

- Recent studies of tool making by capuchin monkeys in Brazil and chimps in Guinea are discussed.
- A U.S. President's threat to bomb Iranian cultural sites is used to frame the updated discussion of why heritage should be preserved and protected.
- There is new information on transnational communication and social media in the section on globalization.

Chapter 3: Doing Anthropology

- The discussions of ethics and anthropologists and the military have been revised and updated.

Chapter 4: Language and Communication

- The major section on "Sociolinguistics" has been reorganized, with new subheads added for clarity and new content on speech patterns and politics.
- A new "Anthropology Today" box, "Naming a Pandemic: Do Geographic Names Stigmatize?" examines the naming of diseases, including the COVID-19 coronavirus.

Chapter 5: Making a Living

- I updated the "Sad Case of the Basarwa San" (their eviction from their ancestral territory and forced resettlement).
- A new "Anthropology Today" box "To Give Is Good: Reciprocity and Human Survival" describes ongoing research by the Human Generosity Project, with a focus on recent fieldwork among the Ik of Uganda.
- I moved the "Anthropology Today" box on deindustrialization to Chapter 12.

Chapter 6: Political Systems

- There is a new "Anthropology Today" box, "Political Action to Protect the Sentient Forest."

Chapter 7: Families, Kinship, and Marriage

- The section "Changes in North American Kinship" contains a revised and updated discussion of changing characteristics of American families, households, and children's living arrangements.
- There is a new discussion of how the COVID-19 pandemic and the ensuing economic downturn pushed younger American adults to move in with their parents, thus reversing a historic trend toward smaller family and household size.
- There is a new discussion of "Relationships Queried in the 2020 Census."
- The section on "Same-Sex Marriage" has been updated.

- I streamlined the section on "Divorce."
- The section on "The Online Marriage Market" has been substantially revised and updated.

Chapter 8: Gender

- The section "Gender in Industrial Societies" has been revised, updated, and streamlined.
- A new "Anthropology Today" box, "Patriarchy Today: Case Studies in Fundamentalist Communities," highlights Maxine Margolis's recent comparative study of female status in three fundamentalist religious communities.

Chapter 9: Religion

- I wrote a new "Anthropology Today" box, "Rituals in a Pandemic's Shadow."
- In the section "Religion and Change," the subsection on "Religious Change in the United States" has been revised as per 2019 surveys, focusing on the shift to nonaffiliation.

Chapter 10: Ethnicity and Race

This chapter has been significantly updated, reorganized, and revised, with much new material. Specifics include:

- To the section "American Ethnic Groups," I have added the most recent changes in composition of racial and ethnic groups/categories in the United States.
- I have updated the section "Minority Groups and Stratification, with new data on the relation between poverty, income, and minority status.
- An updated discussion of "Race in the Census" describes the 2020 census form and its detailed questions on ethnicity, race, and national origins.
- Recent election results now inform the "Backlash to Multiculturalism" section.
- The section titled "The Gray and the Brown" includes an updated discussion of demographic projections for the United States through 2060, including significant growth in the dependency ratio.
- Under a new subhead "Ethnic Erasure" are discussions of "Genocide," including examples from Bosnia and Rwanda, and "Forms of Ethnocide."
- In the section "Ethnic Conflict," there is a new discussion of anti-Asian hate crimes during the COVID-19 Outbreak, and legislation addressing those crimes.

Chapter 11: Applying Anthropology

- Updated throughout.

Chapter 12: The World System, Colonialism, and Inequality

- The section "Wealth Distribution in the United States" has been revised and incorporates the latest available statistics on inequality, and its relation to political mobilization.
- Thoroughly revised and updated section on "Neoliberalism and NAFTA's Economic Refugees," including discussion of the USMCA trade pact revision.

- A box new to this chapter, "When the Mills Shut Down: An Anthropologist Looks at Deindustrialization," is moved here from Chapter 5.

Chapter 13: Anthropology's Role in a Globalizing World

- Two major sections: "Energy Consumption and Industrial Degradation" and "Global Climate Change" have been thoroughly revised, updated, and reorganized, including an updated Table 13.1, "Energy Consumption for the Top 12 Countries, 2019."
- In the section on "Emerging Diseases," there is a new discussion of COVID-19, as well as a report on the Trump administration's termination of the USAID-supported PREDICT program, which searched for, identified, and catalogued potentially lethal zoonotic pathogens.
- I added two subheads "Indigenous Empowerment" and "Autochthony and Essentialism" with expanded material to the section "Indigenous Peoples."

Content and Organization

No single or monolithic theoretical perspective orients this book. My e-mail, along with reviewers' comments, confirms that instructors with a very wide range of views and approaches have been pleased with *Mirror* as a teaching tool.

- In Chapter 1, anthropology is introduced as an integrated four-field discipline, with academic and applied dimensions, that examines human biological and cultural diversity in time and space. Anthropology is discussed as a comparative and holistic science, featuring biological, social, cultural, linguistic, humanistic, and historical approaches. Chapter 2 examines the central anthropological concept of culture, including its symbolic and adaptive features. Chapter 3 is about doing anthropology—the methods and ethics of ethnographic research.
- Chapters 4 to 13 are organized to place related content close together—although they are sufficiently independent to be assigned in any order the instructor might select. Thus, "Political Systems" (Chapter 6) logically follows "Making a Living" (Chapter 5). Chapters 7 and 8 ("Families, Kinship, and Marriage" and "Gender," respectively) also form a coherent unit. The chapter 9 on religion covers not just traditional religious practices but also contemporary world religions and religious movements. It is followed by four chapters (Chapters 10–13) that form a natural unit exploring sociocultural transformations and expressions in today's world.
- Those last four chapters address several important questions: How are race and ethnicity socially constructed and handled in different societies, and how do they generate prejudice, discrimination, and conflict? How and why did the modern world system emerge and expand? How has world capitalism affected patterns of stratification and inequality within and among nations? What were colonialism, imperialism, and Communism, and what are their legacies? How do people today actively interpret and confront the world system and the products of globalization? What factors threaten continued human diversity? How can anthropologists work to ensure the preservation of that diversity?

- Let me also single out two chapters present in *Mirror for Humanity* but not found consistently in other anthropology texts: "Ethnicity and Race" (Chapter 10) and "Gender" (Chapter 8). I believe that systematic consideration of race, ethnicity, and gender is vital in any introductory anthropology text. Anthropology's distinctive four-field approach can shed special light on these topics, as we see especially in Chapter 10 ("Ethnicity and Race"). Race and gender studies are fields in which anthropology always has taken the lead. I'm convinced that anthropology's special contributions to understanding the biological, social, cultural, and linguistic dimensions of race, ethnicity, and gender should be highlighted in any introductory text.

Teaching Resources

The following instructor resources can be accessed through the Library tab in Connect Anthropology:

- Instructor's manual
- PowerPoint lecture slides
- Computerized test bank

New to this edition and available within Connect, Test Builder is a cloud-based tool that enables instructors to format tests that can be printed or administered within a Learning Management System. Test Builder offers a modern, streamlined interface for easy content configuration that matches course needs, without requiring a download.

Test Builder enables instructors to:

- Access all test bank content from a particular title
- Easily pinpoint the most relevant content through robust filtering options
- Manipulate the order of questions or scramble questions and/or answers
- Pin questions to a specific location within a test
- Determine your preferred treatment of algorithmic questions
- Choose the layout and spacing
- Add instructions and configure default settings

Create

Design your ideal course materials with McGraw Hill Education's Create: http://www.create.mheducation.com

Rearrange or omit chapters, combine materials from other sources, and/or upload any other content you have written to make the perfect resource for your students. You can even personalize your book's appearance by selecting the cover and adding your name, school, and course information. When you order a Create book, you receive a complimentary review copy. Get a printed copy in three to five business days or an electronic copy (eComp) via e-mail in about an hour. Register today at http://www.create.mheducation.com and craft your course resources to match the way you teach.

Mc Graw Hill connect®

Instructors: Student Success Starts with You

Tools to enhance your unique voice

Want to build your own course? No problem. Prefer to use an OLC-aligned, prebuilt course? Easy. Want to make changes throughout the semester? Sure. And you'll save time with Connect's auto-grading too.

65%

Less Time Grading

Laptop: McGraw Hill; Woman/dog: George Doyle/Getty Images

Study made personal

Incorporate adaptive study resources like SmartBook® 2.0 into your course and help your students be better prepared in less time. Learn more about the powerful personalized learning experience available in SmartBook 2.0 at **www.mheducation.com/highered/connect/smartbook**

Affordable solutions, added value

Make technology work for you with LMS integration for single sign-on access, mobile access to the digital textbook, and reports to quickly show you how each of your students is doing. And with our Inclusive Access program you can provide all these tools at a discount to your students. Ask your McGraw Hill representative for more information.

Padlock: Jobalou/Getty Images

Solutions for your challenges

A product isn't a solution. Real solutions are affordable, reliable, and come with training and ongoing support when you need it and how you want it. Visit **www.supportateverystep.com** for videos and resources both you and your students can use throughout the semester.

Checkmark: Jobalou/Getty Images

SUPPORT AT every step

Students: Get Learning that Fits You

Effective tools for efficient studying

Connect is designed to help you be more productive with simple, flexible, intuitive tools that maximize your study time and meet your individual learning needs. Get learning that works for you with Connect.

Study anytime, anywhere

Download the free ReadAnywhere app and access your online eBook, SmartBook 2.0, or Adaptive Learning Assignments when it's convenient, even if you're offline. And since the app automatically syncs with your Connect account, all of your work is available every time you open it. Find out more at **www.mheducation.com/readanywhere**

"I really liked this app—it made it easy to study when you don't have your textbook in front of you."

- Jordan Cunningham, Eastern Washington University

Calendar: owattaphotos/Getty Images

Everything you need in one place

Your Connect course has everything you need—whether reading on your digital eBook or completing assignments for class, Connect makes it easy to get your work done.

Learning for everyone

McGraw Hill works directly with Accessibility Services Departments and faculty to meet the learning needs of all students. Please contact your Accessibility Services Office and ask them to email accessibility@mheducation.com, or visit **www.mheducation.com/about/accessibility** for more information.

Top: Jenner Images/Getty Images, Left: Hero Images/Getty Images, Right: Hero Images/Getty Images

Acknowledgments

I'm grateful to many colleagues in McGraw Hill. I offer particular thanks to product developer Patrick Cash-Peterson, who helped me plan and implement this revision, and worked with me to complete and submit the manuscript. Thanks, too, to Elisa Odoardi, product developer, and now portfolio manager for anthropology, and to McGraw Hill's entire team of sales reps and regional managers for the work they do in helping professors and students gain access to my books. I also acknowledge Michael Ryan, President of Higher Education for Portfolio and Learning Content.

I thank Maria McGreal for her work as content project manager, as well as Surbhi Sharma, who served ably as my production contact at MPS Limited, guiding me through the later stages of the production process. Laura Fuller, buyer, worked with the printer to make sure everything came out right. Once again, I am delighted to have worked with Charlotte Goldman, freelance photo researcher, who for several editions has helped me choose the photos featured in this book. I also thank Yashoda Rawat for copyediting, Rama lingam Thenarasu for proofreading, and MPS Limited for executing the design.

I'm grateful to the reviewers of previous editions and of my other anthropology texts for their enthusiasm and their suggestions for changes, additions, and deletions (sometimes in very different directions!). Very, very special thanks as well to the more than 2,000 students who have used SmartBook and helped me pinpoint content and writing that needed clarification. My readers also share their insights about *Window* via e-mail. Anyone—student or instructor—can reach me at the following e-mail address: ckottak@bellsouth.net.

As usual, my family provides me with understanding, support, and inspiration in my writing projects. Dr. Nicholas Kottak, my son and a fellow anthropologist, and Isabel Wagley Kottak, my wife, companion, and co-worker in the field throughout my career, regularly share their insights with me. Once again, I dedicate this book to my daughter, Dr. Juliet Kottak Mavromatis, who continues our family tradition of exploring and writing about human diversity and diagnosing and treating the human condition.

During my long academic career, I've benefited from the knowledge, help, and advice of so many friends, colleagues, teaching assistants (graduate student instructors—GSIs), and students that I can no longer fit their names into a short preface. I hope they know who they are and accept my thanks. I do especially thank my co-authors of other books: Lara Descartes (*Media and Middle Class Moms*), Lisa Gezon (Culture), and Kathryn Kozaitis (*On Being Different*). Kathryn (with whom I have worked on four editions), Lisa (two editions), and Lara are also prized former students of mine. Today they all are accomplished anthropologists in their own right, and they continue to share their wisdom with me.

I'm very grateful to my Michigan colleagues who've offered insights and suggested ways of making my books better. Thanks especially to a 101 team that has included Tom Fricke, Stuart Kirsch, Holly Peters-Golden, and Andrew Shryock. Most recently, I've benefited from the knowledge and cutting-edge research of my colleagues in Section 51 (Anthropology) of the National Academy of Sciences.

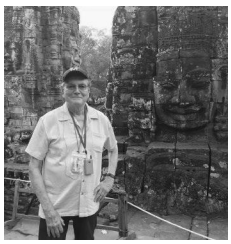
Feedback from students and from my fellow anthropologists, along with teaching forums and workshops, keeps me up-to-date on the interests, needs, and views of the people for whom *Mirror* is written. I also benefit from my long-term and ongoing participation in the General Anthropology Division (GAD) of the American Anthropological Association and my co-editorship (with Chris Furlow and Lisa Gezon) of the GAD Bulletin *General Anthropology*. I continue to believe that effective anthropology textbooks are based in the enjoyment of teaching, respect for students, and appreciation of anthropology as a holistic and humanistic science. I hope this product of my experience will continue to be helpful to others.

Conrad Phillip Kottak

Seabrook Island, South Carolina

ckottak@bellsouth.net

About the Author



The author at Bayon temple, Angkor Thom, Cambodia in February 2018. Courtesy Isabel Wagley Kottak

Conrad Phillip Kottak,

who received his AB and PhD degrees from Columbia University, is the Julian H. Steward Collegiate Professor Emeritus of Anthropology at the University of Michigan, where he served as anthropology department chair from 1996 to 2006. He has been honored for his teaching by the university and the state of Michigan and by the American Anthropological Association. He is an elected member of the American Academy of Arts and Sciences and the National Academy of Sciences, where he chaired Section 51, Anthropology, from 2010 to 2013. He co-edits *General Anthropology*, the biannual bulletin of the General Anthropology Division of the American Anthropological Association.

Professor Kottak has done ethnographic fieldwork in Brazil, Madagascar, and the United States. His general interests are in the processes by which local cultures are incorporated—and resist incorporation—into larger systems. This interest links his earlier work on ecology and state formation in Africa and Madagascar to his more recent research on globalization, national and international culture, and media, including new media and social media.

Kottak's popular case study *Assault on Paradise: The Globalization of a Little Community in Brazil* (2006, reissued and updated by Waveland Press in 2018) describes his long-term and continuing fieldwork in Arembepe, Bahia, Brazil. His book *Prime-Time Society: An Anthropological Analysis of Television and Culture* (2009) is a comparative study of the nature and impact of television in Brazil and the United States.

Kottak's other books include *The Past in the Present: History, Ecology and Cultural Variation in Highland Madagascar* (1980), *Researching American Culture: A Guide for Student Anthropologists* (1982), *Madagascar: Society and History* (1986), and *Media and Middle Class Moms: Images and Realities of Work and Family* (with Lara Descartes, 2009). The most recent editions (19th) of his texts *Anthropology: Appreciating Human Diversity* and *Cultural Anthropology: Appreciating Cultural Diversity* were published by McGraw Hill in 2021. He also is the author of *Window on Humanity*: *A Concise Introduction to Anthropology* (10th ed., McGraw Hill, 2022) and of this book—*Mirror for Humanity: A Concise Introduction to Cultural Anthropology* (13th ed., McGraw Hill, 2022).

Kottak's articles have appeared in academic journals, including *American Anthropologist*, *Journal of Anthropological Research*, *American Ethnologist*, *Ethnology*, *Human Organization*, and *Luso-Brazilian Review*. He also has written for more popular journals, including *Transaction/SOCIETY*, *Natural History*, *Psychology Today*, and *General Anthropology*.

In other research projects, Professor Kottak and his colleagues have investigated ecological awareness in Brazil, biodiversity conservation in Madagascar, and media use by modern American families. Most recently, he has collaborated with Professor Richard Pace and several students on research investigating "The Evolution of Media Impact: A Longitudinal and Multi-Site Study of Television and New Electronic/Digital Media in Brazil," a project supported by the National Science Foundation.

Conrad Kottak appreciates comments about his books from professors and students. He can be reached at the following e-mail address: ckottak@bellsouth.net.

Chapter 1

What Is Anthropology?

The Cross-Cultural Perspective

"That's just human nature." "People are pretty much the same all over the world." Opinions like these, which we hear in conversations, in media, and in other scenes in daily life, promote the erroneous idea that people in other countries have the same desires, feelings, values, and aspirations that we do. Such statements imply that because people are essentially the same, they are eager to receive the ideas, beliefs, values, institutions, practices, and products of an expansive North American culture. Often this assumption turns out to be wrong.

Anthropology offers a broader view—a distinctive comparative, cross-cultural perspective. Most people think that anthropologists study nonindustrial societies, and they do. My research has taken me to remote villages in Brazil and Madagascar, a large island off the southeast coast of Africa. In Brazil I sailed with fishers in simple sailboats on Atlantic waters. Among Madagascar's Betsileo people, I worked in rice fields and took part in ceremonies in which I entered tombs to rewrap the corpses of decaying ancestors.

However, anthropology is much more than the study of nonindustrial peoples. It is a comparative science that examines all societies, ancient and modern, simple and complex. Most of the other social sciences tend to focus on a single society, usually an industrial nation such as the United States or Canada. Anthropology offers a unique cross-cultural perspective, constantly comparing the customs of one society with those of others.

Today's anthropologists work in varied roles and settings. Nory Condor Alarcon (top photo) is an anthropologist who works for the Forensic Laboratory of the Public Ministry of Ayacucho, Peru. Here she comforts a young woman as she confirms that the lab's forensic team has identified the remains of several of her close relatives. In the bottom photo, a group of experts including anthropologist Mac Chapin (left) hold a press conference at UN Headquarters in New York introducing a new high-tech map of indigenous Peoples of Central America. (top): Robin Hammond/IDRC/Panos Pictures/Redux Pictures (bottom): EDUARDO MUNOZ ALVAREZ/Getty Images

Among scholarly disciplines, anthropology stands out as the field that provides the cross-cultural test. How much would we know about human behavior, thought, and feeling if we studied only our own kind? What if our entire understanding of human behavior were based on analysis of questionnaires filled out by American college students? That question should make you think about the basis for statements about what humans are like, individually or as a group. A primary reason anthropology can uncover so much about what it means to be human is that the discipline is based on the cross-cultural perspective. A single culture simply cannot tell us everything we need to know about what it means to be human. We need to compare and contrast.

To become a cultural anthropologist, one typically does *ethnography* (the firsthand, personal study of local settings). Ethnographic fieldwork usually entails spending a year or more in another society, living with the local people and learning about their way of life. No matter how much the ethnographer discovers about that society, he or she remains an alien there. That experience of alienation has a profound impact. Having learned to respect other customs and beliefs, anthropologists can never forget that there is a wider world. There are normal ways of thinking and acting other than our own.

Human Adaptability

Anthropologists study human beings wherever and whenever they find them—in a Turkish café, a Mesopotamian tomb, or a North American shopping mall. Anthropology is the exploration of human diversity in time and space. Anthropology studies the whole of the human condition: past, present, and future; biology, society, language, and culture. Of particular interest is the diversity that comes through human adaptability.

Humans are among the world's most adaptable animals. In the Andes of South America, people wake up in villages 16,000 feet above sea level and then trek 1,500 feet higher to work in tin mines. In the Australian outback, people worship animals and discuss philosophy. Humans survive malaria in the tropics. A dozen men have walked on the moon. The model of the *Star Trek* starship *Enterprise* in Washington's Smithsonian Institution is a symbol of the *Star Trek* mission "to seek out new life and new civilizations, to boldly go where no one has gone before." Wishes to know the unknown, control the uncontrollable, and create order out of chaos find expression among all peoples. Creativity, adaptability, and flexibility are basic human attributes, and human diversity is the subject matter of anthropology.

Students often are surprised by the breadth of **anthropology**, which is the study of humans around the world and through time. Anthropology is a uniquely comparative and **holistic** science. *Holism* refers to the study of the whole of the human condition: past, present, and future; biology, society, language, and culture.

People share **society**—organized life in groups—with other animals, including baboons, wolves, mole rats, and even ants. Culture, however, is more distinctly human. **Cultures** are traditions and customs, transmitted through learning, that form and guide the beliefs and behavior of the people exposed to them. Children learn such a tradition by growing up in a particular society, through a process called *enculturation.* Cultural traditions include customs and opinions, developed over the generations, about proper and improper

behavior. These traditions answer such questions as: How should we do things? How do we make sense of the world? How do we tell right from wrong? A culture produces a degree of consistency in behavior and thought among the people who live in a particular society.

The most critical element of cultural traditions is their transmission through learning rather than through biological inheritance. Culture is not itself biological, but it rests on certain features of human biology. For more than a million years, humans have had at least some of the biological capacities on which culture depends. These abilities are to learn, to think symbolically, to use language, and to employ tools and other products in organizing their lives and adapting to their environments.

Anthropology confronts and ponders major questions of human existence as it explores human biological and cultural diversity in time and space. By examining ancient bones and tools, we unravel the mysteries of human origins. When did our ancestors separate from those remote great-aunts and great-uncles whose descendants are the apes? Where and when did *Homo sapiens* originate? How has our species changed? What are we now, and where are we going? How have changes in culture and society influenced biological change? Our genus, *Homo*, has been changing for more than 2 million years. Humans continue to adapt and change both biologically and culturally.

Adaptation, Variation, and Change

Adaptation refers to the processes by which organisms cope with environmental forces and stresses, such as those posed by climate and *topography* or terrains, also called landforms. How do organisms change to fit their environments, such as dry climates or high mountain altitudes? Like other animals, humans use biological means of adaptation. But humans are unique in also having cultural means of adaptation.

Mountainous terrains pose particular challenges, those associated with high altitude and oxygen deprivation. Consider four ways (one cultural and three biological) in which humans may cope with low oxygen pressure at high altitudes. Illustrating cultural (technological) adaptation would be a pressurized airplane cabin equipped with oxygen masks. There are three ways of adapting biologically to high altitudes: genetic adaptation, long-term physiological adaptation, and short-term physiological adaptation. First, native populations of high-altitude areas, such as the Andes of Peru and the Himalayas of Tibet and Nepal, seem to have acquired certain genetic advantages for life at very high altitudes. The Andean tendency to develop a voluminous chest and lungs probably has a genetic basis. Second, regardless of their genes, people who grow up at a high altitude become physiologically more efficient there than genetically similar people who have grown up at sea level would be. This illustrates long-term physiological adaptation during the body's growth and development. Third, humans also have the capacity for short-term or immediate physiological adaptation. Thus, when lowlanders arrive in the highlands, they immediately increase their breathing and heart rates. Hyperventilation increases the oxygen in their lungs and arteries. As the pulse also increases, blood reaches their tissues more rapidly. All these varied adaptive responses—cultural and biological—achieve a single goal: maintaining an adequate supply of oxygen to the body. Table 1–1 summarizes some of the cultural and biological ways by which humans adapt to high altitudes.

TABLE 1–1 Forms of Cultural and Biological Adaptation (to High Altitude)

Form of Adaptation	Type of Adaptation	Example
Technology	Cultural	Pressurized airplane cabin with oxygen masks
Genetic adaptation (occurs over generations)	Biological	Larger "barrel chests" of native highlanders
Long-term physiological adaptation (occurs during growth and development of the individual organism)	Biological	More efficient respiratory system, to extract oxygen from "thin air"
Short-term physiological adaptation (occurs spontaneously when the individual organism enters a new environment)	Biological	Increased heart rate, hyperventilation

As human history has unfolded, the social and cultural means of adaptation have become increasingly important. In this process, humans have devised diverse ways of coping with a wide range of environments. The rate of cultural adaptation and change has accelerated, particularly during the past 10,000 years. For millions of years, hunting and gathering of nature's bounty—*foraging*—was the sole basis of human subsistence. However, it took only a few thousand years for **food production** (the cultivation of plants and domestication of animals), which originated some 12,000–10,000 years ago, to replace foraging in most areas. Between 6000 B.P. and 5000 B.P. (before the present), the first civilizations arose. These were large, powerful, and complex societies, such as ancient Egypt, that conquered and governed large geographic areas.

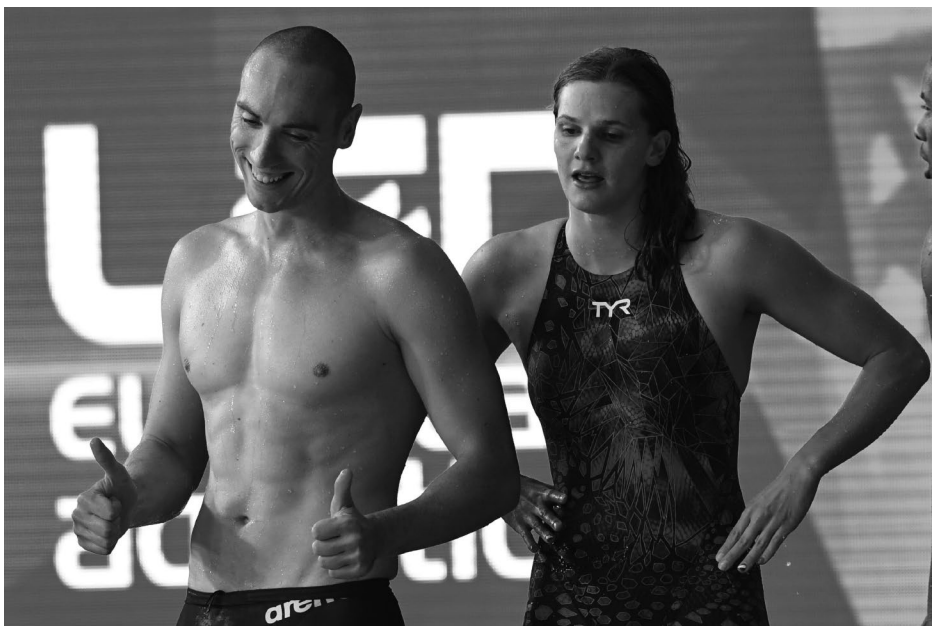
Much more recently, the spread of industrial production and the forces of globalization have profoundly affected human life. Throughout human history, major innovations have spread at the expense of earlier ones. Each economic revolution has had social and cultural repercussions. Today's global economy and communications link all contemporary people, directly or indirectly, in the modern world system. People must cope with forces generated by progressively larger systems—region, nation, and world. The study of such contemporary adaptations generates new challenges for anthropology: "The cultures of world peoples need to be constantly rediscovered as these people reinvent them in changing historical circumstances" (Marcus and Fischer, 1986, p. 24).

Cultural Forces Shape Human Biology

Anthropology's comparative, biocultural perspective recognizes that cultural forces constantly mold human biology. (**Biocultural** refers to using and combining both biological and cultural perspectives and approaches to analyze and understand a particular issue or problem.) Culture is a key environmental force in determining how human bodies grow and develop. Cultural traditions promote certain activities and abilities, discourage others, and set standards of physical well-being and attractiveness. Consider how this works in sports. North American girls are encouraged to pursue, and therefore do well in, competition involving figure skating, gymnastics, track and field, swimming, diving, and many

other sports. Brazilian girls, although excelling in the team sports of basketball and volleyball, haven't fared nearly as well in individual sports as have their American and Canadian counterparts. Why are people encouraged to excel as athletes in some nations but not others? Why do people in some countries invest so much time and effort in competitive sports that their bodies change significantly as a result? Why do Americans engage in combat sports such as football, which can cause irreversible damage to brains and bodies?

Cultural standards of attractiveness and propriety influence participation and achievement in sports. Americans run or swim not just to compete but also to keep trim and fit. Brazil's beauty standards traditionally have accepted more fat, especially in female buttocks and hips. Brazilian men have had significant international success in swimming and running, but it is less common to see Brazilian women excelling in those sports. One reason why Brazilian women are underrepresented in competitive swimming may be that sport's effects on the body. Years of swimming sculpt a distinctive physique: an enlarged upper torso, a massive neck, and powerful shoulders and back. Successful female swimmers tend to be big, strong, and bulky. The countries that have produced them most consistently are the United States, Canada, Australia, Germany, the Scandinavian nations, the Netherlands, the former Soviet Union, and (more recently) China, where this body type isn't as stigmatized as it is in Latin countries. For women, Brazilian culture prefers more ample hips and buttocks to a more muscled upper body. Many young female swimmers in Brazil choose to abandon the sport rather than their culture's "feminine" body ideal.



Years of swimming sculpt a distinctive physique—an enlarged upper torso and neck, and powerful shoulders and back. Shown here at the 2018 European Championships in Glasgow, Scotland, French swimmers Jeremy Stravius and Marie Wattel celebrate their gold medal finish in the Mixed 4x100m freestyle relay. Francois Xavier Marit/AFP/Getty Images

When you grew up, which sport did you appreciate the most—soccer, swimming, football, baseball, tennis, golf, or some other sport (or perhaps none at all)? Is this because of "who you are" or because of the opportunities you had as a child to practice and participate in this particular activity? When you were young, your parents might have told you that drinking milk and eating vegetables would help you grow up "big and strong." They probably didn't as readily recognize the role that *culture* plays in shaping bodies, personalities, and personal health. If nutrition matters in growth, so, too, do cultural guidelines. What toys and games are appropriate for boys and girls? What kinds of work should men and women do? Where should people live? What are proper uses of their leisure time? What role should religion play? How should people relate to their family, friends, and neighbors? Although our genetic attributes provide a foundation for growth and development, human biology is fairly plastic—that is, it is malleable. Culture is an environmental force that affects our development as much as nutrition, heat, cold, and altitude do. Culture also guides our emotional and cognitive growth and helps determine the kinds of personalities we have as adults.

General Anthropology

The academic discipline of anthropology, also known as **general anthropology** or "four-field" anthropology, includes four main subdisciplines, or subfields. They are sociocultural anthropology, anthropological archaeology, biological anthropology, and linguistic anthropology. (From here on, the shorter term *cultural anthropology* will be used as a synonym for *sociocultural anthropology*.) Of the subfields, cultural anthropology has the largest membership. Most departments of anthropology teach courses in all four subfields.

There are historical reasons for the inclusion of four subfields in a single discipline. The origin of anthropology as a scientific field, and of American anthropology in particular, can be traced to the nineteenth century. Early American anthropologists were concerned especially with the history and cultures of the indigenous peoples of North America. Interest in the origins and diversity of Native Americans (called First Nations in Canada) brought together studies of customs, social life, language, and physical traits. Anthropologists still are pondering such questions as these: Where did Native Americans come from? How many waves of migration brought them to the New World? What are the linguistic, cultural, and biological links among Native Americans and between them and Asia? (Note that a unified four-field anthropology did not develop in Europe, where the subfields tend to exist separately.)

Early American anthropology was especially concerned with the history and cultures of Native North Americans. Ely S. Parker, or Ha-sa-no-an-da, was a Seneca Indian who made important contributions to early anthropology. Parker also served as commissioner of Indian affairs for the United States. National Archives and Records Administration

There also are logical reasons for the unity of American anthropology. Each subfield considers variation in time and space (that is, in different geographic areas). Cultural anthropologists and anthropological archaeologists study changes in social life and customs (among many other topics). Archaeologists use studies of living societies to imagine what life might have been like in the past. Biological anthropologists examine evolutionary changes in human biology. Linguistic anthropologists may reconstruct the basics of ancient languages by studying modern ones.

The subfields influence each other as anthropologists talk to each other, read books and journals, and meet in professional organizations. General anthropology explores the basics of human biology, society, and culture and considers their interrelations. Anthropologists share certain key assumptions. Perhaps the most fundamental is the idea that sound conclusions about "human nature" cannot be derived from studying a single population, nation, society, or cultural tradition. A comparative, cross-cultural approach is essential.

The Subdisciplines of Anthropology

Cultural Anthropology

Cultural anthropology is the study of human society and culture. This subfield describes, analyzes, interprets, and explains similarities and differences among societies and changes in society and culture. To study and interpret cultural diversity, cultural anthropologists engage in two kinds of activity: ethnography (based on fieldwork) and ethnology (based on cross-cultural comparison). **Ethnography** provides an account of a particular culture, society, or community. During ethnographic fieldwork, the ethnographer gathers data that he or she organizes, analyzes, and interprets to develop that account, which may be in the form of a book, an article, or a film. Traditionally, ethnographers have lived in small communities and studied local behavior, beliefs, customs, social life, economic activities, politics, and religion (see Galman, 2018; Okely, 2012; Vivanco, 2017; Wolcott, 2008).

An anthropological perspective derived from ethnographic fieldwork often differs radically from that of economics or political science. Those fields focus on national and official organizations and policies and often on elites. However, the groups that anthropologists traditionally have studied usually have been relatively poor and powerless. Ethnographers often observe discriminatory practices directed toward such people, who experience food shortages, dietary deficiencies, and other aspects of poverty. Political scientists tend to study programs that national planners develop, whereas anthropologists discover how these programs work on the local level.

Communities and cultures are less isolated today than ever before. As noted by Franz Boas (1940/1966) many years ago, contact between neighboring tribes always has existed and has extended over enormous areas. "Human populations construct their cultures in interaction with one another, and not in isolation" (Wolf, 1982, p. ix). Villagers increasingly participate in regional, national, and world events, including pandemics. Exposure to external forces comes through education, the mass media, migration, and modern transportation. City and nation increasingly invade local communities

TABLE 1–2 Ethnography and Ethnology—Two Dimensions of Cultural Anthropology

Ethnography	Ethnology
Requires fieldwork to collect data	Uses data collected by a series of researchers
Is often descriptive	Is usually synthetic
Is specific to a group or community	Is comparative and cross-cultural

with the arrival of teachers, tourists, development agents, government and religious officials, and political candidates. Such linkages are prominent components of regional, national, and international systems of politics, economics, and information. These larger systems increasingly affect the people and places anthropology traditionally has studied. The study of such linkages and systems is part of the subject matter of modern anthropology.

Ethnology examines, compares, analyzes, and interprets the results of ethnography—the data gathered in different societies. Ethnologists use such data to compare, contrast, and generalize about society and culture. Looking beyond the particular to the more general, they attempt to identify and explain cultural differences and similarities, to test hypotheses, and to build theory to enhance our understanding of how social and cultural systems work. Ethnology gets its data for comparison not only from ethnography but also from the other subfields, particularly from anthropological archaeology, which reconstructs social systems of the past. (Table 1–2 summarizes the main contrasts between ethnography and ethnology.)

Anthropological Archaeology

Anthropological archaeology (more simply, "archaeology") reconstructs, describes, and interprets human behavior and cultural patterns through material remains. At sites where people live or have lived, archaeologists find artifacts—material items that humans have made, used, or modified—such as tools, weapons, campsites, buildings, and garbage. Plant and animal remains and ancient garbage tell stories about consumption and activities. Wild and domesticated grains have different characteristics, which allow archaeologists to distinguish between gathering and cultivation. Examination of animal bones reveals the ages of slaughtered animals and provides other information useful in determining whether species were wild or domesticated.

Analyzing such data, archaeologists answer several questions about ancient economies: Did the group get its meat from hunting, or did it domesticate and breed animals, killing only those of a certain age and sex? Did plant food come from wild plants or from sowing, tending, and harvesting crops? Did the residents make, trade for, or buy particular items? Were raw materials available locally? If not, where did they come from? From such information, archaeologists reconstruct patterns of production, trade, and consumption.

Archaeologists have spent considerable time studying potsherds, fragments of earthenware. Potsherds are more durable than many other artifacts, such as textiles and wood. The quantity of pottery fragments allows estimates of population size and density. The discovery that potters used materials that were not available locally suggests systems of trade. Similarities in manufacture and decoration at different sites may be proof of

cultural connections. Groups with similar pots may share a common history. They might have common cultural ancestors. Perhaps they traded with each other or belonged to the same political system.

Many archaeologists examine paleoecology. *Ecology* is the study of interrelations among living things in an environment. The organisms and environment together constitute an *ecosystem*, a patterned arrangement of energy flows and exchanges. Human ecology studies ecosystems that include people, focusing on the ways in which human use "of nature influences and is influenced by social organization and cultural values" (Bennett, 1969, pp. 10–11). *Paleoecology* looks at the ecosystems of the past.

In addition to reconstructing ecological patterns, archaeologists may infer cultural transformations, for example, by observing changes in the size and type of sites and the distance between them. A city develops in a region where only towns, villages, and hamlets existed a few centuries earlier. The number of settlement levels (city, town, village, hamlet) in a society is a measure of social complexity. Buildings offer clues about political and religious features. Temples and pyramids suggest that an ancient society had an authority structure capable of marshaling the labor needed to build such monuments. The presence or absence of certain structures, like the pyramids of ancient Egypt and Mexico, reveals differences in function between settlements. For example, some towns were places where people went to attend ceremonies. Others were burial sites; still others were farming communities.

Sabrina Shirazi, a sophomore at University of Maryland, measures the elevation of the unit she has dug at an archaeological site called "The Hill" in Easton, Maryland. This site may be the oldest settlement of free African-Americans in the United States. Kenneth K. Lam/Getty Images

Archaeologists also reconstruct behavior patterns and lifestyles of the past by excavating. This involves digging through a succession of levels at a particular site. In a given area, through time, settlements may change in form and purpose, as may the connections between settlements. Excavation can document changes in economic, social, and political activities.

Although archaeologists are best known for studying prehistory, that is, the period before the invention of writing, they also study the cultures of historical and even living peoples (see Sabloff, 2008). Studying sunken ships off the Florida coast, underwater archaeologists have been able to verify the living conditions on the vessels that brought ancestral African Americans to the New World as enslaved people. In a well-known research project in Tucson, Arizona, archaeologist William Rathje learned a great deal about contemporary life by studying modern garbage (Zimring, 2012). The value of "garbology," as Rathje called it, is that it provides "evidence of what people did, not what they think they did, what they think they should have done, or what the interviewer thinks they should have done" (Harrison, Rathje, and Hughes, 1994, p. 108). What people report may contrast strongly with their real behavior as revealed by garbology. For example, the three Tucson neighborhoods that reported the lowest beer consumption actually had the highest number of discarded beer cans per household (Rathje and Murphy, 2001; Zimring, 2012)!

Biological Anthropology

Biological anthropology is the study of human biological diversity through time and as it exists in the world today. There are five specialties within biological anthropology:

1. Human biological evolution as revealed by the fossil record (paleoanthropology)
2. Human genetics
3. Human growth and development
4. Human biological plasticity (the living body's ability to change as it copes with environmental conditions, such as heat, cold, and altitude)
5. Primatology (the study of monkeys, apes, and other nonhuman primates)

A common thread that runs across all five specialties is an interest in biological variation among humans, including their ancestors and their closest animal relatives (monkeys and apes).

These varied interests link biological anthropology to other fields: biology, zoology, geology, anatomy, physiology, medicine, and public health. Knowledge of osteology—the study of bones—is essential for anthropologists who examine and interpret skulls, teeth, and bones, whether of modern-day humans or of our fossilized ancestors. *Paleontologists* are scientists who study fossils. *Paleoanthropologists* study the fossil record of human evolution. Paleoanthropologists often collaborate with archaeologists, who study artifacts, in reconstructing biological and cultural aspects of human evolution. Fossils and tools often are found together. Different types of tools provide information about the habits, customs, and lifestyles of the ancestral humans who used them.

More than a century ago, Charles Darwin noticed that the variety that exists within any population permits some individuals (those with the favored characteristics) to do

better than others at surviving and reproducing. Genetics, which developed after Darwin, enlightens us about the causes and transmission of the variety on which evolution depends. However, it isn't just genes that cause variety. During any individual's lifetime, the environment works along with heredity to determine biological features. For example, people with a genetic tendency to be tall will be shorter if they have poor nutrition during childhood. Thus, biological anthropology also investigates the influence of environment on the body as it grows and matures. Among the environmental factors that influence the body as it develops are nutrition, altitude, temperature, and disease, as well as cultural factors, such as the standards of attractiveness that were discussed previously.

Biological anthropology (along with zoology) also includes primatology. The primates include our closest relatives—apes and monkeys. Primatologists study their biology, evolution, behavior, and social life, often in their natural environments. Primatology assists paleoanthropology, because primate behavior and social organization may shed light on early human behavior and human nature.

Linguistic Anthropology

We don't know (and probably never will) when our ancestors acquired the ability to speak, although biological anthropologists have looked to the anatomy of the face, skull, and vocal tract to speculate about the origin of language. Primatologists have described the communication systems of monkeys and apes. We do know that grammatically complex languages have existed for thousands of years. Linguistic anthropology offers further illustration of anthropology's interest in comparison, variation, and change. **Linguistic anthropology** studies language in its social and cultural context, throughout the world and over time. Some linguistic anthropologists make inferences about universal features of language, linked perhaps to uniformities in the human brain. Others reconstruct ancient languages by comparing their contemporary descendants. Still others study linguistic differences to discover varied perceptions and patterns of thought in different cultures (see Bonvillain, 2012, 2016).

Historical linguistics considers variation in time, such as the changes in sounds, grammar, and vocabulary between Middle English [spoken from approximately C.E. (formerly A.D.) 1050–1550] and modern English. **Sociolinguistics** investigates relationships between social and linguistic variation: How do different speakers use a given language? How do linguistic features correlate with social factors, including class and gender differences? One reason for variation is geography, as in regional dialects and accents. Linguistic variation also is expressed in the bilingualism of ethnic groups. Linguistic and cultural anthropologists collaborate in studying links between language and many other aspects of culture, such as how people reckon kinship and how they perceive and classify colors. This chapter's "Anthropology Today," focusing on how changes in vocabulary reflect cultural changes, illustrates common ground between linguistic and cultural anthropology.

Applied Anthropology

What sort of man or woman do you envision when you hear the word *anthropologist*? Although anthropologists have been portrayed as quirky and eccentric, bearded and bespectacled, anthropology is not a science of the exotic carried on by quaint scholars in

ivory towers. Rather, anthropology has a lot to tell the public. Anthropology's foremost professional organization, the American Anthropological Association (AAA), has formally acknowledged a public service role by recognizing that anthropology has two dimensions: (1) academic anthropology and (2) practicing, or **applied, anthropology**. The latter refers to the application of anthropological data, perspectives, theory, and methods to identify, assess, and solve contemporary social problems. As American anthropologist Erve Chambers (1987) has stated, applied anthropology is "concerned with the relationships between anthropological knowledge and the uses of that knowledge in the world beyond anthropology" (p. 309). More and more anthropologists from the four subfields now work in "applied" areas such as public health, family planning, business, market research, economic development, and cultural resource management.

Because of anthropology's breadth, applied anthropology has many applications. For example, applied medical anthropologists consider both the sociocultural and the biological contexts and implications of disease and illness. Perceptions of good and bad health, along with actual health threats and problems, differ among societies. Various ethnic groups recognize different illnesses, symptoms, and causes and have developed different health care systems and treatment strategies.

Applied archaeology, usually called *public archaeology*, includes such activities as cultural resource management, public educational programs, and historic preservation. Legislation requiring evaluation of sites threatened by dams, highways, and other construction

Applied anthropology in action. Professor Robin Nagle of New York University is also an anthropologist-in-residence at New York City's Department of Sanitation. Nagle studies curbside garbage as a mirror into the lives of New Yorkers. Here she accompanies sanitation worker Joe Damiano during his morning rounds in August 2015. Richard Drew/AP Images

TABLE 1–3 The Four Subfields and Two Dimensions of Anthropology

Anthropology's Subfields (General Anthropology)	Examples of Application (Applied Anthropology)
Cultural anthropology	Development anthropology
Anthropological archaeology	Cultural resource management (CRM)
Biological anthropology	Forensic anthropology
Linguistic anthropology	Study of linguistic diversity in classrooms

activities has created an important role for public archaeology. To decide what needs saving, and to preserve significant information about the past when sites cannot be saved, is the work of **cultural resource management** (CRM). CRM involves not only preserving sites but also allowing their destruction if they are not significant. The *management* part of the term refers to the evaluation and decision-making process. Cultural resource managers work for federal, state, and county agencies and other clients. Applied cultural anthropologists sometimes work with public archaeologists, assessing the human problems generated by proposed changes and determining how they can be reduced. Table 1–3 relates anthropology's four subfields to its two dimensions.

Anthropology and Other Academic Fields

As mentioned previously, one of the main differences between anthropology and the other fields that study people is anthropology's unique blend of biological, social, linguistic, cultural, historical, and contemporary perspectives. Paradoxically, while distinguishing anthropology, this breadth is what also links it to many other disciplines. For instance, techniques used to date fossils and artifacts have come to anthropology from physics, chemistry, and geology. Because plant and animal remains often are found with human bones and artifacts, anthropologists collaborate with botanists, zoologists, and paleontologists.

A Humanistic Science

As a discipline that is both scientific and humanistic, anthropology has links with many other academic fields. Anthropology is a **science**—a "systematic field of study or body of knowledge that aims, through experiment, observation, and deduction, to produce reliable explanations of phenomena, with references to the material and physical world" (Merriam-Webster, 1993, p. 937). The chapters that follow present anthropology as a humanistic science devoted to discovering, describing, understanding, and explaining similarities and differences in time and space among humans and our ancestors. Clyde Kluckhohn (1944) described anthropology as "the science of human similarities and differences" (p. 9). His statement of the need for such a field still stands: "Anthropology provides a scientific basis for dealing with the crucial dilemma of the

world today: how can peoples of different appearance, mutually unintelligible languages, and dissimilar ways of life get along peaceably together?" (p. 9). Anthropology has compiled an impressive body of knowledge, which this textbook attempts to encapsulate.

Besides its links to the natural sciences (e.g., geology, zoology) and social sciences (e.g., sociology, psychology), anthropology also has strong links to the humanities. The humanities include English, comparative literature, classics, folklore, philosophy, and the arts. These fields study languages, texts, philosophies, arts, music, performances, and other forms of creative expression. Ethnomusicology, which studies forms of musical expression on a worldwide basis, is especially closely related to anthropology. Also linked is folklore, the systematic study of tales, myths, and legends from a variety of cultures. One might well argue that anthropology is among the most humanistic of all academic fields because of its fundamental respect for human diversity. Anthropologists listen to, record, and represent voices from a multitude of nations and cultures. Anthropology values local knowledge, diverse worldviews, and alternative philosophies. Cultural anthropology and linguistic anthropology in particular bring a comparative and non-elitist perspective to forms of creative expression, including language, art, narratives, music, and dance, viewed in their social and cultural context.

Cultural Anthropology and Sociology

Students often ask about how anthropology differs from sociology, which is probably the discipline closest to anthropology, specifically to sociocultural anthropology. Like anthropologists, particularly cultural anthropologists, sociologists study society—consisting of human social behavior, social relations, and social organization. Key differences between sociology and anthropology reflect the kinds of societies traditionally studied by each discipline. Sociologists typically have studied contemporary Western, industrial societies. Anthropologists, by contrast, traditionally focused on nonindustrial and non-Western societies. Sociologists and anthropologists developed different methods to study these different kinds of society. To study contemporary Western societies, which tend to be large-scale, complex nations, sociologists have relied on surveys and other means of gathering quantifiable data. Sociologists must use sampling and statistical techniques to collect and analyze such data, and statistical training has been fundamental in sociology. Working in much smaller societies, such as a village, anthropologists can get to know almost everyone and have less need for sampling and statistics. However, because anthropologists today are working increasingly in modern nations, use of sampling and statistics is becoming more common.

Traditionally, ethnographers studied small and nonliterate (without writing) populations and developed methods appropriate to that context. An ethnographer participates directly in the daily life of another culture and must be an attentive, detailed observer of what people do and say. The focus is on a real, living population, not just a sample of a population. During ethnographic fieldwork, the anthropologist takes part in the events she or he is *observing*, describing, and analyzing. Anthropology, we might say, is more personal and less formal than sociology.

Anthropology Today *Words of the Year*

Annual "words of the year" lists provide an excellent illustration of how vocabulary shifts in response to cultural changes. Organizations in various countries routinely publish these lists, from which one increasingly common word or phrase is generally chosen as the winner—the "word of the year." Table 1–4 lists the word of the year chosen by the American Dialect Society (ADS) for every year between 2000 (*chad*) and 2020 (*COVID*). The list tells us a lot about recent American history, especially the concerns that have dominated the news and public discourse from year to year. For instance, we see how certain key words—often just one word or phrase—can sum up the presidential elections of 2000 (*chad*), 2004 (*red state, blue state, purple state*), and 2016 (*dumpster fire*). National crises of 2001, 2002, 2007, 2008, and 2020 are encapsulated respectively by *9-11, weapons of mass destruction, subprime, bailout,* and *COVID.* Years of protest show up in *occupy* (2011) and *#blacklivesmatter* (2014). *Tweet* (2009), *app* (2010), and *hashtag* (2012) summarize changes in technology and communication. Sometimes, the words are more playful, like *metrosexual* (2003), *truthiness* (2005), and *plutoed* (2006)—this last word coined from the demotion of our former ninth planet.

In 2015, not just the ADS, but other organizations as well, chose the singular form of the common pronoun *they* as word of the year, and in 2019 the Society made *singular "they"* its Word of the Decade (2010–2019). *They* is a third-person pronoun that is gender neutral; it includes males, females, and nonbinary individuals. Although grammatically *they* is a plural pronoun, it also is employed (increasingly) as a singular pronoun. Someone can use *they* when they want to avoid having to use "he or she" in a sentence—as I just did.

Although for centuries, *they* has been used as both a singular and a plural pronoun, singular *they* began to meet resistance around 1800 (Baron, 2015). Grammarians discouraged its use because of lack of agreement between an apparently plural pronoun and a singular verb (e.g., "They eats dinner."). Those grammatical purists who still resist singular *they* might be reminded that the singular pronoun *you* in English began as a plural pronoun, which eventually replaced *thou* and *thee* as a singular pronoun. It appears that the time has come for a similar shift to using *they* instead of the more unwieldy "he or she."

In its 30th annual words of the year vote, the ADS chose *"(my) pronouns"* as its Word of the Year (2019) and, as mentioned, *singular "they"* as its Word of the Decade (2010–2019). *"(My) pronouns"* was recognized for its use in sharing one's set of personal pronouns (as in "pronouns: she/her"). *Singular "they"* was recognized for its increasing use in referring to someone whose gender identity is nonbinary. The selection of *"(my) pronouns"* recognizes how the personal expression of gender identity has become an increasing part of our shared discourse.

For obvious reasons, *COVID* was chosen as 2020's word of the year, beating out related words and phrases including "pandemic," "social distancing," and even "2020" itself—used to sum up chaotic and despondent feelings inspired by the totality of that year's events. Other runners-up included "Blursday," "bubble/pod," and "superspreader."

TABLE 1–4 Words of the Year, 2000–2020, as Chosen by the American Dialect Society (ADS)

2000: **chad** (from the "hanging chads" on several ballots cast in Florida in the 2000 U.S. presidential election)

2001: **9-11** (for obvious reasons)

2002: **weapons of mass destruction** (used by the George W. Bush administration as a pretense for invading Iraq)

2003: **metrosexual** (a fashion-conscious heterosexual male)

2004: **red state, blue state, purple state** (from the 2004 U.S. presidential election)

2005: **truthiness** (from *The Colbert Report*; preferring concepts or facts one wishes to be true, rather than concepts or facts known to be true)

2006: **plutoed** (demoted or devalued, like the former planet Pluto)

2007: **subprime** (a risky loan, mortgage, or investment)

2008: **bailout** (government rescue of a company on the brink of failure)

2009: **tweet** (a message sent via Twitter)

2010: **app** (short for *application*, as on a smartphone, now extended to any computer program)

2011: **occupy** (as in Occupy Wall Street)

2012: **hashtag** (a word or phrase preceded by a hash symbol, as on Twitter)

2013: **because** (when used to introduce a noun, adjective, or other part of speech, as in "because awesome")

2014: **#blacklivesmatter** (hashtag used to protest killings of African Americans by police)

2015: singular **they** (as a gender-neutral pronoun)

2016: **dumpster fire** (a disastrous or chaotic situation, representing the public discourse and preoccupations surrounding the 2016 U.S. presidential election)

2017: **fake news** [meaning either: (1) disinformation or falsehoods presented as real news or (2) actual news that is claimed to be untrue]

2018: **tender-age shelter** (also *tender-age facility* or *tender-age camp*, are terms used euphemistically to describe the government-run detention centers housing the children of asylum seekers at the U.S./Mexico border

2019: **(my) pronouns** (referring to the sharing of one's set of personal pronouns, as in "Becky Smith—pronouns: she/her" or "Pat Roberts—pronouns: they/ them")

2020: **COVID** (shorthand for *COVID-19*, the name given to the disease caused by infection from novel coronavirus; also used more broadly to refer to the pandemic and its impacts.

Source: Adapted from the Words of the Year website of the American Dialect Society. https://www.americandialect.org/woty.

In today's interconnected world, however, the interests and methods of anthropology and sociology have converged—come together—as they study many of the same topics and areas. For example, many sociologists now work in non-Western countries, smaller communities, and other settings that used to be mainly within the anthropological orbit. As industrialization and urbanization have spread across the globe, anthropologists now work increasingly in industrial nations and cities, rather than villages. Among the many topics studied by contemporary cultural anthropologists are rural-urban migration and transnational (from one country to another) migration, inner-city life, religious/ethnic conflict, crime, and warfare. Contemporary anthropologists are as likely as sociologists study race, ethnicity, gender, inequality, power, and globalization.

Summary

1. Anthropology is the holistic, biocultural, and comparative study of humanity. It is the systematic exploration of human biological and cultural diversity across time and space. Examining the origins of, and changes in, human biology and culture, anthropology provides explanations for similarities and differences among humans and their societies.
2. The four subfields of general anthropology are (socio)cultural anthropology, anthropological archaeology, biological anthropology, and linguistic anthropology. All consider variation in time and space. Each also examines adaptation—the process by which organisms cope with environmental stresses. Anthropology's biocultural perspective is a particularly effective way of approaching interrelations between biology and culture. Cultural forces mold human biology, including our body types and images.
3. Cultural anthropology explores the cultural diversity of the present and the recent past. Archaeology reconstructs cultural patterns, often of prehistoric populations. Biological anthropology documents diversity involving fossils, genetics, growth and development, bodily responses, and nonhuman primates. Linguistic anthropology considers diversity among languages. It also studies how speech changes in social situations and over time. Anthropology has two dimensions: academic and applied. Applied anthropology is the use of anthropological data, perspectives, theory, and methods to identify, assess, and solve contemporary social problems.
4. Concerns with biology, society, culture, and language link anthropology to many other fields—sciences and humanities. Sociologists traditionally study Western, industrial societies, whereas anthropologists have focused on rural, nonindustrial peoples.

Think Like an Anthropologist

1. If, as Franz Boas illustrated early on in American anthropology, cultures are not isolated, how can ethnography provide an account of a particular community, society, or culture? Note: There is no easy answer to this question! Anthropologists continue to deal with it as they define their research questions and projects.

2. The American Anthropological Association has formally acknowledged a public service role by recognizing that anthropology has two dimensions: (1) academic anthropology and (2) practicing, or applied, anthropology. What is applied anthropology? Based on your reading of this chapter, identify examples from current events where an anthropologist could help identify, assess, and solve contemporary social problems.

adaptation, *4*
anthropological archaeology, *9*
anthropology, *3*
applied anthropology, *13*
biocultural, *5*
biological anthropology, *11*
cultural anthropology, *8*
cultural resource management (CRM), *14*
culture, *3*
ethnography, *8*
ethnology, *9*
food production, *5*
general anthropology, *7*
holistic, *3*
linguistic anthropology, *12*
science, *14*
society, *3*
sociolinguistics, *12*

Chapter 2

Culture

What Is Culture?

In Chapter 1 we saw that humans share *society*, organized life in groups, with social animals, such as apes, monkeys, wolves, and ants. Although other animals, especially apes, have rudimentary cultural abilities, only humans have fully elaborated cultures—distinctive traditions and customs transmitted over the generations through learning and through language.

The concept of culture has long been basic to anthropology. A century and a half ago, in his book *Primitive Culture*, the British anthropologist Edward Tylor proposed that cultures, systems of human behavior and thought, obey natural laws and therefore can be studied scientifically. Tylor's definition of culture still offers an overview of the subject matter of anthropology, and it is widely quoted.

"Culture . . . is that complex whole which includes knowledge, belief, arts, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1871/1958, p. 1). The crucial phrase here is "acquired . . . as a member of society." Tylor's definition focuses on attributes that people acquire not through biological inheritance but by growing up in a particular society in which they are exposed to a specific cultural tradition. **Enculturation** is the process by which a child *learns* his or her culture.

Culture Is Learned

The ease with which children absorb their cultural tradition rests on the uniquely elaborated human capacity to learn. Other animals may learn from experience, so that, for example, they avoid fire after discovering that it hurts. Social animals also learn from other members of their group. Wolves, for example, learn hunting strategies from other pack members. Such social learning is particularly important among monkeys and apes, our closest biological relatives. But our own *cultural learning* depends on the uniquely developed human capacity to use **symbols**, signs that have no necessary or natural connection to the things they stand for, or signify.

Through cultural learning, people create, remember, and deal with ideas. They understand and apply specific systems of symbolic meaning. Anthropologist Clifford Geertz (1973) describes cultures as sets of "control mechanisms—plans, recipes, rules, instructions" and likens them to computer programs that govern human behavior (p. 44). During enculturation, people gradually absorb and internalize their particular culture—a previously established system of meanings and symbols that helps guide their behavior and perceptions throughout their lives.

Every person begins immediately, through a process of conscious and unconscious learning and interaction with others, to internalize, or incorporate, a cultural tradition through the process of enculturation. Sometimes culture is taught directly, as when parents tell their children to say "thank you" when someone gives them something or does them a favor.

We also acquire culture through observation. Children pay attention to the things that go on around them. They modify their behavior not just because other people tell them to do so, but also because of their own observations and growing awareness of what their culture considers right and wrong. Many aspects of culture are absorbed unconsciously. North Americans acquire their culture's notions about how far apart people should stand when they talk, not by being told directly to maintain a certain distance but through a gradual process of observation, experience, and conscious and unconscious behavior modification. No one tells Brazilians or Italians to stand closer together than North Americans do; they learn to do so as part of their cultural tradition.

Culture Is Symbolic

Symbolic thought is unique and crucial to humans and to cultural learning. A symbol is something verbal or nonverbal, within a particular language or culture, that comes to stand for something else. There need be no obvious, natural, or necessary connection between a symbol and the thing that it symbolizes. The familiar pet that barks is no more naturally a *dog* than it is a *chien*, *Hund*, or *mbwa*, the words for "dog" in French, German, and Swahili, respectively. Language is one of the distinctive possessions of *Homo sapiens.* No other animal has developed anything approaching the complexity of language, with its multitude of symbols.

There also is a rich array of nonverbal symbols. Flags, for example, stand for various countries, as arches do for a hamburger chain. Holy water is a potent symbol in Roman Catholicism. As is true of all symbols, the association between water and what it stands for (holiness) is arbitrary and conventional. Water probably is not intrinsically holier

Children acquire culture through instruction, observation, and participation. Here we see diverse American kids participating in a national tradition, as they celebrate Independence Day (July 4).
Ariel Skelley/DigitalVision/Getty Images

than milk, blood, or other natural liquids. Nor is holy water chemically different from ordinary water. Holy water is a symbol within Roman Catholicism, which is part of an international cultural system. A natural thing has been associated arbitrarily with a particular meaning for Catholics, who share beliefs and experiences that are based on learning and transmitted across the generations. Our cultures immerse us in a world of symbols that are both linguistic and nonverbal. Particular items and brands of clothing, such as jeans, shirts, or shoes, can acquire symbolic meanings, as can our gestures, posture, and body decoration and ornamentation.

All humans possess the abilities on which culture rests—the abilities to learn, to think symbolically, to manipulate language, and to use tools and other cultural products in organizing their lives and coping with their environments. Every contemporary human population has the ability to use symbols and thus to create and maintain culture. Our nearest relatives—chimpanzees and gorillas—have rudimentary cultural abilities. However, no other animal has elaborated cultural abilities to the extent that *Homo* has.

Culture Is Shared

Culture is an attribute not of individuals per se but of individuals as members of *groups*. Culture is transmitted in society. We learn our culture by observing, listening, talking, and interacting with other people. Shared beliefs, values, memories, and expectations link people who grow up in the same culture. Enculturation unifies people by providing us with common experiences. Today's parents were yesterday's children. If they grew up

in North America, they absorbed certain values and beliefs transmitted over the generations. People become agents in the enculturation of their children, just as their parents were for them. Although a culture constantly changes, certain fundamental beliefs, values, worldviews, and child-rearing practices endure. One example of enduring shared enculturation is the American emphasis on self-reliance and independent achievement.

Despite characteristic American notions that people should "make up their own minds" and "have a right to their opinion," little of what we think is original or unique. We share our opinions and beliefs with many other people—nowadays not just in person but also via new media. Think about how often (and with whom) you share information or an opinion via texting, Snapchat, Instagram, Facebook, Pinterest, Twitter, or WhatsApp. Illustrating the power of shared cultural background, we are most likely to agree with and feel comfortable with people who are socially, economically, and culturally similar to ourselves. This is one reason Americans abroad tend to socialize with each other, just as French and British colonials did in their overseas empires. Birds of a feather flock together, but for people, the familiar plumage is culture.

Culture and Nature

Culture takes the natural biological urges we share with other animals and teaches us how to express them in particular ways. People have to eat, but culture teaches us what, when, and how. In many cultures, people have their main meal at noon, but most North Americans prefer a large dinner. English people eat fish (e.g., kippers—kippered herring) for breakfast, but North Americans prefer hot cakes and cold cereals. Brazilians put hot milk into strong coffee, whereas many North Americans pour cold milk into a weaker brew. Midwesterners dine at 5 or 6, Spaniards at 10.

Cultural habits, perceptions, and inventions mold "human nature" into many forms. People have to eliminate wastes from their bodies. But some cultures teach people to defecate squatting, while others tell them to do it sitting down. Peasant women in the Andean highlands squat in the streets and urinate, getting all the privacy they need from their massive skirts. All these habits are parts of cultural traditions that have converted natural acts into cultural customs.

Culture influences how we perceive nature, human nature, and "the natural," and cultural advances have overcome many "natural" limitations. We can prevent and cure diseases, such as polio and smallpox, that felled our ancestors, even as we face and learn to deal with novel pathogens that emerge during our lifetimes. We can use pills to enhance or restore sexual potency. Through cloning, scientists have challenged the way we think about biological identity and the meaning of life itself. Culture, of course, does not always protect us. Hurricanes, earthquakes, tsunamis, floods, and other natural forces regularly thwart our efforts to modify the environment through building, development, and expansion.

Culture Is All-Encompassing and Integrated

For anthropologists, culture includes much more than refinement, good taste, sophistication, education, and appreciation of the fine arts. Not only college graduates but all people are "cultured." The most interesting and significant cultural forces are those that affect people every day of their lives, particularly those that influence children during enculturation.

Culture, as defined anthropologically, encompasses features that sometimes are considered trivial or unworthy of serious study, such as those of "popular" culture. To understand contemporary North American culture, we must consider holidays, mass media, the Internet, fast food, sports, and games. As a cultural manifestation, a rock star may be as interesting as a symphony conductor (or vice versa); a comic book may be as significant as a book-award winner.

The term **popular culture** encompasses aspects of culture that have meaning for many or most people within the same national culture. American examples include July 4th, Halloween, Thanksgiving, football, homecoming dances, dinner-and-a-movie dates, and retirement parties. Although popular culture is available to us all, we use it selectively, and its meaning varies from one person to the next. For example, the World Cup, the Super Bowl, Taylor Swift, *Star Wars*, and *The Simpsons* mean something different to each of their fans. All of us creatively consume and interpret print media, music, television, films, theme parks, celebrities, politicians, and other popular culture products.

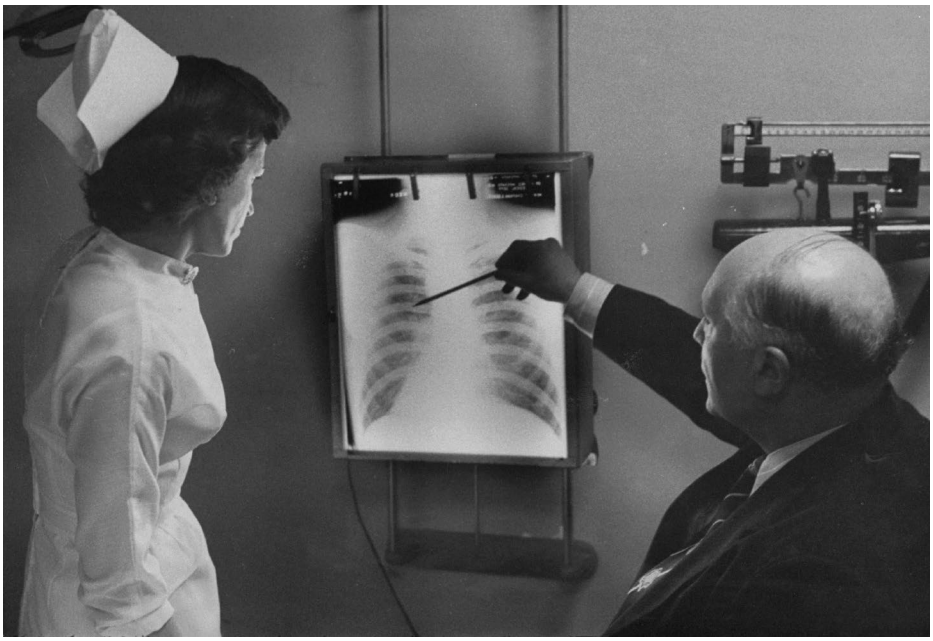
Cultures are not haphazard collections of customs and beliefs. Cultures are integrated, patterned systems. If one part of the system (e.g., the economy) changes, other parts also change. For example, during the 1950s, most American women planned domestic careers as homemakers and mothers. Since then, an increasing number of American women, including wives and mothers, have entered the workforce. Only 32 percent of married American women worked outside the home in 1960, compared with about 60 percent today.

Economic changes have social repercussions. Attitudes and behavior about marriage, family, and children have changed. Late marriage, "living together," and divorce have become commonplace. Work may compete with marriage and family responsibilities, reducing time spent at home and interfering with child care. Recognizing this, employers increasingly make it possible for workers to work remotely from home, a pattern reinforced dramatically by the COVID-19 pandemic and the availability of Zoom and similar platforms.

Cultures are integrated not simply by their dominant economic activities and related social patterns but also by sets of values, ideas, symbols, and judgments. Cultures train their individual members to share certain personality traits. A set of characteristic **core values** (key, basic, central values) integrates each culture and helps distinguish it from others. For instance, the work ethic and individualism are core values that have integrated American culture for generations. Different sets of dominant values influence the patterns of other cultures.

Culture Is Instrumental, Adaptive, and Maladaptive

Culture is the main reason for human adaptability and success. Other animals rely on biological means of adaptation (such as fur or blubber, which are adaptations to cold). Humans also adapt biologically—for example, by shivering when we get cold or sweating when we get hot. But in addition to biological responses, people also have cultural ways of adapting. To cope with environmental stresses, we habitually use technology, or tools. We hunt cold-adapted animals and use their fur coats as our own. We turn the thermostat up in the winter and down in the summer. In summer, we have a cold drink, jump in a pool, or travel to someplace cooler. In winter, we drink hot chocolate, seek out a sauna, or vacation in warmer climates. People use culture *instrumentally*, that is, to fulfill their basic biological needs for food, drink, shelter, comfort, and reproduction.



In the top photo (circa 1950), a male doctor points out features of an X-ray to a female nurse. In the bottom photo, a contemporary doctor holds up and studies MRI scans. Nowadays, female college graduates aged 30 to 34 are just as likely to be doctors, dentists, lawyers, professors, managers, and scientists as they are to be working in traditionally female professions, as teachers, nurses, librarians, secretaries, or social workers. (top): Walter Sanders/The LIFE Picture Collection/Getty Images; (bottom): Ron Levine/Photographer's Choice/Getty Images

People also use culture to fulfill psychological and emotional needs, such as friendship, companionship, approval, and sexual desirability. People seek *informal support*—help from people who care about them—as well as *formal support* from associations and institutions. To these ends, individuals cultivate ties with others on the basis of common experiences, political interests, aesthetic sensibilities, or personal attraction.

On one level, cultural traits (e.g., air conditioning) may be called *adaptive* if they help individuals cope with environmental stresses. But on a different level, such traits can also be *maladaptive.* That is, they may threaten a group's continued existence. Thus, chlorofluorocarbons (e.g., as found in old air conditioners) have been banned in the United States because they deplete the ozone layer and, by doing so, can harm humans and other life. Many modern cultural patterns may be maladaptive in the long run. Some examples of maladaptive aspects of culture are policies that encourage or promote overpopulation, poor food-distribution systems, overconsumption, climate change, and environmental degradation.

Culture's Evolutionary Basis

The human capacity for culture has an evolutionary basis that extends back perhaps 3 million years, the date of the earliest evidence of tool manufacture in the archaeological record. Tool making by our distant ancestors may extend even farther back, based on observations of tool manufacture by chimpanzees in their natural habitats (e.g., Mercader, Panger, and Boesch, 2002; Schaik, 2016).

Similarities between humans and apes, our closest relatives, are evident in anatomy, brain structure, genetics, and biochemistry. Most closely related to us are the African great apes: chimpanzees and gorillas. *Hominidae* is the zoological family that includes fossil and living humans, as well as chimps and gorillas. We refer to members of this family as **hominids**. The term **hominins** is used for the group that leads to humans but not to chimps and gorillas and that encompasses all the human species that ever have existed.

Many human traits are part of an ancestral arboreal heritage that we share with monkeys and apes. These traits developed as our ancestors adapted to life in the trees millions of years ago. They include (1) grasping ability and manual dexterity (especially opposable thumbs), (2) depth and color vision, (3) learning ability based on a large, visually oriented brain, and (4) substantial parental investment in a limited number of offspring. All these traits continue to be key features of human adaptation. Manual dexterity, for example, is essential to a major human adaptive capacity: tool making.

What We Share with Other Primates

There is a substantial gap between primate *society* (organized life in groups) and fully developed human *culture*, which is based on symbolic thought. Nevertheless, studies of nonhuman primates reveal many similarities with humans, such as the ability to learn from experience and change behavior as a result. Monkeys, and especially apes, learn throughout their lives. In one group of Japanese macaques (land-dwelling monkeys), for example, a 3-year-old female started washing sweet potatoes before she ate them. First her mother, then her age peers, and finally the entire troop began washing sweet potatoes as

well. The ability to benefit from experience confers a tremendous adaptive advantage, permitting the avoidance of fatal mistakes. Faced with environmental change, humans and other primates don't have to wait for a genetic or physiological response. They can modify learned behavior and social patterns instead.

Although humans do employ tools much more than any other animal does, tool use also turns up among several nonhuman species, including birds, beavers, sea otters, and especially apes. Furthermore, humans are not the only animals that make tools with a specific purpose in mind. It is well-known that capuchin monkeys in South America use specific kinds of rocks to pound the shells off nuts, which they then eat. Recent excavations show that they have hammered and dug with carefully chosen stones for the last 3,000 years (Bower, 2019).

Chimpanzees living in the Tai forest of Ivory Coast make and use stone tools to break open hard, golf-ball-sized nuts (Mercader, Panger, and Boesch, 2002). At specific sites, the chimps gather nuts, place them on stumps or flat rocks, which are used as anvils, and pound the nuts with heavy stones. The chimps must select hammer stones suited to smashing the nuts and carry them to where the nut trees grow. Nut cracking is a learned skill, with mothers showing their young how to do it. Chimpanzees at Bossou, Guinea (West Africa) systematically use sticks to gather algae floating in ponds. They stand at the edge of a pond, each chimp holding a stalk or stick, which they carefully place in the water. Then they slowly lift the sticks covered with algae to their mouths (Matsuzawa, 2019).

In 1960, Jane Goodall began observing wild chimps—including their tool use and hunting behavior—at Gombe Stream National Park in Tanzania, East Africa (see Goodall, 2010). The most studied form of ape tool making involves "termiting," in which chimps make tools to probe termite hills. They choose twigs, which they modify by removing leaves and peeling off bark to expose the sticky surface beneath. They carry the twigs to termite hills, dig holes with their fingers, and insert the twigs. Finally, they pull out the twigs and dine on termites that were attracted to the sticky surface. Given what is known about ape tool use and manufacture, it is unsurprising that early hominins shared this ability; currently, the earliest evidence for hominin stone tool making dates back 3 million years. Bipedalism (moving around upright on two legs) would have allowed early hominins to carry and wield tools and weapons against predators and competitors in an open grassland habitat.

The apes have other abilities on which culture depends. Wild chimpanzees and orangutans aim and throw objects. Gorillas build nests, and they throw branches, grass, vines, and other objects. Hominins have elaborated the capacity to aim and throw, without which we never would have developed projectile technology, weaponry, baseball, or the forward pass.

As with tool making, anthropologists once considered hunting to be a distinctive human activity not shared with the apes. Again, however, primate research shows that other primates, especially chimpanzees, are habitual hunters. For example, in Uganda's Kibale National Park, chimps form large hunting parties, including an average of 26 individuals (almost always adult and adolescent males). Most hunts (78 percent) result in at least one prey item being caught—a much higher success rate than that among lions (26 percent), hyenas (34 percent), or cheetahs (30 percent). Chimps' favored prey there is the red colobus monkey (Mitani and Watts, 1999).

It is likely that human ancestors were doing some hunting by at least 3 million years ago, based on the existence of early stone tools apparently designed to cut meat. Given

Different forms of tool use by chimps. Top photo shows a Liberian chimp using a hammer stone to crack palm nuts. The bottom photo shows chimps using prepared twigs to "fish" for termites from a termite hill. (top): Clive Bromhall/Oxford Scientific/Getty Images; (bottom): Stan Osolinski/Oxford Scientific/Getty Images

our current understanding of chimp tool making and hunting, we can infer that hominids may have been hunting much earlier than the first archaeological evidence attests. Because chimps typically devour the monkeys they kill, leaving few remains, we may never find archaeological evidence for the first hominid or hominin hunt, especially if it proceeded without stone tools.

How We Differ from Other Primates

Although chimps often share meat from a hunt, apes and monkeys (except for nursing infants) tend to feed themselves individually. Cooperation and sharing are much more characteristic of humans. Until fairly recently (12,000–10,000 years ago), all humans were hunter-gatherers who lived in small social groups called bands. In some world areas, the hunter-gatherer way of life persisted into recent times, permitting study by ethnographers. In such societies, men and women take resources back to the camp to share. Everyone shares the meat from a large animal. Nourished and protected by younger band members, elders live past reproductive age and are respected for their knowledge and experience. Humans are among the most cooperative of the primates—in the food quest and other social activities. As well, the amount of information stored in a human band is far greater than that in any other primate group.

Another difference between humans and other primates involves mating. Among baboons and chimps, most mating occurs when females enter **estrus**, during which they ovulate. In estrus, the vaginal area swells and reddens, and receptive females form temporary bonds with,

TABLE 2–1 Cultural Features of Chimpanzees (Rudimentary) and Humans (Fully Developed)

	Chimpanzees	Humans
Cultural learning	Rudimentary	Fully developed
Tool use	Occasional	Habitual
Tool manufacture	Occasional: hammer stones, termiting	Habitual and sophisticated
Aimed throwing	Occasional objects, not tools	Projectile technology
Hunting	Significant, but no tools	Basic hominin subsistence strategy, with tools
Food sharing	Meat sharing after hunt	Basic to human life
Cooperation	Occasional in hunting	Basic to human life
Mating and marriage	Female estrus cycle, limited pair bonds	Year-round mating, marriage, and exogamy
Kin ties	Limited by dispersal at adolescence	Maintained through sons and daughters

and mate with, males. Human females, by contrast, lack a visible estrus cycle, and their ovulation is concealed. Not knowing when ovulation is occurring, humans maximize their reproductive success by mating throughout the year. Human pair bonds for mating are more exclusive and more durable than are those of chimps. Related to our more constant sexuality, all human societies have some form of marriage. Marriage gives mating a reliable basis and grants to each spouse special, though not always exclusive, sexual rights in the other.

Marriage creates another major contrast between humans and other primates: exogamy and kinship systems. Most cultures have rules of exogamy requiring marriage outside one's kin or local group. Exogamy confers adaptive advantages because it creates ties between the spouses' kin groups. Their children have relatives, and therefore allies, in two kin groups rather than just one. Such ties of affection and mutual support between members of different local groups tend to be absent among primates other than *Homo.* Other primates tend to disperse at adolescence. Among chimps and gorillas, females tend to migrate, seeking mates in other groups. Humans also choose mates from outside the natal group, and usually at least one spouse moves. However, *humans maintain lifelong ties with sons and daughters.* The systems of kinship and marriage that preserve these links provide a major contrast between humans and other primates (see Bergendorff, 2016; Martin, 2019). Table 2–1 summarizes differences in the cultural abilities of humans and chimpanzees, our nearest relatives.

Universality, Generality, and Particularity

Anthropologists agree that cultural learning is uniquely elaborated among humans and that all humans have culture. Anthropologists also agree that although *individuals* differ in their emotional and intellectual tendencies and capacities, all human *populations* have equivalent capacities for culture. Regardless of their genes or their physical appearance, people can learn *any* cultural tradition. To understand this point, consider that contemporary North Americans are the genetically mixed descendants of people from all over the world. Our ancestors were biologically varied, lived in different countries and continents, and participated in hundreds of cultural traditions. However, successive waves of immigrants and their descendants now share a national culture.

In studying human diversity in time and space, anthropologists distinguish among the universal, the generalized, and the particular. Certain biological, psychological, social, and cultural features are **universal**, found in every culture. Others are merely **generalities**, common to several but not all human groups. Still other traits are **particularities**, unique to certain cultural traditions.

Universals and Generalities

Biologically based universals include a long period of infant dependency; year-round (rather than seasonal) sexuality; and a complex brain that enables us to use symbols, languages, and tools. Among the social universals is life in groups and in some kind of family. Generalities occur in certain times and places but not in all cultures. They may be widespread, but they are not universal. One cultural generality that is present in many but not all societies is the nuclear family, a kinship group consisting of parents and children. Many middle-class Americans still view the "traditional" nuclear family, consisting of a married man and woman and their children, as a proper and "natural" group. This view persists despite the fact that nuclear families now comprise only about 20 percent of all American households. Cross-culturally, too, this kind of "traditional" family is far from universal. Consider the Nayars, who live on the Malabar Coast of India. Traditionally, the Nayars lived in female-headed households, and husbands and wives did not live together. In many other societies, the nuclear family is submerged in larger kin groups, such as extended families, lineages, and clans (see Chapter 7).

Different societies can share beliefs and customs because of borrowing or through (cultural) inheritance from a common cultural ancestor. Speaking English is a generality shared by North Americans and Australians because both countries had English settlers. Another reason for generalities is domination, as in colonial rule, when a more powerful nation imposes its customs and procedures on another group. In many countries, use of the English language reflects colonial history. More recently, English has spread through **diffusion** (cultural borrowing) to many other countries, as it has become the primary language used in business and travel.

Particularity: Patterns of Culture

A cultural particularity is a trait or feature of culture that is not generalized or widespread; rather, it is confined to a single place, culture, or society. Yet because of cultural borrowing, which has accelerated through modern transportation and communication systems, traits that once were limited in their distribution have become more widespread. Traits that are useful, that have the capacity to please large audiences, and that don't clash with the cultural values of potential adopters are more likely than others to be borrowed. Nevertheless, certain cultural particularities persist. Examples include distinctive regional foods, such as the pork barbecue with a mustard-based sauce that is available only in South Carolina and the "pasty," a beef stew baked in pie dough, that is characteristic of Michigan's Upper Peninsula. Besides diffusion (which, for example, has spread McDonald's food outlets, once confined to San Bernardino, California, across the globe), there are other reasons that cultural particularities are increasingly rare. Many cultural traits are shared as cultural universals and as a result of independent invention. Facing similar problems, people in different places have come up with (independently invented) similar solutions. Again and again, similar cultural causes have produced similar cultural results.

Cultures use rituals to mark such universal life-cycle events as birth, puberty, marriage, parenthood, and death. But particular cultures differ as to which events merit special celebration and in the emotions expressed during their rituals. Compare the Balinese cremation ceremony (top) with the Thai wedding (bottom). In the cremation ceremony, participants celebrate the life of the deceased as they carry a body (underneath each creature) to be burned and released from worldly ties. In this Thai Buddhist wedding ceremony, a groom, age 40, and bride, age 26, temporarily lie down in a coffin. This custom is believed to banish bad luck and bring happiness. How would you describe the emotions suggested by the photos? Source: (top): Tuul & Bruno Morandi/Getty Images; (bottom): Chaiwat Subprasom/Newscom