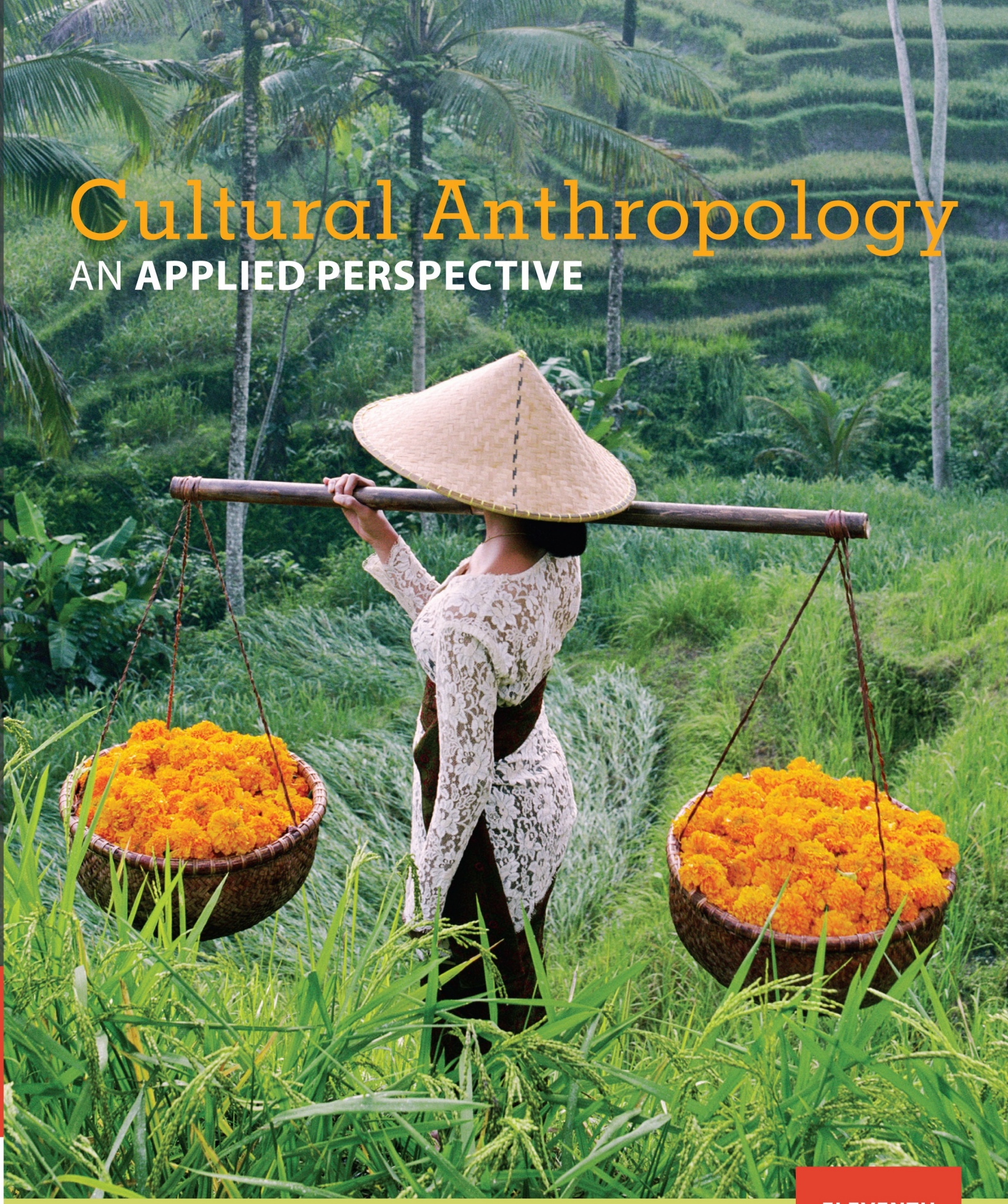
Cultural Anthropology

AN **APPLIED PERSPECTIVE**



GARY **FERRARO** | SUSAN **ANDREATTA**

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

ELEVENTH EDITION

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

ELEVENTH EDITION

Cultural Anthropology

An Applied Perspective

Gary Ferraro

University of North Carolina—Charlotte

Susan Andreatta

University of North Carolina—Greensboro

CENGAGE Learning®

Australia • Brazil • Mexico • Singapore • United Kingdom • United States

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

CENGAGE Learning®

***Cultural Anthropology: An Applied Perspective,* Eleventh Edition**
Gary Ferraro and Susan Andreatta

Product Director: Marta Lee-Perriard
Product Manager: Elizabeth Beiting-Lipps
Content Developer: Chrystie Hopkins, Lumina Datamatics, Inc.
Product Assistant: Allison Robbins
Marketing Manager: Eric Wagner
Content Project Manager: Cheri Palmer
Art Director: Michael Cook
Manufacturing Planner: Judy Inouye
Production Service and Compositor: MPS Limited
Intellectual Property Analyst: Jennifer Bowes
Intellectual Property Project Manager: Reba Frederics
Photo and Text Researcher: Lumina Datamatics, Inc.
Illustrator: Graphic World
Text Designer: Liz Harasymczuk
Cover Designer: Michael Cook
Cover Image: Martin Puddy/Stone/Getty Images

© 2018, 2015 Cengage Learning

ALL RIGHTS RESERVED. No part of this work covered by the copyright herein may be reproduced or distributed in any form or by any means, except as permitted by U.S. copyright law, without the prior written permission of the copyright owner.

For product information and technology assistance, contact us at
Cengage Learning Customer & Sales Support, 1-800-354-9706
For permission to use material from this text or product, submit all requests online at **www.cengage.com/permissions**
Further permissions questions can be e-mailed to
permissionrequest@cengage.com

Library of Congress Control Number: 2016947236

Student Edition:
ISBN: 978-1-337-10964-2

Loose-leaf Edition:
ISBN: 978-1-337-11617-6

Cengage Learning
20 Channel Center Street
Boston, MA 02210
USA

Cengage Learning is a leading provider of customized learning solutions with employees residing in nearly 40 different countries and sales in more than 125 countries around the world. Find your local representative at **www.cengage.com**

Cengage Learning products are represented in Canada by Nelson Education, Ltd.

To learn more about Cengage Learning Solutions, visit **www.cengage.com**

Purchase any of our products at your local college store or at our preferred online store **www.cengagebrain.com**

Printed in the United States of America
Print Number: 01 Print Year: 2017

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

To Ayla, our bilingual beauty!

GPF

Tim—Thank you for your love and for understanding the value of applied anthropology.

SLA

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Brief Contents

Preface **xvii**

About the Authors **xxv**

1 What Is Anthropology? **3**

2 The Concept of Culture **25**

3 Applied Anthropology **49**

4 The Growth of Anthropological Theory **71**

5 Methods in Cultural and Applied Cultural Anthropology **95**

6 Language and Communication **121**

7 Subsistence Patterns **147**

8 Economics **177**

9 Marriage and the Family **205**

10 Kinship and Descent **233**

11 Sex and Gender **255**

12 Social Stratification **285**

13 Political Organization and Social Control **311**

14 Belief Systems **339**

15 Art **367**

16 Global Challenges and the Role of Applied Anthropology **389**

Glossary 415

References 423

Index 437

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Detailed Contents

Preface **xvii**

About the Authors **xxv**

CHAPTER 1

What Is Anthropology? 3

A Letter to Students 3

Biological Anthropology 6
- *Evolutionary Record of Humans* 6
- *Primatology* 6
- *Physical Variations among Primates* 7

Archaeology 8

Anthropological Linguistics 10

Cultural Anthropology 11
- *Areas of Specialization* 12

Guiding Principles 15
- *Holism* 15
- *Ethnocentrism* 15
- *Cultural Relativism* 16
- *Emic versus Etic Approaches* 17

Contributions of Anthropology 17
- *Enhancing Understanding* 17
- *Applying Anthropological Concepts to Social Problems* 18
- *Building Skills for the Twenty-First Century* 20
  - Develop a Broad Perspective 20
  - Appreciate Other Perspectives 20
  - Balance Contradictions 20
  - Emphasize Global Teamwork 20
  - Develop Cognitive Complexity 21
  - Develop Perceptual Acuity 21

The Bottom Line: Understanding Other Cultures 21

Summary 22

Key Terms 23

Critical Thinking Questions 23

Applied Perspective Applying Archaeology in Post-Katrina New Orleans 10

Danita Delimont/Gallo Images/Getty Images

Cross-Cultural Miscue 15

Applied Perspective Applying Anthropology to the Field of Economic Development 18

CHAPTER 2

The Concept of Culture 25

Culture Defined 26

Culture Is Shared 29

Culture Is Learned 30

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Strauss/Curtis/Getty Images

Learning versus Instincts **30**
Learning Different Content **31**
Culture Is Taken for Granted **31**
Culture Influences Biological Processes **32**
Our Bodies and Culture **33**
Cultural Universals **34**
Basic Needs **34**
Culture Is Adaptive and Maladaptive **35**
Cultures Are Generally Integrated **37**
Cultural Interconnections **37**
Cultures Change **39**
Inventions and Innovations **39**
Cultural Diffusion **40**
The Process of Diffusion Is Selective **40**
Diffusion Is a Two-Way, Reciprocal Process **40**
Cultural Elements May Be Modified **41**
Some Parts of Culture Are More Likely to Diffuse than Others **41**
Diffusion Is Affected by Other Important Variables **41**
Linked Changes **42**
"Primitive" Cultures **43**
Culture and the Individual **43**
New Twenty-First-Century Tools for the Study of Cultures **43**
Summary **46**
Key Terms **46**
Critical Thinking Questions **47**
Cross-Cultural Miscue **31**
Cross-Cultural Miscue **33**
Applied Perspective Cross-Cultural Coaching **44**

CHAPTER 3

Applied Anthropology **49**

Applied Anthropology **50**
All Anthropologists Are Not Applied Anthropologists **50**
Applying the Anthropological Perspective **51**
History of Applied Anthropology **53**
The Ethics of Cultural Anthropology: Ethnographic and Applied **54**
Anthropologists' Major Areas of Ethical Responsibility **57**
Ethical Consideration in Private and Public Sectors **57**
Funding Applied Research **58**
Specialized Roles of Applied Anthropologists **58**
Examples of Applied Anthropology **60**
An Ethnographic Study of Post-Disaster Relief (Development Anthropology) **60**
Agrochemical Effects on the Human and Natural Environments (Ecological Anthropology) **61**
The Greater Use of Anthropological Knowledge **62**
Career Opportunities in Applied Anthropology **63**

FLPA/Superstock

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

How to Start to Become an Applied Anthropologist **64**
Medical Anthropology **65**
Ecological Anthropology **65**
International Business and Business Anthropology **65**
Educational Anthropology **66**
Development Anthropology **66**
Summary **68**
Key Terms **68**
Critical Thinking Questions **68**
Cross-Cultural Miscue **55**
Cross-Cultural Miscue **65**
Applied Perspective If the Food Won't Kill You, the Cooking Will **66**

CHAPTER 4
The Growth of Anthropological Theory **71**

Evolutionism **72**
Evolutionism in Brief **74**
Diffusionism **74**
Diffusionism in Brief **74**
American Historicism **74**
American Historicism in Brief **75**
Functionalism **75**
Functionalism in Brief **77**
Psychological Anthropology **77**
Psychological Anthropology in Brief **79**
Neoevolution **79**
Neoevolution in Brief **80**
French Structuralism **80**
French Structuralism in Brief **81**
Ethnoscience **81**
Ethnoscience in Brief **81**
Feminist Anthropology **82**
Feminist Anthropology in Brief **83**
Cultural Materialism **83**
Cultural Materialism in Brief **84**
Humanistic Anthropology **84**
Interpretive Anthropology **84**
Interpretative Anthropology in Brief **85**
Postmodernism **85**
Postmodernism in Brief **86**
Political Economy **86**
Political Economy in Brief **89**
Political Ecology **89**
Political Ecology in Brief **90**
Theory, Practice, and Praxis **90**

Tim Graham/Getty Images

Praxis in Anthropology **90**
Concluding Thoughts on the History of Anthropological Theory **91**
Summary **92**
Key Terms **93**
Critical Thinking Questions **93**
Cross-Cultural Miscue **82**
Contemporary Issue Water, Culture, and Power: When Is It Too Late to Act? **88**

CHAPTER 5
Methods in Cultural and Applied Cultural Anthropology **95**

Preparing for Fieldwork **99**
Stages of Field Research **100**
Stage 1: Selecting a Research Problem **100**
Stage 2: Formulating a Research Design **101**
Stage 3: Collecting the Data **101**

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Christine Pemberton/The Image Works

Stage 4: Analyzing the Data **101**
Stage 5: Interpreting the Data **102**
Data-Gathering Techniques **103**
Participant Observation **103**
Guidelines for Participant Observation **104**
Advantages of Participant Observation **105**
Disadvantages of Participant Observation **105**
Interviewing **106**
Structured, Semistructured, and Unstructured Interviews **106**
Validity of the Data Collected **107**
Additional Data-Gathering Techniques **107**
Census Taking **107**
Mapping **107**
Document Analysis **108**
Collecting Genealogies **109**
Photography **110**
Applied Field Methods **111**
Choosing a Technique **112**
The Pains and Gains of Fieldwork **112**
Culture Shock **113**
Biculturalism **114**
Recent Trends in Ethnographic Fieldwork **116**
Reflexive Methods **116**
Statistical Cross-Cultural Comparisons **116**
New Information Technology **117**
Mining Social Networking Websites for Sociocultural Data **117**
Accountability **117**
Summary **118**
Key Terms **118**
Critical Thinking Questions **119**
Cross-Cultural Miscue **98**
Applied Perspective Climate Change: Food and Water Insecurity **108**
Cross-Cultural Miscue **111**
Applied Perspective What Do You Do with a Degree in Anthropology? **115**

CHAPTER 6
Language and Communication **121**

The Nature of Language **122**
Diversity of Language **123**
Communication: Human versus Nonhuman **125**
Open and Closed Communication Systems **125**
The Structure of Language **127**
Phonology **128**
Morphemes **128**
Grammar **129**
Language Change **130**
Language and Culture **131**
How Culture Influences Language **131**
The Nuer **132**
U.S. Example of Cultural Emphasis **132**
How Language Influences Culture **132**
The Sapir-Whorf Hypothesis **133**
Testing the Hypothesis **133**
Linguistic Style **135**
Sociolinguistics **136**
Diglossia **137**
Specialized Vocabularies **137**
Dialects **138**
Language Nationalism, and Ethnic Identity **138**
Nonverbal Communication **140**
Hand Gestures **140**
Posture (Body Stance) **141**

StockLite/Shutterstock.com

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Touching **141**
Communication and Technology in the Twenty-First Century **141**
Summary **144**
Key Terms **144**
Critical Thinking Questions **144**
Cross-Cultural Miscue **122**
Applied Perspective Endangered Languages Saved by Digital Technology **126**
Contemporary Issue Becoming a Teacher of English to Nonnative English Speakers **129**
Cross-Cultural Miscue **136, 139**
Applied Perspective Applied Anthropology and Internet Communication **143**

Keren Su/China Span/Alamy

CHAPTER 7

Subsistence Patterns **147**

Human Adaptation **149**
Adapting to One's Environment **149**
Environment and Technology **151**
Major Food-Getting Strategies: Subsistence **152**
Hunting-and-Gathering Societies **154**
The Ju/'hoansi of the Kalahari Region **155**
The Inuit **157**
Food-Producing Societies **160**
Changes Resulting from Food Production **162**
Horticulture **163**
Pastoralism **166**
Intensive Agriculture **169**
Peasantry **170**
Industrial Agriculture **171**
Resistance to Industrial Agriculture: An Applied Perspective **172**
Community Gardens **173**
Farmers Markets **173**
Back-to-the-Land Movement **173**
Worldwide Opportunities on Organic Farms **173**
Fishery Projects **173**
Pastoral Projects **174**
Summary **174**
Key Terms **175**
Critical Thinking Questions **175**
Applied Perspective Fighting Hunger with Edible Insects **153**
Applied Perspective Niche Marketing for Local Commercial Fishermen **160**
Cross-Cultural Miscue **163,** 168

CHAPTER 8

Economics **177**

Economics and Economic Anthropology **177**
Cross-Cultural Examination of Economic Systems **178**
The Allocation of Natural Resources **179**
Hunters and Gatherers **179**
Pastoralists **180**
Horticulturalists **182**
Intensive Agriculturalists **182**
Production **183**
Units of Production **184**
Production in the Household **184**
Division of Labor **185**
Gender Specialization **185**
Age Specialization **187**
Labor Specialization **188**

Imagestate Media Partners Limited - Impact Photos/Alamy

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Distribution of Goods and Services 188
Reciprocity 189
Generalized Reciprocity 189
Balanced Reciprocity 190
Negative Reciprocity 191
Redistribution 191
Bridewealth 191
Chiefly Redistribution (Tribute) 192
Big Men/Feast Givers 192
Potlatch 193
Market Exchange 194
Standardized Currency 194
Variety of Markets 194
Informal Economy 195
Market Economies 196
Globalization of World Economies 198
Views on Globalization 199
Summary 201
Key Terms 202
Critical Thinking Questions 202
Contemporary Issues Preserving Andean Fiber Textiles through Biodiversity 181
Cross-Cultural Miscue 185
Applied Perspective What Do I Do with a Major in Anthropology? 196
Applied Perspective Helping Clean Up a Problem: A Local Charity Recycles Hotel Soaps to Kill Germs around the World 200

Juanmonino/Getty Images

CHAPTER 9
Marriage and the Family 205

Marriage and the Family 206
Sexual Union 207
Permanence 207
Common Residence 208
Marriage and the Family: Functions 208
Young Children Raising a Family 209
Mate Selection: Who Is Out of Bounds? 209
Inbreeding Theory 211
Family Disruption Theory 211
Theory of Expanding Social Alliances 211
Mate Selection: Whom Should You Marry? 212
Rules of Exogamy 212
Rules of Endogamy 212
Arranged Marriages 212
Preferential Cousin Marriages 215
The Levirate and Sororate 215
The Role of Romantic Love and Courtship 216
Number of Spouses 217
Monogamy 217
Polygyny 217
Sex Ratio in Polygynous Societies 218
Advantages of Polygyny 218
Competition among Wives 219
Polygyny in the United States 219
Polyandry 220
Economic Considerations of Marriage 220
Bridewealth 221
Bride Service 222
Dowry 223
Divorce 223
Marriage: Continuity and Change 224
Family Structure 225
The Nuclear Family 225
The Extended Family 228
Modern-Day Family Structure and Living Arrangements 228
Summary 230
Key Terms 230
Critical Thinking Questions 230
Cross-Cultural Miscue 209
Applied Perspective A Crisis of Births: Family Making in Italy 226
Cross-Cultural Miscue 229

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Jack Hollingsworth/Photodisc/Getty Images

CHAPTER 10

Kinship and Descent 233

Kinship Defined 234
Using Kinship Diagrams 236
Principles of Kinship Classification 237
Generation 237
Sex or Gender 237
Lineality versus Collaterality 237
Consanguineal versus Affinal Kin 238
Relative Age 238
Sex of the Connecting Relative 238
Social Condition 238
Side of the Family 238
The Formation of Descent Groups 238
Unilineal Descent Groups 239
Patrilineal Descent Groups 239
Matrilineal Descent Groups 240
The Corporate Nature of Unilineal Descent Groups 242
Multilineal Descent Groups 243
Double Descent 243
Ambilineal Descent 244
Bilateral Descent 244
Residence Patterns: Where Do Wives and Husbands Live? 244
Different Systems of Classification 245
Eskimo System 245
Iroquois System 245
Kinship and the Modern World 246
Summary 251
Key Terms 251
Critical Thinking Questions 252

Cross-Cultural Miscue 238
Contemporary Issues Does the Gender of the Anthropologist Influence His or Her Findings? 241
Cross-Cultural Miscue 247
Applied Perspective Medical Anthropologists and Reproductive Health 249

CHAPTER 11

Sex and Gender 255

Sex Is Biological and Gender Is Cultural 255
Gender Is Cultural 256
Human Sexuality 258
Sexual Orientation 260
Gender Roles 262
Gender and Subsistence 263
Child Rearing for Men and Women 266
Gender and Language 268
Gender Stratification 269
Education 272
Employment 273
Reproductive Health 273
Finance 274
Gender Ideology 275
Exploitation Caused by Gender Ideology 277
Gender in the United States 279
Summary 281
Key Terms 282
Critical Thinking Questions 282
Cross-Cultural Miscue 262
Applied Perspective Umoja Uaso: A Women's Village in Kenya 264

Michael Nagle/The New York Times/Redux

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Applied Perspective Son Preference: New Reproductive Technologies and Family-Building Strategies in India **271**
Cross-Cultural Miscue **279**

CHAPTER 12

Social Stratification **285**

Dimensions of Social Inequality **285**
Types of Societies **287**
Egalitarian Societies **288**
Rank Societies **288**
Stratified Societies **289**
Class versus Caste **289**
Class Societies **290**
Caste Societies **296**
Racial and Ethnic Stratification **298**
Race and Ethnicity in the United States **300**
Race and Intelligence **302**
Forms of Intergroup Relations **303**
Theories of Stratification **304**
The Functionalist Interpretation **306**
The Conflict Theory Interpretation **306**
Functionalists versus Conflict Theorists **307**
Global Stratification **307**
Summary **308**
Key Terms **309**
Critical Thinking Questions **309**
Cross-Cultural Miscue **294**
Contemporary Issues "Education Is the Way out of Poverty!" Easier Said than Done? **295**
Cross-Cultural Miscue **302**
Applied Perspective Diabetes among Mexican Americans **305**

Watchira Teartasin/Shutterstock.com

Paul Almasy/Getty Images

CHAPTER 13

Political Organization and Social Control **311**

Types of Political Organization **312**
Band Societies **312**
Tribal Societies **313**
Chiefdoms **314**
State Societies **315**
The Rise of State Systems **316**
The Modern Nation-State **317**
Gender and the Modern State **317**
Changing State Systems of Government **318**
Variations in Political Structures **321**
Social Control **322**
Universal Mechanisms Found in All Types of Societies **324**
Socialization **325**
Public Opinion **325**
Supernatural Belief Systems **325**
Mechanisms of Social Control Found in Small-Scale Societies **326**
Corporate Lineages **326**
Song Duels **327**
Intermediaries **327**
Age Organization **328**

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Moots: Informal Courts 328
Oaths and Ordeals 329
Mechanisms of Social Control in State Societies 330
Courts and Codified Laws 330
Warfare 332
Summary 335
Key Terms 335
Critical Thinking Questions 336
Applied Perspective Rebuilding Japan after World War II 316
Applied Perspective Anthropology in the Courtroom 322
Cross-Cultural Miscue 326, 332
Contemporary Issues Should Anthropologists Work for the Military? 334

CHAPTER 14

Belief Systems 339

Defining Religion 340
Problems of Defining Religion 340
Religion and Magic 342
Sorcery and Witchcraft 343
Functions of Religion 345
Social Functions of Religion 345
Social Control 345
Conflict Resolution 346
Reinforcement of Group Solidarity 346
Psychological Functions of Religion 347
Cognitive Function 348
Emotional Function 348
Types of Religious Organization 349
Individualistic Cults 349
Shamanistic Cults 350
Communal Cults 352
Rites of Passage 352
Rites of Solidarity 353
Ecclesiastical Cults 354
Religion: Continuity and Change 357
Globalization of World Religions 358
Religious Change in the Twenty-First Century: The Rise of Fundamentalism 360
Christian Fundamentalism 361
Islamic Fundamentalism and Religious Nationalism 362
Religious Change and Technology 363
Summary 363
Key Terms 364
Critical Thinking Questions 364

David Samuel Robbins/Getty Images

Applied Perspective Anthropology and the U.S. Supreme Court 343
Cross-Cultural Miscue 345
Applied Perspective Anthropology and Medicine 347
Cross-Cultural Miscue 353
Contemporary Issues When Religious Values Conflict with Individual Values: A Cross-Cultural Example 362

CHAPTER 15

Art 367

What Is Art? 367
Differences in Art Forms 369
The Functions of Art 372
Emotional Gratification for the Individual 372
Social Integration 373
Social Control 374
Preserving or Challenging the Status Quo 375

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

PhotoviewPlus/Flickr/Getty Images

Graphic and Plastic Arts **376**
Music **377**
Ethnomusicology **378**
Dance **379**
Functions of Dance **380**
Dance and Other Aspects of a Culture **380**
Film: A Recent Art Form **382**
Art: Continuity and Change **383**
Summary **386**
Key Terms **386**
Critical Thinking Questions **386**
Contemporary Issues Call It Art, Not Native Art **370**
Cross-Cultural Miscue **372**
Contemporary Issues Where Is the Line between Art and Body Parts? **379**
Cross-Cultural Miscue **382**
Applied Perspective Anthropologist-Turned-Detective Finds Stolen African Statues **384**

CHAPTER 16

Global Challenges and the Role of Applied Anthropology **389**

A CLOSING LETTER TO STUDENTS **389**
The Growth of the Modern World Order: Colonialism and Globalization **390**
Colonialism **390**
Neocolonialism (Multinational Corporations) **392**
The Recent Intensification of Globalization **393**
Global Challenges and the Role of Applied Cultural Anthropology **396**
Sustainable Economic Development for Marginalized Peoples **397**
Cultural Survival of Indigenous Peoples **404**
Climate Change and Applied Anthropology **407**
Conclusion **410**
Summary **412**
Key Terms **413**
Critical Thinking Questions **413**
Cross-Cultural Miscue **393, 396**
Applied Perspective A Cultural Anthropologist Revitalizes the Small Town of Star, North Carolina **402**
Applied Perspective Want to Work in an International Economic Development Program? **410**

Glossary **415**
References **423**
Index **437**

Joerg Boethling/Alamy

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Feature Contents

APPLIED PERSPECTIVE

Applying Archaeology in Post-Katrina New Orleans **10**
Applying Anthropology to the Field of Economic Development **18**
Cross-Cultural Coaching **44**
If the Food Won't Kill You, the Cooking Will **66**
Climate Change: Food and Water Insecurity **108**
What Do You Do with a Degree in Anthropology? **115**
Endangered Languages Saved by Digital Technology **126**
Applied Anthropology and Internet Communication **143**
Fighting Hunger with Edible Insects **153**
Niche Marketing for Local Commercial Fishermen **160**
What Do I Do with a Major in Anthropology? **196**
Helping Clean Up a Problem: A Local Charity Recycles Hotel Soaps to Kill Germs around the World **200**
A Crisis of Births: Family Making in Italy **226**
Medical Anthropologists and Reproductive Health **249**
Umoja Uaso: A Women's Village in Kenya **264**
Son Preference: New Reproductive Technologies and Family-Building Strategies in India **271**
Diabetes among Mexican Americans **305**
Rebuilding Japan after World War II **316**
Anthropology in the Courtroom **322**
Anthropology and the U.S. Supreme Court **343**
Anthropology and Medicine **347**
Anthropologist-Turned-Detective Finds Stolen African Statues **384**
A Cultural Anthropologist Revitalizes the Small Town of Star, North Carolina **402**
Want to Work in an International Economic Development Program? **410**

CONTEMPORARY ISSUES

Water, Culture, and Power: When Is It Too Late to Act? **88**
Becoming a Teacher of English to Nonnative English Speakers **129**
Preserving Andean Fiber Textiles through Biodiversity **181**
Does the Gender of the Anthropologist Influence His or Her Findings? **241**
"Education Is the Way out of Poverty!" Easier Said than Done? **295**
Should Anthropologists Work for the Military? **334**
When Religious Values Conflict with Individual Values: A Cross-Cultural Example **362**
Call It Art, Not Native Art **370**
Where Is the Line between Art and Body Parts? **379**

CROSS-CULTURAL MISCUE

Chapter 1 **15**
Chapter 2 **31, 33**
Chapter 3 **55, 65**
Chapter 4 **82**
Chapter 5 **98, 111**
Chapter 6 **122, 136, 139**
Chapter 7 **163, 168**
Chapter 8 **185**
Chapter 9 **209, 229**
Chapter 10 **238, 247**
Chapter 11 **262, 279**
Chapter 12 **294, 302**
Chapter 13 **326, 332**
Chapter 14 **345, 353**
Chapter 15 **372, 382**
Chapter 16 **393, 396**

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Preface

Applied cultural anthropology has become increasingly multifaceted, making it necessary to introduce material from new collaborators with diverse, yet complementary, backgrounds, experiences, and research interests. Both authors share a strong applied focus in their work as well as a similar, compatible vision of the importance of an applied perspective within the discipline and, particularly, the need for an applied focus in introductory-level anthropology courses.

The authors have complementary approaches to the field of applied anthropology. Gary Ferraro has concentrated for the past several decades on the applied areas of the anthropology of business, education, and organizational structures. Susan Andreatta has focused her professional attention on environmental and medical anthropology. Ferraro and Andreatta have co-conducted workshops at the annual meetings of the Society for Applied Anthropology and the American Anthropological Association to assist faculty who want to incorporate more of an applied perspective in their classes.

From the beginning, this text has had two major purposes. First, the book is designed to introduce university undergraduates to the field of cultural anthropology by drawing on the rich ethnographic examples found within the discipline. With its comparative approach to the study of cultural diversity, the text provides a comprehensive overview of the discipline. Second, the text goes beyond the basic outline of introductory materials by examining how the theory, insights, and methods of cultural anthropology have been applied to those contemporary situations that students, both majors and non-majors, are likely to encounter in their professional and personal lives.

The popularity of applied anthropology has grown steadily in past decades, largely as a result of the discipline's recognition of the need to become more relevant to our everyday lives. In the age of globalization few would deny the need for our students to become culturally competent, irrespective of what occupation(s) they might pursue. Enabling today's undergraduates to cope more effectively with cultural diversity is hardly an empty catchphrase. Because cultural anthropology, even in its traditional (nonapplied) form, has always been the academic discipline best positioned to educate for cultural competency, it only makes sense to make our introductory courses as relevant and applied as possible.

The theme of applied anthropology runs throughout this text. While providing a comprehensive introduction to the field, *Cultural Anthropology: An Applied Perspective*, eleventh edition, goes beyond the presentation of academic anthropology and thoroughly integrates the application of anthropological theory, methods, and examples to contemporary situations that students are likely to encounter in the world around them. The applied perspective is further highlighted by the chapter opening cases and the features called *Applied Perspectives* and *Cross-Cultural Miscues*. In addition, *Contemporary Issues* boxes draw attention to issues in the field and events, as well as help students relate to the anthropological perspective in everyday life. The Applied Perspectives, which appear in boxed format in nearly all of the chapters, demonstrate how cultural anthropology actually has been used to solve specific societal problems in such areas as medicine, the environment, education, government, architecture, business, and economic development. For example, in Chapter 3 students learn about the use of cookstoves in Peru and the local health implications of food preparation, while in Chapter 8 students who question what can I do with a major in anthropology are provided opportunities found in the corporate world. Chapter 16 offers suggestions for those students who have an interest in working in international development.

Over the past decade a number of leading introductory textbooks in the field have, to one degree or another, included some applied case studies in boxed format. We consider this imitation to be the sincerest form of flattery. Nevertheless, the Applied Perspective case studies in this text differ in some important respects. For example, each case study is selected to illustrate how certain understandings from each chapter have been applied to the solution of significant societal problems; there are more in-depth applied case studies woven into each chapter of this text than in the others. Each of the Applied Perspective case studies is followed by *Questions for Discussion*, which is designed to encourage students to think critically about the broader implications of the applied case.

The second type of applied feature of this textbook is Cross-Cultural Miscues. These short scenarios, which also appear in all sixteen chapters, illustrate the negative consequences of failing to understand cultural differences. To illustrate, one new miscue box from

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Chapter 5 shows how a nutritionist who worked on a food demonstration project in Ghana did not fully understand food sharing in the culture. Her behavior caused villagers to believe the food was cursed. Having a grasp of culture and food sharing can be particularly important in many cross-cultural settings. Another new miscue is found in Chapter 9, where a Peace Corp volunteer misunderstood the culturally appropriate way to give one's condolences in the time of familial death in her village. This cultural misstep nearly cost her a friendship with her next-door neighbor.

A third applied feature of this eleventh edition is short, chapter-opening case studies designed to catch the attention of students and remind them that the study of cultural anthropology really is relevant to our lives. These introductory case studies (like the Applied Perspectives and the Cross-Cultural Miscues) are designated with the "SWAP" feature icon. This acronym stands for "share with a parent" (or a friend) and directly illustrates to students the importance and necessity for understanding culture—what it is and how it changes—as an individual living in today's world. Students should use these SWAP features to counter the inevitable questions from their parents and friends: "You're taking what? What possible benefit can you get from studying cultural anthropology? How will anthropology get you a job?" Accompanying the Applied Perspectives, the Cross-Cultural Miscues, and the chapter-opening case studies, the SWAP icon appears throughout the text. Thus, there are numerous examples to demonstrate why tuition money is not being wasted when undergraduates take courses in, or even major in (heaven forbid!), cultural anthropology.

Please note that Chapters 1 and 16 start with letters (rather than opening scenarios) written to the students by us. The opening letter to students in Chapter 1 tells students essentially what we are telling you in this preface—namely, the nature of the book's applied perspective, what it is designed to accomplish, and how to get the most from the book. Because most professors do not require their students to read the preface, we decided to put this information in the beginning of the first chapter so that they would understand from day one what we are trying to do with the applied focus. And, we open Chapter 16 with a closing letter to the students designed to introduce them to the capstone chapter, remind them of the importance of the applied features of the text, and show them how anthropological understandings and sensitivities are absolutely essential for the resolution of those really big human challenges of the twenty-first century facing all people—namely, climate change, overurbanization in developing countries, environmental degradation, the spread of world health pandemics, the rise of militant religious fundamentalism, and the widening gap between the rich and the poor throughout the world.

There are also Contemporary Issue boxes in the book, dealing with such topics as "Water, Culture, and Power: When Is It Too Late to Act?" (Chapter 4), becoming a teacher of English as a second or other language (Chapter 6), and the conflict between secular values in the United States and religious values in the Islamic World (Chapter 14).

In addition to the smooth integration of applied illustrations into the overall text, an applied perspective (using both positive and negative case studies) is tied to a wide range of professional areas, including, but not limited to, the following:

- International business people
- International development workers
- Market researchers
- Medical caregivers
- Postwar nation builders
- Product designers
- Public health officials
- Public school educators
- Social workers
- University professors

Because our case studies are tied to a variety of occupational areas, students will be more likely to relate the concepts, findings, methods, and theories of cultural anthropology to their own future work lives in the twenty-first century. Tying anthropological insights to specific jobs is particularly important in the increasingly tight job market in the twenty-first century. And, in fact, hiring criteria in most free market economies have changed. By and large employers no longer hire on the basis of what a job candidate knows or whether one's degree is from a first-rate institution. Instead, they want to know: Can you add value to the organization? Do you have the skills and competencies needed to be creative and to solve future problems that do not even exist yet? Although it is true that many of the skills needed by today's employers are not being taught explicitly at institutions of higher learning, many are being taught.

So, if young people are to be successful in the school-to-work transition, they need to learn as much as possible about our rapidly changing workplace along with their chosen fields of study. Applying anthropology in the workplace, such as using their acquired cultural sensitivity to multiethnic differences, immigration, and globalization, is needed in today's workforce. Yet, some students may be interested in getting involved in nongovernmental organizations and working on applied projects that facilitate making a difference in local communities here and abroad; this text provides numerous examples inspiring such thinking and action. Students must "know themselves" well enough to identify what future professions or jobs would be most satisfying to them.

Given the present-day realities of transitioning from school to work, we feel that the applied focus of this textbook is particularly germane for today's students. Each of our applied case studies deals with using anthropological insights for solving problems and

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

challenges faced by people from a variety of professions and occupying a wide range of jobs. All features, including the Applied Perspectives, Cross-Cultural Miscues, Contemporary Issues, and chapter-opening scenarios encourage students to appreciate the types of skills and competencies needed by people who work in jobs that require interacting with culturally different people. In today's global marketplace it is difficult to imagine any job that would not require cross-cultural skills and sensitivities when dealing with customers, clients, patients, or students, either at home or abroad.

Over the past decade an increasing number of cultural anthropologists have agreed with our basic premise: that an introductory text with an applied focus was long overdue. Anthropology instructors at many different types of institutions—public and private, large and small, two-year and four-year—have adopted the first ten editions of this book. As well received as the previous editions have been, however, there is always room for improvement. Responding to many helpful suggestions of reviewers, we have made the following changes in the eleventh edition.

General Changes

As previously discussed, the eleventh edition of *Cultural Anthropology: An Applied Perspective,* speaks more directly to students with more contemporary examples that deal with nonacademic career opportunities and the application of anthropological concepts in the workplace and in one's personal life. The revision further strengthens the themes of economics and environment as well as community and social responsibility that run throughout the text. In addition, global changes include:

1. Full integration of applied anthropology and applying anthropology examples into every chapter;
2. A 10 percent reduction in overall length, with most chapters trimmed;
3. Reframing Chapter 3, Applied Anthropology, to eliminate redundancies with Chapters 4 and 5 on theory and methods, and to refocus the chapter on practical applications, emphasizing the role of anthropology and applying anthropology, including nonacademic careers and ethics; and
4. The updating and improvement of the art program with new photos, tables, graphs, and maps.

Changes by Chapter

Chapter 1: What Is Anthropology?

1. Added a new section explains the difference between *applied* anthropology and *applying* anthropology.
2. A new section has been introduced on how archaeologists are now studying contemporary urban garbage dumps in the United States to determine consumption patterns and to provide data used by urban policy makers.
3. A new example of ethnocentrism has been added.
4. The discussion of cultural relativism has been reorganized to make it more understandable.
5. The section on anthropology's role in enhancing understanding has been streamlined.
6. New data have been added on the percentage of those accepted to college who choose to defer admission to college to take a gap year in some other culture.

Chapter 2: The Concept of Culture

1. The section dealing with the definition of "culture" now includes an additional early twentieth-century definition offered by independent scholar FitzRoy Richard Somerset (1885–1964).
2. The section on cultural universals has been reorganized to make it both more comprehensive and user-friendly.
3. The entire section dealing with altering one's physical appearance for aesthetic reasons has been updated.
4. A new final section has been added dealing with the development of twenty-first-century information technology that will revolutionize how we study the concept of culture, culture change, and the flow of ideas.
5. Sixty-four percent of the photos in Chapter 2 are new images.

Chapter 3: Applied Anthropology

1. A new chapter opening begins this chapter.
2. Ethics is introduced in this chapter.
3. The chapter introduces the Human Terrain System and its conflict with the professional code of ethics.
4. The chapter introduces recommendations from Shirley Fiske on how to obtain government employment with an interest in applied anthropology.
5. Mark Schuller's research in the Haitian camps after the earthquake of 2010 has been updated. Internally displaced people remain in camps without proper sanitation, drinkable water, access to health clinics, and regular employment.
6. Examples of applied anthropology found in the chapter have been modified.

Chapter 4: The Growth of Anthropological Theory

1. Note that not all theoretical perspectives are offered in this chapter because most departments offer a course or two in anthropological theory.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

2. We tightened up some of the theoretical sections, and introduced the terms *political economy* and *political ecology*, which will be further defined and used in Chapter 7.
3. We added material on Praxis, which is appropriate for applied research and applying anthropology to the real world.
4. This chapter maintains the Contemporary Issue box on "Water, Culture and Power: When Is It Too Late to Act?"

Chapter 5: Methods in Cultural and Applied Cultural Anthropology

1. We tightened up the case study from Andreatta's research in Jamaica in the section on fieldwork.
2. The chapter introduces community-based participatory research.
3. The chapter introduces a final section on accountability.
4. We added a new Cross-Cultural Miscue feature.
5. We updated the Applied Perspective box on climate change.
6. We retained an Applied Perspective box on what to do with a degree in anthropology.

Chapter 6: Language and Communication

1. We added a new Cross-Cultural Miscue on the use of Facebook in the office as an appropriate means of group communication.
2. We added a new Applied Perspective on language preservation as a way to draw attention to saving endangered languages using digital technology and software apps from smartphones.
3. The chapter introduces an applied linguistics example with the work of Pam Innes and language preservation examples among the Apache.
4. We added cell phone text-messaging examples to illustrate culture change and new means of communicating.

Chapter 7: Subsistence Patterns

1. We added a discussion of food deserts in the United States.
2. We added examples of changing environments and the impact on subsistence strategies for groups such as the Sami, Inuit, and Ju/'hoansi, as well as fishing communities and small island states.
3. The chapter introduces the concepts of locavores and freegans as alternative means of sourcing food.
4. We added a discussion of using small livestock such as goats to manage grassland regions around airports in the United States.
5. We added a discussion of using pig waste to be used in a biogas digester to generate energy in North Carolina.
6. We added a discussion of resistance to industrial agriculture using small-scale food production with examples from Slow Food, use of farmers markets, community-supported agriculture, the back-to-the land movement, community gardens, Worldwide Opportunities on Organic Farms (WWOOF), and a number of other programs.

Chapter 8: Economics

1. The chapter beings with a new chapter opening.
2. The chapter introduces a new Cross-Cultural Miscue on learning how to change money in a foreign country.
3. It introduces a new Contemporary Issue box on alpacas in the Andes.
4. We added examples from Afghanistan in the section on division of labor that addresses women gaining employment.
5. We updated statistics for international labor and the use of children.
6. The chapter introduces a new Applied Perspective box on anthropologists being hired by corporations such as Adidas, Intel, and IBM.

Chapter 9: Marriage and the Family

1. We tightened up the chapter for clarity and to reduce overall length.
2. The chapter introduces a new Cross-Cultural Miscue on appropriate customs for paying one's respects for the death of a family member.
3. The chapter introduces a new Applied Perspective box on having smaller families in Italy.
4. We updated the example of Sumburu women in Kenya and the development of a village for abused women only, changing the traditional division of labor; here women do men's work as well.
5. We updated statistics of children with HIV and AIDS and the impact AIDS has on the children; we also added examples from orphaned children with AIDS.
6. We added a section on child marriages found globally.
7. We added contemporary examples of polygamy in the United States.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

8. We added an example of how modern-day family structure and living arrangements are changing and how young adults are delaying marriage and having children.

Chapter 10: Kinship and Descent

1. We added a new Applied Perspective on medical anthropologists and their work with the Zika virus epidemic.
2. We added a new discussion of how kinship roles and obligations in Western countries are being "outsourced" on a "fee-for-service" basis.
3. There is a new expanded section on twenty-first-century information technology useful for tracking kinship relations.
4. An expanded discussion has been added on reproductive technologies (e.g., in vitro fertilization, surrogate motherhood), which are making our traditional notions of parenthood more difficult to define.

Chapter 11: Sex and Gender

1. This chapter is updated to include a discussion of gender, gender identity, and gender expression.
2. The more inclusive gender construction includes transgender, cisgender, bi-gender, genderqueer, and a number of other identities, while retaining the dichotomous female and male terms.
3. We added a section on women and gender studies to examine how gender is produced within a society's culture and how it affects individual lives with respect to identity, race, ethnicity, class, sexuality, nationality, and religion.
4. We added a section on gender-based violence, domestic violence, sexual violence, and marital rape.
5. We expanded the section on sexual behaviors and the risks of contracting HIV/AIDs.
6. We added a section on sexual orientation as a continuum of preferences for attraction.
7. We added examples from Iran where homosexuality is illegal, and having sex reassignment operations are permitted.
8. We added examples of studies conducted on gender and age differences found in cell phone etiquette.

Chapter 12: Social Stratification

1. We updated the *Forbes* billionaire list for 2016.
2. By examining the subtitles of William Domhoff's book entitled *Who Rules America?* (editions 3, 6, and 7), we were able to document the relative speed with which wealth has been concentrated in the hands of the wealthiest one percent of Americans between 1998 and 2013.
3. We provided new data on global billionaires in 2016: Fifteen of the top twenty billionaires on the planet are from the United States, with wealth ranging from $79.2 billion to $29.2 billion.
4. New data have been presented showing that the number of single mothers in the United States living on less than $2.00 a day (1.5 million) has doubled between 1996 and 2011.
5. A new section has been added on the erosion of the middle class in United States, particularly since the great recession of 2008.
6. New data have been included on the rise of political power and influence of the capitalist class in the United States in recent decades.
7. New information has been added on the Roma population of central and western Europe.
8. New data have been presented on worldwide stratification. For example, in 2016 the 62 wealthiest people in the world own as much as the bottom half of the global population combined (3.5 billion people).

Chapter 13: Political Organization and Social Control

1. New statistics have been added on what percentage of women were presidents or prime ministers (10.3 percent) or members of parliament/national legislatures (19.5 percent).
2. A new section has been added on documenting and analyzing the decadelong reversal (2005–2015) of the growth of democracies throughout the world.
3. New data from 2015 from the Fund for Peace on the Fragile State Index are presented and analyzed.
4. A new discussion has been included on how the Internet, particularly in the United States, works for the benefit of political parties and interest groups, not for the democratic process itself. Because of the information overload caused by the Internet, political discourse has been louder, more shrill, distorted, overly simplistic, and polarized.
5. A new (historically oriented) Applied Perspective has been added that illustrates how the research of anthropologist Ruth Benedict greatly informed the U.S. occupation of Japan immediately following the Second World War.
6. Two new Cross-Cultural Miscue boxes have been added to this edition. One dealing with an American misunderstanding the relationship between the Peoples' Republic of China on the mainland and the

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Republic of China located on the island of Taiwan; a second one dealing with a Russian hand gesture that was misunderstood when a Russian premier visited the United States.

7. A new Contemporary Issues box has been added dealing with the thorny question of whether or not cultural anthropologists should work with the United States military.

Chapter 14: Belief Systems

1. A new section on the 2016 presidential campaign discusses the paradox of Donald Trump gaining a large segment of Evangelical voters despite the fact the he proudly exemplified more anti-Christian behavior than any presidential nominee in U.S. history.
2. New information has been added on the rising popularity of the Wiccan movement in the United States.
3. A new section has been added on urban shamanism in New York City.
4. The section on the changing demographics of Christianity has been expanded to include the transformation of Christianity in South America from Catholic to increasingly Protestant.
5. This edition includes a new Applied Perspective box showing how an anthropologist served as an expert witness in a Supreme Court case involving the Amish religion.
6. A new Cross-Cultural Miscue has been added dealing with how an American company in Taiwan dealt with a local religious issue involving its workers in the plant.

Chapter 15: Art

1. A new box has been added entitled "Just Call It Art," which shows what was called "native art" is now working its way into Western museums, competing along with works of artists from more complex societies.
2. The chapter has a new section on how the arts contributes to the economic development of the society in which it is found, as well as enhancing the quality of one's aesthetic life.
3. New examples are introduced to illustrate how governments use art to control people's behavior.
4. A new section has been added on how art, and the making of art, fits into the total culture of which it is a part.
5. Also new to this edition is an expanded discussion of how studio craft/arts in the United States and beyond has changed over the past half century in terms of monetary value, audience, purpose, and narrative.
6. New to this chapter is a discussion on the role of how modern communication technology is changing the face of arts education.

Chapter 16: Global Challenges and the Role of Applied Anthropology

1. The chapter also contains a new Applied Perspective box on a major U.S. company that develops and administers economic development programs in developing countries, and recruits its expatriate program officers with an eye toward cross-cultural experience, sensitivities, and coping skills rather than technical expertise alone.
2. The economic data on former African colonies have been updated.
3. A number of new examples of globalization have been added to this edition.
4. The human rights efforts on behalf of the Ngobe of Panama by Cultural Survival, Inc. have been brought up to date.

Chapter Features

As discussed, this edition contains a number of pedagogical features designed to enhance student learning. These include What We Will Learn introductory questions alerting students to key concepts of the chapter, chapter-opening scenarios that illustrate just how important culture is for understanding the world around us, concise chapter summaries, a list of key terms, a running glossary as well as a cumulative glossary, Applied Perspective boxes, Contemporary Issues boxes, and Cross-Cultural Miscues, all designed to illustrate the relevance of cultural anthropology to our everyday lives. Questions for Discussion also appear at the end of the Applied Perspective boxes and are designed to stimulate critical thinking about the applied cases.

Supplements for Instructors

Online Instructor's Manual with Test Bank for Ferraro/Andreatta's *Cultural Anthropology: An Applied Perspective*, Eleventh Edition An online Instructor's Manual accompanies this book. It contains information to assist instructors in designing the course, including learning objectives, chapter outlines, key terms, critical thinking questions, class activities, Internet exercises, and suggested films. For assessment support, the updated test bank includes true/false, multiple-choice, short-answer, and essay questions for each chapter.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Cengage Learning Testing Powered by Cognero for *Cultural Anthropology: An Applied Perspective*, by Ferraro/Andreatta, Eleventh Edition This assessment tool is a flexible, online system that allows you to author, edit, and manage test bank content from multiple Cengage Learning solutions. You can create multiple test versions in an instant and deliver tests from your LMS, your classroom, or wherever you want.

Online PowerPoints for *Cultural Anthropology: An Applied Perspective*, Eleventh Edition Vibrant Microsoft PowerPoint lecture slides for each chapter assist you with your lecture by providing concept coverage using images, figures, and tables directly from the textbook.

Online Resources for Instructors and Students

Anthropology CourseReader. Anthropology Course Reader allows you to create a fully customized online reader in minutes. Access a rich collection of thousands of primary and secondary sources, readings, and audio and video selections from multiple disciplines. See the Author's Choice for selections of applied anthropology articles edited by Gary Ferraro, editor.

To access these resources and additional course materials and companion resources, please visit www.cengagebrain.com. At the CengageBrain.com home page, search for the ISBN of your title (from the back cover of your book) using the search box at the top of the page. This will take you to the product page where free companion resources can be found.

Supplements for Students

For a complete listing of our case studies and readers go to www.cengage.com/community/fromthefield

***Classic Readings in Cultural Anthropology*, Fourth Edition** (978-1-285-73850-5) Practical and insightful, this concise and accessible reader by Gary Ferraro presents a core selection of historical and contemporary works that have been instrumental in shaping anthropological thought and research over the past decades. Readings are organized around eight topics that closely mirror most introductory textbooks and are selected from scholarly works on the basis of their enduring themes and contributions to the discipline.

***Globalization and Change in Fifteen Cultures: Born in One World, Living in Another*, edited by George Spindler and Janice E. Stockard.** (978-0-534-63648-7) In this volume, fifteen case study authors write about culture change in today's diverse settings around the world. Each original article provides insight into the dynamics and meanings of change, as well as the effects of globalization at the local level.

***Case Studies in Cultural Anthropology*, edited by George Spindler and Janice E. Stockard.** Select from more than sixty classic and contemporary ethnographies representing geographic and topical diversity. Newer case studies focus on culture change and culture continuity, reflecting the globalization of the world and include a legacy edition of Napoleon Chagnon's *Yanomamö*, and a fourth edition of Richard Lee's *The Dobe Ju/'hoansi*. Recent publications include *Shadowed Lives*, by Leo Chavez.

***Case Studies on Contemporary Social Issues*, edited by John A. Young.** Framed around social issues, these new contemporary case studies are globally comparative and represent the cutting-edge work of anthropologists today. Recent publications include *Slaughterhouse Blues* by Donald Stull and Michael Broadway and *Seeking Food Rights: Nation, Inequality and Repression in Uzbekistan* by Nancy Rosenberger.

Acknowledgments

To one degree or another, many people have contributed to this textbook. Some have made explicit suggestions for revisions, many of which have been incorporated into various editions over the past eighteen years. Others have contributed less directly, yet their fingerprints are found throughout the text. We are particularly grateful to the many professors with whom we have studied at Syracuse University (Ferraro) and Michigan State University (Andreatta). We owe a similar debt to the many colleagues over the years who have shared with us their thinking on anthropological research and teaching. Although there are far too many names to fit into a small preface, they have had an important impact on our thinking and our careers as anthropologists and, thus, on the content of this book. They have always responded graciously to our requests for information in their various areas of expertise and have taught us a great deal about teaching introductory anthropology. We are confident that they know who they are and will accept our most sincere gratitude.

Since its first appearance in 1992, this textbook has benefited enormously from excellent editorial guidance and the comments of many reviewers. We want to thank our original editor, Peter Marshall, for his encouragement to write an introductory textbook with an applied focus before it was fashionable. We also want to thank our Senior Content Developer, Lin Marshall Gaylord, for her vision, counsel, and many excellent suggestions. Thanks are also extended to the entire

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Cengage Learning editorial, marketing, and production team; MPS Limited, Production Services; and Cheryl Dubois, Photo Researcher.

As with the previous editions of this book, many reviewers have made valuable and insightful suggestions for strengthening the text. For this eleventh edition we would like to express our gratitude to the many colleagues who wish to remain anonymous.

We also want to thank the many unsolicited reviewers—both professors and students—who have commented on various aspects of the text over the years. We trust that these reviewers will see that many of their helpful suggestions have been incorporated into the eleventh edition. We encourage any readers, professors, or students to send us comments, corrections, and suggestions for future improvements via e-mail at the following addresses:

garyferraro425@gmail.com
s_andrea@uncg.edu

After nearly a half century (cumulative) of full-time university teaching, we want to express our deepest gratitude to our many students who have helped us define and refine our anthropological perspectives and, consequently, the concepts and interpretations in this book.

Gary Ferraro
Susan Andreatta

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

About the Authors

Gary Ferraro, professor emeritus of anthropology at the University of North Carolina–Charlotte, received his BA in history from Hamilton College and his MA and PhD from Syracuse University. He has been a Fulbright Scholar at the University of Swaziland in Southern Africa (1979–1980) and again at Masaryk University in the Czech Republic (2003), and he has served twice (1983, 2003) as a visiting professor of anthropology in the University of Pittsburgh's Semester at Sea Program, a floating university that travels around the world. He has conducted research for extended periods of time in Kenya and Swaziland, and has traveled widely throughout many other parts of the world. He has served as a consultant and trainer for such organizations as USAID, the Peace Corps, the World Bank, IBM, G.E. Plastics, and Georgia Pacific, among others. From 1996 to 2000 he served as the director of the Intercultural Training Institute at UNC–Charlotte, a consortium of cross-cultural trainers and educators from academia, government, and business, designed to help regional organizations cope with cultural differences at home and abroad. He is the author of

The Two Worlds of Kamau (1978),
The Cultural Dimension of International Business (1990, 1994, 1998, 2002, 2006, 2010, and 2013 with co-author, Elizabeth K. Briody), *Cultural Anthropology:*
An Applied Perspective (1994), *Applying Cultural Anthropology: Readings* (1998),
Global Brains: Knowledge and Competencies for the 21st Century (2002), and
Classic Readings in Cultural Anthropology (2004, 2009, 2012, and 2015).

Susan Andreatta, professor of anthropology at the University of North Carolina–Greensboro, received her BA in anthropology and Spanish at the University of Delaware, her MA in anthropology from Iowa State University, and her PhD in anthropology from Michigan State University. Andreatta also did a two-year postdoc in England at the University of Hull. During the past thirty years she has conducted fieldwork in Costa Rica, Jamaica, St. Vincent, Barbados, Antigua, Dominica, Mexico, Uganda, China, Peru, and North Carolina. Her theoretical orientation lies in political economy and political ecology as applied to the environment and health. Since 1985 she has participated in a wide range of applied projects, including those that focused on tourism, migration and resettlement, health and nutrition, agriculture, agroforestry, fishing, and marketing of fresh local produce and seafood. Her interests in small family farms, rural communities, fishing communities, and their transformation or resistance to the expansion of agribusiness and the globalization of agriculture have enabled her to work both overseas and domestically. In addition, she has been examining traditional and Western approaches to health care in changing economic and political systems. Her work has been published in *Human Organization, Culture and Agriculture, Southern Rural Sociology, Urban Anthropology,* and *Home Health Care Management & Practice.* Andreatta is the director of Project Green Leaf at University of North Carolina–Greensboro, a project she started in 2001 that provides undergraduate students with hands-on applied research experiences. She is a past board member and former secretary for the Society for Applied Anthropology (SfAA) as well as a past president of the Society for Applied Anthropology (2007–2009).

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

A young girl from Guatemala peers from behind a tree to see what is going on in the world around her, an activity in which students of cultural anthropology also engage.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

CHAPTER

1 What Is Anthropology?

A LETTER TO STUDENTS

Greetings! We would like to welcome you to the eleventh edition of *Cultural Anthropology: An Applied Perspective*.

We are proud of this textbook and the difference we bet it will make in your lives after reading and learning from the text. To be certain, all introductory textbooks in cultural anthropology are designed to introduce readers to the content of cultural anthropology. But this textbook, with its "Applied Perspective," goes beyond the content of the discipline by showing you how the research findings, theories, methods, and insights of cultural anthropology can be useful in your *everyday* personal and professional lives.

The study of cultural anthropology, in other words, is far more than the study of the similarities and differences among the thousands of distinct and discrete cultures of the world and, in today's interconnected world, it is far more relevant. The *applied* orientation of this book illustrates (through distinct examples and scenarios) how understanding the ideas and behavior patterns of culturally different people, both at home and abroad, enables us to better meet our personal and professional objectives. Conversely, when we fail to take our cultural environments seriously, we are likely to commit some serious cultural faux pas.

The book's applied orientation is woven into each chapter through three unique features: chapter opening real-world scenarios, Applied Perspective features, and Cross-Cultural Miscues. First, an introductory mini-case study that is actual, and not hypothetical, begins each chapter and illustrates why it is important to understand the basic concepts in the chapter. The second feature that highlights applied anthropology is the Applied Perspective boxes. These are longer case studies based on actual anthropological research that demonstrate how cultural anthropology has been used to solve specific societal problems in such work-related areas as medicine, government, architecture, education, economic development, and business. Finally, the Cross-Cultural Miscues, which appear in each chapter, illustrate the negative consequences of failing to appreciate cultural differences in one's everyday interactions. All three of these features are highlighted with the SWAP (an acronym for "Share with a Parent" or a friend) icon to direct your attention to key examples in the text that illustrate the importance of applied anthropology.

We are writing to you in Chapter 1 so that you know from the outset that this book has a twofold purpose: (1) It introduces you to the basic field of

WHAT WE WILL LEARN

- How does anthropology differ from other social and behavioral sciences?
- What is the four-field approach to the discipline of anthropology?
- What do anthropologists mean by *holism?*
- What is meant by *cultural relativism*, and why is it important?
- What skills will students develop from the study of anthropology?
- How can anthropology help solve social problems?

Danita Delimont/Gallo Images/Getty Images

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

cultural anthropology, and (2) it demonstrates how cross-cultural awareness is extraordinarily relevant in the highly interconnected world of the twenty-first century. We also want to alert you that there are several important features of each chapter that should be taken seriously because they remind us of the relevance of cultural knowledge to our everyday lives. In fact, you should cite these highly relevant scenarios and examples to your parents and friends who never fail to ask the question: Why are you taking (or worse yet, majoring in) cultural anthropology? Because we all play out our lives in a cultural context—and, to an increasing degree, in a multicultural or cross-cultural context—an understanding of cultural anthropology is extremely important for maximizing our personal and professional success in the twenty-first century, irrespective of what line of work you might pursue.

We trust that you will find reading about living and working in other cultures (for example, see the Cross-Cultural Miscue) or about anthropology and new product research in the developing world interesting and thought provoking as you learn about the real impact culture has on your everyday life. Be sure to pay close attention to the SWAP icons that appear beside all mini-case studies throughout the book. These case studies will help you to answer the questions from parents and friends about what you can possibly learn from cultural anthropology. ■

When most North Americans hear the word *anthropologist*, a number of images come to mind. They picture, for example:

- Jane Goodall devoting years of her life to making systematic observations of chimpanzees in their natural environment in Gombe Stream National Park, Tanzania
- A field anthropologist interviewing an exotic tribesman about his kinship system
- The excavation of a jawbone that will be used to demonstrate the evolutionary link between early und modern humans
- A linguist meticulously recording the words and sounds of a native informant speaking a language that has never been written down
- A cultural anthropologist studying the culture of a fishing communities off the Texas Gulf Coast
- A team of archaeologists using ground-penetrating radar to locate an ancient temple from a rain forest in Guatemala

Each of these impressions—to one degree or another—accurately represents the concerns of scientists who call themselves anthropologists. Anthropologists do, in fact, travel to different parts of the world to study cultures (cultural anthropologists) and languages (anthropological linguists), but they also study culturally distinct groups within their own cultures. Anthropologists also unearth fossil remains (biological anthropologists) and various artifacts (archaeologists) of individuals who lived thousands and, in some cases, millions of years ago. Even though anthropologists in these subspecialties engage in substantially different types of activities and generate different types of data, they are all directed toward a single purpose: the scientific study of humans, both biologically and culturally, in whatever form, time period, or region of the world they might be found.

Anthropology—derived from the Greek words *anthropos* for "human" and *logos* for "study"—is, if we take it literally, the study of humans. In one sense this is an accurate description to the extent that anthropology raises a wide variety of questions about the human condition. And yet this literal definition is not particularly illuminating because a number of other academic disciplines—including sociology, biology, psychology, political science, economics, and history—also study human beings. What is it that distinguishes anthropology from all of these other disciplines?

Anthropology is the study of people—their origins, their development, and contemporary variations wherever and whenever they have been found. Of all the disciplines that study humans, anthropology is

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

by far the broadest in scope. The subject matter of anthropology includes fossilized skeletal remains of early humans, artifacts, and other material remains from prehistoric and historic archaeological sites, and all of the contemporary and historical cultures of the world. The task that anthropology has set for itself is an enormous one. Anthropologists strive for an understanding of the biological and cultural origins and evolutionary development of the species. They are concerned with all humans, both past and present, as well as their behavior patterns, thought systems, and material possessions. In short, anthropology aims to describe, in the broadest sense, what it means to be human (Peacock 1986).

In their search to understand the human condition, anthropologists—drawing on a wide variety of data and methods—have created a diverse field of study. Many specialists in the field of anthropology often engage in research that is directly relevant to other fields. It has been suggested (Wolf 1964) that anthropology spans the gap between the humanities, the social sciences, and the natural sciences. To illustrate, anthropological investigations of native art, folklore, values, and supernatural belief systems are primarily humanistic in nature; studies of social stratification, comparative political systems, and means of distribution are common themes in sociology, political science, and economics, respectively; and studies of comparative anatomy and radiocarbon dating are central to the natural sciences of biology and chemistry.

The global scope of anthropological studies has actually increased over the past century. In the early 1900s, anthropologists concentrated on the non-Western, preliterate, and technologically simple societies of the world and were content to leave the study of industrial societies to other disciplines such as sociology and economics. In recent decades, however, anthropologists have devoted increasing attention to cultural and subcultural groups in industrialized areas while continuing their studies of ethnic peoples of the world at home as well as abroad. It is not uncommon today for anthropologists to apply their field methods to the study of the Amish of Pennsylvania, migrant workers in North Carolina, or fishermen in the coastal United States. Only when the whole range of human cultural variation is examined will anthropologists be in a position to test the accuracy of theories about human behavior.

Traditionally, the discipline of anthropology is divided into four distinct branches or subfields: *biological anthropology*, which deals with humans as biological organisms; *archaeology*, which attempts to reconstruct the cultures of the past, most of which have left no written records; *anthropological linguistics*, which focuses on the study of language in historical, structural, and social contexts; and *cultural anthropology*, which examines similarities and differences among contemporary cultures of the world (see Table 1.1). All four subfields of the discipline of anthropology engage in both (1) theoretical research (describing and comparing cultural features among and between cultures) and (2) more practical forms of research designed to solve specific societal problems. This more problem-oriented endeavor is itself comprised of two broad streams: first, "applied anthropology" involves conducting applied research projects designed to facilitate change or generate policy recommendations for addressing societal problems; and the second, which is known in the field as "applying anthropology," involves using already existing anthropological data, methods, theories, and insights to inform government programs and nongovernment organizations (NGOs) that promote, manage, and assess social programs and social policies.

Although cultural anthropology is the central focus of this textbook, a brief discussion of all four branches will provide an adequate description of the discipline as a whole.

TABLE 1.1

Branches of Anthropology

Biological Anthropology	Archaeology	Anthropological Linguistics	Cultural Anthropology
Paleoanthropology	Historical archaeology	Historical linguistics	Development anthropology
Primatology	Prehistoric archaeology	Descriptive linguistics	Psychological anthropology
Human variation	Contract archaeology	Ethnolinguistics	Ecological anthropology
Forensic anthropology	Applied archaeology	Sociolinguistics	Medical anthropology
Applied biological anthropology	Cultural resource management	Applied linguistics	Urban anthropology
			Political anthropology
			Applied anthropology

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Biological Anthropology

The study of humans from a biological perspective is called **biological anthropology**. Essentially, biological anthropologists are concerned with three broad areas of investigation. First, they are interested in reconstructing the evolutionary record of the human species; that is, they ask questions about the emergence of humans and how humans have evolved up to the present time. This area of biological anthropology is known as **paleoanthropology**. The second area of concern to biological anthropologists, known as **primatology**, focuses on our nearest living relatives, namely apes, monkeys, and prosimians. And the third area, known as human variation, studies how and why the physical traits of contemporary human populations vary throughout the world. Unlike comparative biologists, biological anthropologists study how culture and environment have influenced these two areas of biological evolution and contemporary variations.

Evolutionary Record of Humans

In their attempts to reconstruct human evolution, paleoanthropologists have drawn heavily on fossil remains (hardened organic matter such as bones and teeth) of humans, protohumans, and other primates. Once these fossil remains have been unearthed, the difficult job of comparison, analysis, and interpretation begins. To which species do the remains belong? Are the remains human or those of our prehuman ancestors? If not human, what do the remains tell us about our own species? When did these primates live? How did they adapt to their environment? To answer these questions, paleoanthropologists use the techniques of comparative anatomy. They compare such physical features as cranial capacity, teeth, hands, position of the pelvis, and shape of the head of the fossil remains with those of humans or other nonhuman primates. In addition to comparing physical features, paleoanthropologists look for signs of culture (such as tools or tool use) to help determine the humanity of the fossil remains. For example, if fossil remains are found in association with tools, and if it can be determined that those individuals made the tools, then it is likely that the remains will be considered humanlike.

biological anthropology The subfield of anthropology that studies biological evolution of human beings and the contemporary physical variations among peoples of the world.

paleoanthropology The study of human and nonhuman primate evolution through fossil remains.

primatology The study of nonhuman primates in their natural environments for the purpose of gaining insights into the human evolutionary process.

The work of paleoanthropologists is often painstaking and must be conducted with meticulous attention to detail. Even though the quantity of fossilized materials is growing each year, paleoanthropologists have little data to analyze. Much of the evolutionary record remains underground. Of the fossils that have been found, many are partial or fragmentary, and more often than not, they are not found in association with cultural artifacts. Consequently, to fill in the human evolutionary record, biological anthropologists need to draw on the work of a number of other specialists: paleontologists (who specialize in prehistoric plant and animal life), archaeologists (who study prehistoric material culture), and geologists (who provide data on local physical and climatic conditions).

In addition to reconstructing the human evolutionary record, paleoanthropology has led to various applications of biological anthropology. For example, forensic anthropology for years has used traditional methods and theories from biological anthropology to help identify the remains of crime and disaster victims for legal purposes. Forensic anthropologists can determine from skeletal remains the age, sex, and stature of the deceased as well as other traits such as physical abnormalities, traumas (such as broken bones), and nutritional history. In recent years, forensic anthropologists have been called on to testify in murder trials. On a larger scale, some applied forensic anthropologists have headed international teams to study the physical remains of victims of mass human rights abuses. For example, in 1984, forensic anthropologist Clyde Snow helped identify some of the 9,000 people murdered by the government of Argentina between 1976 and 1983. Snow's forensic research and subsequent testimony in an Argentinean court were crucial in convicting some of the perpetrators of these mass murders. Similarly, forensic anthropologists have been working in Bosnia and Kosovo to identify the victims of Slobodan Milosevic's programs of ethnic cleansing during the 1990s. More recently, the life and work of Kathy Reichs, a forensic anthropologist and best-selling crime novelist, have inspired the primetime TV series *Bones* (see Figure 1.1).

Primatology

Since the 1950s, biological anthropologists have developed an area of specialization of their own that helps shed light on human evolution and adaptation over time and space. This field of study is known as *primatology*—the study of our nearest living relatives (apes, monkeys, and prosimians) in their natural habitats (see Figure 1.2). Primatologists study the anatomy and social behavior of such nonhuman primate species as gorillas, baboons, and chimpanzees in an effort to gain clues about our own evolution as a species.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Christopher Morris/Getty Images

FIGURE 1.1 Dr. Kathy Reichs, a forensic anthropologist, works with police, the courts, medical examiners, and international organizations to help identify victims of crimes, disasters, and genocide. She also served on the forensic recovery team for victims of the World Trade Center disaster of September 11, 2001.

Michel Gunther/Science Source

FIGURE 1.2 Primatologist, Jane Goodall, seen here with a chimpanzee in Gombe Stream National Park in Tanzania. Goodall has spent more than fifty-five years studying and advocating for chimpanzees and for the protection of their habitat.

Because biological anthropologists do not have the luxury of observing the behavior of human ancestors several million years ago, they can learn how early humans could have responded to certain environmental conditions and changes in their developmental past by studying contemporary nonhuman primates (such as baboons and chimps) in similar environments. For example, the simple yet real division of labor among baboon troops can shed light on role specialization and social stratification in early human societies, or the rudimentary tool-making skills found among chimpanzees in Tanzania may help explain early human strategies for adapting to the environment.

Sometimes the study of primatology leads to findings that are both startling and eminently practical. While studying chimps in their natural habitat in Tanzania, primatologist Richard Wrangham noticed that young chimps occasionally ate the leaves of plants that were not part of their normal diet. Because the chimps swallowed the leaves whole, Wrangham concluded that they were not ingesting these leaves primarily for nutritional purposes. Chemical analysis of the leaves by pharmacologist Eloy Rodriguez indicated that the plant contains substantial amounts of the chemical compound thiarubrine A, which has strong antibiotic properties. Wrangham concluded that the chimps were medicating themselves, perhaps to control internal parasites. Seeing the potential for treating human illnesses, Rodriguez and Wrangham applied for a patent. Interestingly, they use part of the proceeds from their new drug to help preserve the chimpanzee habitat in Tanzania. In Wrangham's words, "I like the idea of chimps showing us the medicine and then helping them to pay for their own conservation" (quoted in Howard 1991).

Physical Variations among Primates

Although all humans are members of the same species and therefore are capable of interbreeding, considerable physical variation exists among human populations. Some of these differences are based on visible physical traits, such as the shape of the nose, body stature, and color of the skin. Other variations are based on less visible biochemical factors, such as blood type or susceptibility to diseases.

For the first half of the twentieth century, biological anthropologists attempted to document human physical variations throughout the world by dividing the world's populations into various racial categories. A **race** was defined as a group of people who share a greater statistical frequency of genes and physical traits with one another than they do with people outside the group. Today, however, no anthropologists subscribe to the notion that races are fixed biological entities whose members all share the same physical features. Despite an enormous amount of effort devoted to classifying people into discrete racial categories during much of the twentieth century, most anthropologists do not consider these categories to be particularly useful. Today we know that the amount of genetic variation is much greater within racial groups than between racial groups. Thus, most anthropologists view these early-twentieth-century racial typologies as largely an oversimplification of our present state of genetic knowledge. (For more on race and racism, see Chapter 12.)

race A subgroup of the human population whose members share a greater number of genes and physical traits with one another than they do with members of other subgroups.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

Although contemporary anthropologists continue to be interested in human physical variation, they have turned their attention to examining how human physical variations help people adapt to their environment. Biological anthropologists have found that populations with the greatest amount of melanin in their skin are found in tropical regions, whereas lighter-skinned populations generally reside in more northern latitudes. This suggests that natural selection has favored darker skin in tropical areas because it protects people from dangerous ultraviolet light. In colder climates people tend to have considerable body mass (less body surface), which is a natural protection from the deadly cold. And sickle cells, found widely in the blood of people living in sub-Saharan Africa, protect people against the ravages of malaria. These three examples illustrate how physical variations can help people adapt to their natural environments. In their investigations of how human biological variations influence adaptation, biological anthropologists draw on the work of three allied disciplines: **genetics** (the study of inherited physical traits), **population biology** (the study of the interrelationships between population characteristics and environments), and **epidemiology** (the study of the occurrence, distribution, and control of disease in populations over time).

Archaeology

Experts in the field of **archaeology** study the lifeways of people from the past by excavating and analyzing the material culture they have left behind. The purpose of archaeology is not to fill up museums by collecting exotic relics from prehistoric societies. Rather, it is to understand cultural adaptations of ancient peoples by at least partially reconstructing their cultures. Because archaeologists concentrate on societies of the past, they are limited to working with material culture including, in some cases, written records. From these material remains, however, archaeologists are able to infer many nonmaterial cultural aspects (ideas and behavior patterns) held by people thousands, and in some cases millions, of years ago.

Archaeologists work with three types of material remains: artifacts, features, and ecofacts. **Artifacts** are objects that have been made or modified by humans and that can be removed from the site and taken to the laboratory for further analysis. Tools, arrowheads, and fragments of pottery are examples of artifacts. **Features**, like artifacts, are made or modified by people, but they cannot be readily carried away from the dig site. Archaeological features include such things as house foundations, fireplaces, and postholes (see Figure 1.3). **Ecofacts** are objects found in the natural environment (such as bones, seeds, and wood) that were not made or altered by humans but were used by them. Ecofacts provide archaeologists with important data concerning the environment and how people used natural resources.

The data that archaeologists have at their disposal are selective. Not only are archaeologists limited to material remains, but also the overwhelming majority of material possessions that may have been part of a culture do not survive thousands of years under the ground. As a result, archaeologists search for fragments of material evidence (such items as projectile points, hearths, beads, and postholes) that will enable them to

genetics The study of inherited physical traits.

population biology The study of the interrelationships between population characteristics and environments.

epidemiology The study of the occurrence, distribution, and control of disease in populations.

archaeology The subfield of anthropology that focuses on the study of prehistoric and historic cultures through the excavation of material remains.

artifacts A type of material remain (found by archaeologists) that has been made or modified by humans, such as tools and arrowheads.

features Archaeological remains that have been made or modified by people and cannot easily be carried away, such as house foundations, fireplaces, and postholes.

ecofacts Physical remains—found by archaeologists—that were used by humans but not made or reworked by them (for example, seeds and bones).

Natursports/Shutterstock.com

FIGURE 1.3 Archaeologists and students excavate at Atapuerca, the site where fossils and stone tools of the earliest known humans in Western Europe have been found.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203

piece together a culture. A prehistoric garbage dump is particularly revealing because archaeologists can learn a great deal about how people lived from what they threw away. These material remains are then used to make inferences about the nonmaterial aspects of the culture (that is, values, ideas, and behaviors) being studied.

Once archaeologists have collected the physical evidence, the difficult work of analysis and interpretation begins. By studying the bits and pieces of material culture left behind (within the context of both environmental data and anatomical remains), archaeologists seek to determine how the people supported themselves, whether they had a notion of an afterlife, how roles were allocated between men and women, whether some people were more powerful than others, whether the people engaged in trade with neighboring peoples, and how lifestyles have changed over time.

Present-day archaeologists work with both historic and prehistoric cultures. Historic archaeologists help to reconstruct the cultures of people who used writing and about whom historical documents have been written. For example, historical archaeologists have contributed significantly to our understanding of colonial American cultures by analyzing material remains that can supplement such historical documents as books, letters, graffiti, and government reports.

Prehistoric archaeology, on the other hand, deals with the vast segment of the human record (several million years) that predates the advent of writing about 5,500 years ago. Archaeology remains the one scientific enterprise that systematically focuses on prehistoric cultures. Consequently, it has provided us with a much longer time frame than written history for understanding the record of human development and impact on the environment.

The relevance of studying ancient artifacts often goes beyond helping us better understand our prehistoric past. In some cases, the study of stone tools can lead to improvements in our own modern technology. To illustrate, while experimentally replicating the manufacture of stone tools, archaeologist Don Crabtree found that obsidian from the western part of the United States can be chipped to a sharp edge. When examined under an electron microscope, the cutting edge of obsidian was found to be 200 times sharper than modern surgical scalpels. Some surgeons now use these obsidian scalpels because the healing is faster and the scarring is reduced (Sheets 1993).

Another area of applied archaeology is called **cultural resource management**. During the 1960s and 1970s, a number of preservation and environmental protection laws were passed to identify and protect cultural and historic resources (for example, landmarks, historic buildings, and archaeological sites) from being bulldozed. The laws require environmental impact studies to be conducted before the start of federally funded projects such as dams, highways, airports, or office buildings. If the building project would destroy the cultural resource, then the law requires that archaeological research be conducted to preserve the information from the site. In response to these laws, archaeologists developed the specialty of cultural resource management (also known as *public archaeology* or *contract archaeology*).

The goal of this work of applied archaeology is to ensure that the laws are properly followed, that high-quality research is conducted, and that the data from archaeological sites are not destroyed by federally funded building projects. Cultural resource management has grown so rapidly in recent years that by the turn of the millennium about half of all professionally trained archaeologists were working in this field.

Although, typically, archaeology focuses on prehistorical and historical peoples, some archaeologists are using their techniques to study contemporary societies. For example, archaeologist William Rathje of the University of Arizona, one of the world's best known "garbologists," seeks to better understand prehistoric, historic, and *contemporary* peoples by studying what they throw away (see Figure 1.4). For example, in his study of garbage in Tucson, Arizona, Rathje

Jim Sugar/Getty Images

FIGURE 1.4 **Archaeologist William Rathje, shoveling debris in a landfill in San Francisco, seeks to understand cultures (both prehistoric and contemporary) by studying their waste.**

cultural resource management A form of applied archaeology that involves identifying, evaluating, and sometimes excavating sites before roads, dams, and buildings are constructed.

Copyright 2018 Cengage Learning. All Rights Reserved. May not be copied, scanned, or duplicated, in whole or in part. WCN 02-200-203