# APPLYING ANTHROPOLOGY

An Introductory Reader

SECOND EDITION



AARON PODOLEFSKY • PETER J. BROWN

# APPLYING ANTHROPOLOGY An Introductory Reader

Second Edition

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## APPLYING ANTHROPOLOGY

To our parents: Bobbie and Irv Tamres Ray and Mable Podolefsky Byron and Marie Brown

## To the Student

An introductory course in any discipline is chock-full of new terminology, concepts, and facts. Sometimes students forget that these new ideas and vocabulary are actually intellectual tools that can be put to work for analyzing and solving problems. In preparing this book, we have selected readings that will show you how anthropological concepts, discoveries, and methods can be applied in today's world.

The study of anthropology can help you view the world in a completely different way. You can come to appreciate the great diversity of human cultures and the interrelatedness of economic, sociopolitical, and religious systems. Anthropology can give you a broad perspective on humanity and help you understand other people's beliefs and customs. In doing so, it can help you become a better citizen in an increasingly global society.

The fascinating side of anthropology seems obvious to most educated people, but there is also a practical side of the discipline, complementary and less well known. We have selected the readings in this book to demonstrate that practical, applied side. Many of the articles are examples of anthropological ideas and research methods in action—being used to understand and solve practical problems. We have included career profiles of anthropologists working outside the college and university setting that show how they are applying anthropology. We believe that the fundamental lessons of anthropology can be applied to many careers and all areas of human endeavor.

Over the years, we have found that students often read assignments without planning, and this actually makes studying less efficient. Before you read a selection, it is important that you first spend a few moments skimming it to get an idea of what it is about, where it is going, and what you should look for. This kind of preliminary reading is a poor idea for mystery novels, but it is essential for academic assignments. Without this preparation, the article may become a hodge-podge of facts and figures; details may be meaning-less, because you have missed the big picture. By planning your reading first, you can see how the details are relevant to the central theme of an article.

To help you with planning your reading, we have included questions at the beginning of each article. By studying the questions in advance, you may gain an idea of what is to come and why the article is important. This will help make the time you spend reading more fruitful. Most of the questions highlight the central themes of the essay or draw your attention to interesting details. Some of the questions, however, do not have straightforward answers—they are food for thought and topics for discussion.

These articles have been selected with you, the student, in mind. We hope they convey to you our excitement about the anthropological adventure, and we expect that you will find them both enjoyable and thought-provoking.

If you are interested in further reading in applied anthropology, there are several excellent books available, such as *Applied Anthropology: A Practical Guide*, by Erve Chambers; *Applied Anthropology: An Introduction*, by John van Willigen; *Anthropological Praxis: Translating Knowledge into Action*, by Robert M. Wulff and

Shirley J. Fiske; and Applied Anthropology in America, by Elizabeth M. Eddy and William L. Partridge. And you might want to look at the journals Human Organization and Practicing Anthropology, both of which are

published by the Society for Applied Anthropology. The National Association of Practicing Anthropologist (NAPA) has also published interesting works on specific fields such as Medical Anthropology.

## To the Instructor

Introductory anthropology has become an established part of the college curriculum, and through this course our profession communicates with a large and diverse audience. Members of that undergraduate audience differ in experience, academic concentration, and career aspirations. For those students considering anthropology as a major, we need to provide (among other things) a vision of the future, of anthropological work to be done in the public domain as well as within the academy. For them, we need to provide some answers to the question, "What can I do with a degree in anthropology?" For students majoring in other areas, such as business, engineering, or psychology, we need to address the question, "How can anthropological insights or research methods help me understand and solve human problems?" If we can provide such a service, we increase the likelihood that students will find creative solutions to the professional problems that await them, and we brighten the future for our anthropology majors by underscoring the usefulness of an anthropological perspective on the practical problems of today's world.

Over the years, we have found that most introductory texts have done little more than include a chapter on applied anthropology at the end of the book. This suggests, at least to students, that most of anthropology has no relevance to their lives. Such treatment by most textbooks also implies that the application of anthropological knowledge is a tangent or afterthought—at best, an additional subject area, such as kinship or politics.

We disagree. We believe that the applications of anthropology cut across and infuse all the discipline's subfields. This reader is a collection of articles that provide examples of both basic and *applied* research in biological anthropology, archaeology, cultural anthropology, and anthropological linguistics.

One of our primary goals is to demonstrate some of the ways our discipline is used outside the academic arena. We want anthropology to be seen as a field that is both interesting and relevant to the real world. Like the public at large, students seem well aware that the subject matter of anthropology is fascinating, but they seem unaware of both the fundamental questions of humanity addressed by anthropologists and the practical applications of the field.

Any student who completes an introductory course in anthropology should learn that anthropological work, in its broadest sense, may include (or at least contribute to) international business, epidemiology, program evaluation, social impact studies, dispute resolution, organizational analysis, market research, and nutrition research, even though their introductory anthropology texts make no mention of these fields. To emphasize how anthropology can be put to work in different settings, we have included several profiles of anthropologists whose careers involve applying anthropology outside the university setting.

We chose the readings in this book to complement the typical course in introductory anthropology. The sequence of articles follows the organization of standard anthropology textbooks, grouped under traditional headings such as sex roles and marriage, rather than headings based on the applied areas such as medical anthropology or the anthropology of development. As in most contemporary textbooks, anthropological linguistics is included under culture and communication. Had we meant this book to be a reader on applied anthropology, our organization would have been different. While this book could be used in courses on applied anthropology (an earlier edition has been), this was not our intended audience. Also, for this reason, we have not provided extensive discussion of the history or definition of applied anthropology. For students interested in this, there are a number of fine books on the subject. These include Applied Anthropology: A Practical Guide, by Erve Chambers; Applied Anthropology: An Introduction, by John van Willigen; Anthropological Praxis: Translating Knowledge into Action, by Robert M. Wulff and Shirley J. Fiske; and Applied Anthropology in America, by Elizabeth M. Eddy and William L. Partridge.

Although people distinguish between basic and applied research, much of anthropology falls into a gray area, having elements of both. Many selections in this reader fall into that gray zone—they are brief ethnographic accounts that contain important implications for understanding and resolving problems. We could have included a large number of articles exemplifying strictly applied research—an evaluation report of agency performance, for example. While this sort of research is fascinating and challenging to do, it is usually not exciting for students to read. We have selected articles that we believe are fascinating for students and convey the dual nature (basic/applied) of social science research.

We want to thank the entire staff at Mayfield Publishing Company and especially our editor, Jan Beatty, for her vision, good humor, and tolerance.

We would especially like to thank the following instructors who returned questionnaires about the selections in the first edition that their students found most valuable and enjoyable.

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We would also like to thank the following people who have been so willing to share their viewpoints and efforts in compiling this volume: Cary Hardwick, Eric Johnson, Hollande Levinson, Nicole Needham, Judy Robertson, Diane Shere, Aleem Walji, and Pat Woelber.

To help busy instructors, we have provided an intructor's manual for this edition that includes for each article a brief summary, key terms, and test questions.

To help students better understand the subject matter, we have included a number of pedagogical aids: introductions and guiding questions for each article; a global map that pinpoints the locations of places and peoples discussed in the articles; and, for easy reference, an extensive glossary and index.

In our experience, introductory students are as eager to learn about the applications of anthropological knowledge as they are fascinated by anthropological insights into human history and cultural diversity. The selections in this book should not only help students understand why anthropology is important in today's world, but also should make the course more memorable and meaningful.

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#### 1 Teaching Theories: The Evolution-Creation Controversy 6

ROBERT ROOT-BERNSTEIN AND DONALD L. McEachron (The American Biology Teacher, October 1982)

Through a comparison of evolution and creationism, this article examines the logic of scientific inquiry and the characteristics of scientific theory. Scientific theories are testable and correctable, which is why they lead to new and useful knowledge.

#### 2 What Are Friends For? 15

BARBARA SMUTS (Natural History, February 1987)

"Friendship" between adult males and females is an important part of the society of olive baboons of Kenya. These mutually beneficial long-term relationships are usually based on female choice and are only indirectly related to sex. Observations of nonhuman primates make anthropologists rethink the origin and nature of human sociality.

#### 3 Lucy 21

Donald Johanson and Maitland A. Edey (from *Lucy: The Beginnings of Humankind*, 1981) Paleoanthropological field research can be incredibly exciting, as in the discovery of Lucy, an *Australopithecus afarensis* fossil of unprecedented completeness and antiquity. Such important fossil discoveries as Lucy raise new questions and force the redrawing of our evolutionary family tree.

#### 4 The Search for Adam and Eve 26

JOHN TIERNEY, LYNDA WRIGHT, AND KAREN SPRINGEN (Newsweek, January 11, 1988)

Using techniques of molecular biology on human mitochondrial DNA, which is inherited exclusively through the female line, researchers speculate about the age and location of a common ancestor—"Eve"—for all modern humans.

#### 5 The Extinction of Homo sapiens 32

BARRY BOGIN (Michigan Quarterly Review, Spring 1985)

The fossil record shows that most species that have evolved are now extinct, primarily because they were unable to adapt to a changing environment. Will modern humans, who are rapidly degrading our environment, be exempt from such a fate?

#### 6 Ancient Genes and Modern Health 40

S. BOYD EATON AND MELVIN KONNER (Anthroquest, Winter 1985)

Many of the serious health problems confronting us today may be the result of an incongruity between our genetic heritage as descendants of hunter-gatherers and our current diet and lifestyle. The study of Paleolithic people may be the key to a healthy life.

#### 7 Racial Odyssey 44

BOYCE RENSBERGER (Science Digest, January/February 1981)

Biological variation among contemporary humans is fascinating and complex. Simple racial taxonomies have no scientific value, but much of the human variation can be explained by the process of natural selection.

#### 8 Profile of an Anthropologist No Bone Unturned 51

PATRICK HUYGHE (Discover, December 1988)

Throughout his career, Clyde Snow has used the skills of the physical anthropologist in studying human body measurements and skeletal anatomy to solve mysteries.

## The Oklahoma City Child Disappearances: Forensic Anthropology in the Identification of Skeletal Remains 57

CLYDE C. SNOW AND JAMES L. LUKE (Journal of Forensic Sciences, April 1970)

The detailed analysis of a child's skeleton found in a shallow grave shows that a process of hypothesis testing is necessary for proper identification of a murder victim.

#### 10 Engineering Anthropology: Past, Present, and Potential 64

H.T.E. HERTZBERG (from The Uses of Anthropology, 1979)

Expertise in human anatomy and human variation makes the contributions of anthropometry (the anthropological study of human body measurements) important for the design of aircraft seats, crash dummies, and clothing.

#### 11 What's New in Archaeology? 78

COLIN RENFREW (UNESCO Courier, July 1985)

Although the goals of archaeology—establishing chronologies and describing earlier lifeways—remain the same, new technologies are being used to analyze archaeological sites and artifacts.

#### 12 Opportunities in Cultural Resources Management 82

ALLEN G. PASTRON (1988)

Since the enactment of national historic preservation legislation in the 1960s and 1970s, many archaeologists have entered the expanding field of Cultural Resources Management (CRM). CRM research, which seeks to evaluate and preserve the nation's cultural heritage, has provided archaeologists with a new set of challenges and opportunities.

#### 13 Fingerprints in the Sand 86

RICHARD MONASTERSKY (Science News, December 1990)

Archaeologists are interested in describing and understanding the prehistoric past and not in artifacts as "things" for a collection. The looting of archaeological sites is a crime. Sophisticated new technologies are being used by both archaeologists and federal prosecutors to arrest and convict archaeological thieves.

#### 14 Disease and Death at Dr. Dickson's Mounds 90

ALAN H. GOODMAN AND GEORGE J. ARMELAGOS (Natural History, September 1985)

The intensification of maize agriculture among prehistoric Native Americans of the Mississippian period combined with their involvement in a trading network led to a drastic decline in their health.

#### 15 The Worst Mistake in the History of the Human Race 95

JARED DIAMOND (Discover, May 1987)

The agricultural revolution has long been considered one of the most important transformations in human history. But was it for the better or worse?

## 16 Profile of an Anthropologist From Tikal to Tucson: Today's Garbage Is Tomorrow's Artifact 99

(Anthropology Newsletter, 1981)

Archaeologist William Rathje shifts his research from ancient Maya to modern America and invents garbology.

#### 17 Food Waste Behavior in an Urban Population 102

GAIL G. HARRISON, WILLIAM L. RATHJE, AND WILSON W. HUGHES (Journal of Nutrition Education, January/March 1975)

Archaeological research methods applied to the study of garbage in American society lead to new insights into consumer behavior and realistic policies for our current waste disposal crisis.

#### 18 Dawn of a New Stone Age in Eye Surgery 108

PAYSON D. SHEETS (1987)

An anthropologist applies his knowledge of the stone tool-making technology of ancient Maya to the manufacture of surgical scalpels; his obsidian blades are more than 200 times sharper than the surgical steel scalpels currently in use.

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#### CULTURE

#### 19 Space Speaks: How Different Cultures Use Space 114

EDWARD T. HALL (from The Silent Language, 1959)

Hidden cultural meanings of the rules of social interaction become evident through an examination of the cultural uses of space. The meaning and definition of personal space vary considerably from one society to another.

#### 20 Swimming in Cross-Cultural Currents 123

CONRAD PHILLIP KOTTAK (Natural History, May 1985)

A comparison of the meaning of "time" and how it affects the organization of competitive swimming in Brazil and the United States reveals important, although subtle, differences between these two cultures.

#### 21 Body Ritual Among the Nacirema 129

HORACE MINER (American Anthropologist, 1956)

The examination and analysis of the rituals of this tribe shed light on the meaning of culture and help us reflect on our own way of life.

#### 22 Just Another Night on Crack Street 133

PHILIPPE BOURGOIS (New York Times Magazine, November 12, 1989)

While some anthropologists travel long distances to find exotic cultures, others stay closer to home. During fieldwork in a New York crack house, the author comes face to face with the culture of terror.

#### **CULTURE AND COMMUNICATION**

#### 23 Shakespeare in the Bush 139

LAURA BOHANNAN (Natural History, August/September 1966)

Laura Bohannan finds great difficulty in communicating the dramatic themes (and basic story line) of *Hamlet* to the Tiv of Nigeria. Assumptions about human motivations, morality, and the nature of reality are embedded in a cultural context and limit the possible understanding of the story. Great art does not necessarily transcend cultural boundaries.

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#### 24 Problems in Pocatello: A Study in Linguistic Misunderstanding 145

BARBARA JOANS (Practicing Anthropology, Volume 6, Numbers 3 & 4, 1984)

An anthropologist is called as an expert witness in a dispute between the Social Security Administration and six Bannock-Shoshoni Native American women. At issue is the ability of bilingual speakers to understand bureaucratic language.

#### 25 Living Abroad: Cross-Cultural Training for Families 149

LILLIAN TRAGER (Practicing Anthropology, Volume 9, Number 3, 1987)

Training programs are extremely important for employees and their families who are going abroad. Anthropologists can make a special contribution.

#### **CULTURE AND AGRICULTURE**

#### 26 Agricultural Development and the Quality of Life 153

PEGGY F. BARLETT AND PETER J. BROWN (Agriculture and Human Values, 1985)

Agricultural development does not necessarily bring about an increase in the "quality of life." Economic change radically alters different societies' perceptions of life circumstances and life satisfaction.

#### 27 The Domestication of Wood in Haiti: A Case Study in Applied Evolution 161

GERALD F. MURRAY (Anthropological Praxis, 1987)

Using his anthropological knowledge of Haitian peasants, Gerald Murray designs and administers an astoundingly successful reforestation project. Wood as a cash crop makes good economic sense to Haitian farmers, and, as a consequence, both production and agricultural earnings increase.

#### **ECONOMY AND BUSINESS**

#### 28 In Search of the Affluent Society 171

ALLEN JOHNSON (Human Nature, September 1978)

A comparison of Machiguenga Indians of Peru and middle-class Parisians raises questions about the meaning of affluence. Who has more leisure time?

#### 29 Eating Christmas in the Kalahari 179

RICHARD BORSHAY LEE (Natural History, December 1969)

When the !Kung San make fun of an ox that the anthropologist wants to give the group for a Christmas feast, Richard Lee learns about the important value of reciprocity in a food-foraging band.

#### 30 Coping with Cultural Polyglots 184

CLAUDIA H. DEUTCH (New York Times, February 24, 1991)

Anthropological field methods are applied to the study of corporations and promote understanding of employees as well as consumers.

## 31 If Only They Would Listen: The Anthropology of Business and the Business of Anthropology 186

S. BRIAN BURKHALTER (Practicing Anthropology, Volume 7, Number 4, 1986)

The methods used to analyze the social and cultural dimensions of economic exchange among exotic tribal cultures are equally effective in the American corporation. Anthropologists have much to offer the business community through their study of "corporate culture."

#### SEX ROLES AND SOCIALIZATION

#### 32 Society and Sex Roles 192

ERNESTINE FRIEDL (Human Nature, April 1978)

Equality between men and women is the product of the social organization of food production and the control of scarce resources. Cross-cultural comparisons of hunter-gatherer groups reveal marked variation in equality between the sexes. Such comparisons contain important lessons for our own society.

#### 33 When Brothers Share a Wife 198

MELVYN C. GOLDSTEIN (Natural History, March 1987)

Fraternal polyandry, a rare form of plural marriage, has both benefits and costs for the people of Tibet. Given the economy and ecology of this area, the practice of polyandry has adaptive functions.

#### 34 The Four-Year Itch 203

HELEN E. FISHER (Natural History, October 1987)

Ethnographic evidence suggests that marriage is a human universal, but it also suggests that divorce and remarriage are common occurrences in all societies. The institution of marriage obviously serves important social and biological functions for reproduction and child care. The frequency of divorce in a four-year-cycle, however, might be best understood from an evolutionary perspective.

#### 35 American Schoolrooms: Learning the Nightmare 209

Jules Henry (Columbia University Forum, Spring 1963)

In addition to reading, writing, and arithmetic, American children learn fundamental cultural values at school. One of the most important lessons is the fear of failure in our competitive society.

#### POLITICS, LAW, AND WARFARE

#### 36 The Kpelle Moot 216

JAMES L. GIBBS, JR. (Africa, Volume 33, Number 1, 1963)

The informal moot, a method of resolving disputes among the Kpelle of Liberia, is significantly different from our court system. It emphasizes the mending of social relations between the disputing parties; the process of the hearing is therapeutic. The moot is a useful alternative model for settling disputes in our own society.

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#### 37 Contemporary Warfare in the New Guinea Highlands 224

AARON PODOLEFSKY (Ethnology, 1984)

Intertribal warfare flares up in the highlands of Papua New Guinea even after decades of relative peace. To understand why, anthropologists focus on changes in the local economic system that have, in turn, changed marriage patterns.

#### 38 Flaming Crosses and Body Snatchers 233

DAVID L. KERTZER (from Ritual, Politics, and Power, 1988)

Kings, revolutionaries, presidents, and even the Ku Klux Klan use symbols and rituals to build their political organization. Political ritual is not trivial fanfare, but a cross-cultural mechanism for getting and maintaining power.

#### SYMBOL, RITUAL, AND CURING

#### 39 Hallucinogenic Plants and Their Use in Traditional Societies 242

WADE DAVIS (Cultural Survival, 1985)

The author, whose writing about psychoactive plants and *zombis* in Haiti has stirred controversy, surveys the use and functions of hallucinogenic plants in other societies. Particularly in traditional South American Indian societies, hallucinogens play a central role in religion and ritual.

#### 40 The Integration of Modern and Traditional Health Sectors in Swaziland 246

EDWARD C. GREEN (Anthropological Praxis, 1987)

A shortage of biomedical health care personnel in developing countries might be eased by incorporating traditional healers into the health care delivery system. The first step in this cooperation is a survey of traditional healers and their activities.

#### 41 Ritual in the Operating Room 252

PEARL KATZ (Ethnology, Volume 20, Number 4, 1981)

Rituals exist in both sacred and secular contexts, and ritual behavior is an integral part of modern surgical procedures.

#### SOCIAL AND CULTURAL CHANGE

#### 42 AIDS as Human Suffering 263

PAUL FARMER AND ARTHUR KLEINMAN (Daedalus, Spring 1989)

In the past decade the AIDS epidemic has spread throughout the world. Social reactions to the threat of this terrible and lethal disease vary between cultures; in this selection, medical anthropologists compare the experience of people dying from AIDS in the United States and Haiti. The suffering caused by AIDS is both biomedical and cultural.

#### 43 Advertising and Global Culture 272

NOREENE JANUS (Cultural Survival, Volume 7, 1983)

The expansion of the world economic system depends on the creation of new consumer demands through advertising. Do developing countries have the right to reject mass advertising for products that their citizens cannot afford?

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#### 44 The Price of Progress 276

JOHN H. BODLEY (from Victims of Progress, 1990)

Economic development, sometimes called "progress," can bring about unintended social and medical consequences, especially for marginalized tribal peoples. New disease burdens, ecological degradation, and increased discrimination are among the hidden costs of economic change for many people.

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