

Preface

WHY WE WROTE THE BOOK

We began working on the first edition of this book over 30 years ago. At that time, all of the other introductory physical anthropology texts reflected the personal research interests of each of the book's authors. We, as teachers, decided to write a book that covered the field of physical anthropology in a balanced and unbiased way. We also decided to write a book for the general education student, but at the same time provide an excellent background in physical anthropology for students who wanted to go into anthropology in the future.

In this Eighth Edition, we have remained true to our initial approach. We have not concentrated on areas of our own interest. Instead, we have written a text that provides a truly balanced approach based on the most recent information available. We also have presented competing views on various topics such as ideas on the evolution of modern hominids. These contrasting presentations serve to show students that physical anthropology is a dynamic field of study, with concepts competing for acceptance.

We also have remained true to our goal of writing a book for students. Our book shows a concern for the student in a number of ways. We have made sure to write in a manner that does not assume previous knowledge. We explain all concepts carefully. We have made an effort to make complex topics as easy to understand as possible. Yet we have not simplified topics to the point of inaccuracy. Throughout the text, we have consistently tried to show the complexity of topics in a systematic and understandable way. Reviewers have unanimously praised the book as being well written and well suited for the intended audience.

FEATURES OF THE BOOK

In this new edition of *Physical Anthropology* we continue to share our love of discovery with students. Every concept is carefully explained and illustrated, guiding students step-by-step through difficult material. We have added learning aids to each chapter (see below) as well as a new supplemental Online Learning Center (see below).

This text maintains its emphasis on three important themes: first, that anthropology is a holistic discipline; second, that human beings are an integral part of nature; and third, because humans depend on learned behavior, our maintenance of a balance with nature can be strengthened by an understanding of our evolutionary past. As always, we use the most current data to unravel the mystery of the evolution of humankind and to examine the dynamic relationship between humans and their environment.

Each chapter of the book guides the student along with a number of study aids that we designed in an effort to make the book easy to use. Every chapter begins with a chapter outline to let the student know in general terms what is to come. Chapters are organized by first-, second-, and third-degree headings to help the student see the relationship of the chapter topics to each other. Rather than having one large summary at the end of the chapter, each section begins with a first-degree heading and ends with a section summary. Each chapter is illustrated with numerous line drawings and photographs. We also have increased the number of charts and tables in this edition and have updated the numerous maps. There are boxes in each chapter on cutting-edge information, controversies within the field, topics of historical interest, and information from fields other than anthropology that relate to the chapter's topics. We have several color inserts with beautiful and informative illustrations. All technical terms are bolded and there is both an in-chapter glossary in the margins of the book and an end-of-text glossary. Each chapter has marginal icons that direct the student to the Online Learning Center. The end of each chapter has study questions, critical thinking questions, annotated suggested readings, and suggested websites.

WHAT IS NEW IN THE EIGHTH EDITION?

We have already mentioned some of the new features of the book. Below is a more comprehensive list of new features. Some of the new features that you will find in all the chapters are a new design featuring a more inviting one-column format and a larger trim size to allow for new features, such as the marginal running glossary. The book is associated with an Online Learning Center and each chapter has marginal icons that tell the student when they should consult the learning center. The Online Learning Center is described in detail in the Supplements section of the Preface. New critical thinking questions can be found at the end of each chapter. These questions ask students to apply information they have learned in the chapter. Many new illustrations have been included in this edition of the book and older illustrations have been redrawn.

A new chapter (Chapter 18), “The Modern World,” has been added to the text. It includes material on the effects of urbanization and industrialization on human population and a section on epidemiology. In the epidemiology section, the evolution, distribution, and causes of disease are discussed. More specific additions and changes in this edition are listed below:

Chapter One—Investigating the Nature of Humankind: There is a new discussion of the controversy over teaching evolution in schools including information on the 1999 Kansas State Board of Education decision on the teaching of evolution and that decision being rescinded in 2001. There is also a new section on a related topic called “Intelligent design.” There is a new box called “The Branches of Anthropology.” It replaces an old illustration on the topic.

Chapter Three—The Modern Study of Human Genetics: This chapter has been updated to include the most recent information on medical genetics, the human genome project, cloning, and genetic engineering.

Chapter Four—Population Genetics: We added two boxes to the chapter, one on population bottlenecking and the other on the founder’s principle.

Chapter Six—People’s Place in Nature: We rewrote the discussion of taxonomy. We also added a new box, “Linnaean Systematics in the Twenty-First Century.” It introduces a new system of classification called the “PhyloCode” and the controversy surrounding its use.

Chapter Seven—The Living Primates: We added a new box, “The Biodiversity of Madagascar,” and a new table on primate characteristics.

Chapter Eight—Comparative Studies: Anatomy and Genetics: We added a new discussion on the comparison of human and other primate genomes.

Chapter Ten—Human Behavior in Perspective: We added a new box, “Chimpanzee Culture.”

Chapter Thirteen—The Early Hominids: This chapter was considerably updated and reorganized. We added information on several new finds that were announced after the seventh edition of the book was published. This includes the highly significant fossils of the species and subspecies *Orrorin tugenensis*, *Ardipithecus ramidus kadabba*, and *Kenyanthropus platyops*. On the basis of these finds and new interpretations, we have added new possible evolutionary trees of the early hominids. We also have rewritten a section on the evolution of erect bipedalism taking into account the new discoveries. We have added a new box, “What Does it Mean to Be Hominid?”

Chapter Fourteen—Early Species of the Genus *Homo*: We have added a new discussion on the relationship between *Homo erectus* and *Homo ergaster*. We have included new information on fossil finds including Spanish and Italian fossils that have been labeled as *Homo antecessor* by some anthropologists. We have rewritten sections on the Neandertals. We have new anatomic analysis of the Neandertals as well as new ideas on their behavior. There is a new box, “Who Are We Having for Dinner? The Roots of Cannibalism.”

SUPPLEMENTS

Chapter Fifteen—The Evolution of *Homo sapiens*: There is a new discussion on the peopling of the New World including the most recent information on Kennewick Man.

Chapter Sixteen—The Biology of Modern *Homo sapiens*: There is a revised discussion of skin color as a human adaptation. There is a new discussion of forensic anthropology.

Chapter Eighteen—The Modern World: *This is a new chapter.* We have reinstated some topics that were in previous editions of the book but had been cut from the seventh edition and added new discussions also. We have added an entirely new section on epidemiology that discusses the role of disease in human evolution. We have added a box called “Human Technology as a Selective Agent.” We have reinstated and updated topics on the effects of urbanization and industrialization on human evolution. We talk about pollution, warfare, resource depletion, and other ecological topics. We have a section on the possible environmental effects of bioterrorism.

For the Student

Student's Online Learning Center—This free Web-based student supplement features the following helpful tools at www.mhhe.com/stein8:

- Chapter objectives, outlines, and overviews.
- PowerPoint lecture notes.
- Self-quizzes (multiple choice and true/false questions with feedback indicating why an answer is correct or incorrect).
- Essay questions.
- Key terms.
- Vocabulary flashcards.
- Interactive exercises.
- Internet exercises.
- Audio glossary.

For the Instructor

Instructor's Manual/Test Bank—This indispensable instructor supplement features chapter outlines, chapter summaries, learning objectives, media and film suggestions, and a complete and extensive test bank with over a thousand test questions.

Instructor's Disk—This computerized disk contains

- An electronic version of the instructor's manual.
- An easy-to-use computerized testing program that is available for both Windows and Macintosh computers.
- A complete set of chapter-by-chapter PowerPoint lecture slides.

Instructor's Online Learning Center—Password-protected access to important instructor support materials and downloadable supplements such as

- The instructor's manual.
- PowerPoint lecture slides.
- Links to professional resources.
- A message board.

PageOut—Designed for the instructor just beginning to explore Web options, this technology supplement allows even novice computer users to create a course website with a template provided by McGraw-Hill.

Videotapes—A wide variety of videotapes from the *Films for the Humanities and Social Sciences* series are available to adopters of the text.

As a full-service publisher of quality educational products, McGraw-Hill does much more than just sell textbooks. The publisher has created and published an extensive array of print, video, and digital supplements for students and instructors. This edition of *Physical Anthropology* includes an exciting supplements package. Orders of new (versus used) textbooks help us to defray the cost of developing such supplements, which is substantial. Please consult your local McGraw-Hill representative for more information on any of the supplements.

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