



Preface

Essentials of Biological Anthropology is an abbreviated version of our longer work, *Biological Anthropology*, which first appeared in 1997. One might imagine an abbreviated version to be rather simple to produce. It wasn't. Many difficult decisions had to be made as to what to leave out, what to modify, and what to enhance. Many favorite passages fell by the wayside. In the end, though, *Essentials* retains the overall structure and organizational flow of the original version—perhaps the single most important ingredient in making that version a good book.

ABOUT THE BOOK

In a field as fast paced as biological anthropology, we welcomed the opportunity to revise and update the original text. New insights into old problems, new fossil finds, new people working in the field—all require comment. Every chapter in *Essentials* has been revised. The outcome of the combined efforts of reviewers, students who had used the original text, and our second look at what we had done is a thoroughly updated condensed text. Yet our efforts are humbled almost daily by new discoveries in the field. For example, researchers recently found that a region of the brain (the planum temporale) thought to control language is larger in the left hemisphere in both chimpanzees and humans, disproving the notion that this area was asymmetrical only in humans. The human planum temporale of the left hemisphere is normally larger than in the right, but 94% of the brains of chimpanzees showed the same asymmetry. These findings affect our continuing studies of the origin of human language and will be discussed in the next edition. Thus goes the field of biological anthropology—exciting, challenging, ever changing.

Above all else, this is a book of ideas. Students will find this text stimulating as well as challenging, factors that characterize the field as a whole. This version is more user-friendly, with important concepts better illustrated, thanks to the artists at Prentice Hall. Explanations of difficult concepts and numerous examples help the student to thoroughly understand the message. In other words, instructors do not have to spend valuable class time explaining the text to students.





The volume provides the “essentials” without so simplifying or condensing them that the excitement of discovery that hallmarks the field is lost. It represents both a useful approach to the teaching of human evolution at the introductory college and university level and a restatement of the coherency and fundamental compatibility of the many subdisciplines that contribute to biological anthropology. Throughout the book is the unifying thread of evolution by natural selection that forms the basic paradigm of the discipline. As scientists we believe that every question should remain open to the possibility of a new answer; however, Charles Darwin’s formulations of evolution and its modifications continue to be the best explanation for our presence and for the world around us. We hope our exposition does justice to his elegant theoretical framework, on which modern biological anthropology is based.

This book is organized along lines of increasing organismal complexity, leading from prebiotic replicating molecules through to modern *Homo sapiens*. Following this organization, the text proceeds generally from very early time to the present, and from broad taxonomic categories that include human beings to progressively more specific categories, ending with *Homo sapiens sapiens*. We have used available paleoecological data to set the stage and provide the context of the morphological and behavioral adaptations characterizing our ancestors at each major time period. We believe that this organization serves to build students’ understanding of the biological, genetic, and anatomical basics of biological anthropology so that the complex questions of hominid phylogeny, human sociocultural behavior, human variability, and modern-day adaptation to our increasingly demanding environment can be approached in more meaningful ways.



SUPPLEMENTS

The supplements package for this text is of exceptional quality. It is intended to give the instructor the resources needed to teach the course and the student the tools needed to successfully complete the course.

Instructor’s Resource Manual: This essential instructor’s tool includes detailed chapter outlines, teaching objectives, discussion questions, classroom activities, and additional resources.

Test Item File: This carefully prepared manual consists of over 1000 questions in multiple-choice, true/false, fill-in, and essay formats. Each question is page referenced to the text.

Prentice Hall Custom Test: This computerized test item file allows you to create your own personalized exams, edit existing questions, import questions, and print multiple versions of the same test. It is available in Windows, DOS, and Macintosh formats.

Study Guide: This carefully written guide helps students better understand the material presented in the text. Each chapter consists of chapter summaries, definitions of key terms and concepts, critical thinking exercises geared to the questions in the text, and self-test questions page referenced to the text.

Boaz Companion Website, at <http://www.prenhall.com/boaz>: This site allows students using the text to fully access the power of the World Wide Web. Students can challenge themselves through this online study guide by working with multiple choice, true/false, and essay questions keyed to each chapter. The online study guide quiz sections provide immediate feedback to the student, with specific page references in the text. The links contained within this site will introduce students to a new world of physical anthropology.

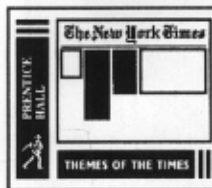
Anthropology on the Internet: 1998–1999: This brief guide introduces students to the origin and innovations behind the Internet and provides clear strategies for navigating the complexity of the Internet and World Wide Web. Exercises within and at the end of the chapters allow students to practice searching for the myriad of resources available to the student of anthropology. This supplementary book is free to students when packaged with this text. Local Prentice Hall representatives can explain shrink-wrap options.

Prentice Hall Color Transparencies: Physical Anthropology, Series I: Full-color illustrations, charts, and other visual materials have been selected to help amplify lecture topics.

Videos: A selection of high quality, award-winning videos that show students the world of anthropology are available from Films for the Humanities and Sciences as well as Filmmaker's Library. Prentice Hall sales representatives can provide more information.

New York Times/Prentice Hall Themes of the Times: Anthropology: The *New York Times* and Prentice Hall are sponsoring *Themes of the Times*, a program designed to enhance student access to current information relevant to the classroom. Through this program, the core subject matter provided in the text is supplemented by a collection of timely articles from one of the world's most distinguished newspapers, the *New York Times*. These articles demonstrate the vital, ongoing connection between what is learned in the classroom and what is happening in the world around us. To enjoy a wealth of information provided by the *New York Times* daily, a reduced subscription rate is available. For information, call toll-free: 1-800-631-1222.

Prentice Hall and the *New York Times* are proud to co-sponsor *Themes of the Times*. We hope it will make the reading of both textbooks and newspapers a more dynamic, involving process.





ACKNOWLEDGMENTS

Many individuals have shaped this book. Sherwood Washburn and Jane Lancaster were instrumental in developing our ideas of a text that brought together fossils and behavior. Joe Birdsell was an important influence in our incorporation of ecology and population perspectives. Jack Cronin deserves credit for contributing the concept of a textbook that fully integrated molecular and fossil approaches. We are indebted to the authors of the text's Frontiers boxes who agreed to share their perspectives and insights: Eugenie C. Scott, Lloyd H. Burckle, Matt Cartmill, Linda D. Wolfe, David R. Begun, Alan Walker, Craig B. Stanford, Kenneth K. Kidd, Judith R. Kidd, and S. Boyd Eaton.

Essentials is a reality because one individual at Prentice Hall made it so. For this reason, we are indebted to Nancy Roberts, Editor in Chief of the Social Sciences. She has always believed in the book and encouraged us onward. Within the scope of Nancy's vision came the other creative people we worked with on a day-to-day basis. The efforts of Sabina Johnson and Barbara Reilly, editors for the first book, remain apparent in this edition. For *Essentials*, the careful and painstaking work of Elaine Silverstein, development editor, and Joan Stone, project manager, can only be described as monumental. All of these people, in addition to Joyce Rosinger, who obtained the necessary permissions, and the artists at Prentice Hall, who created new art often from nothing more than crudely drawn sketches, did a truly magnificent job. We gratefully thank all of you for your efforts.

Readers and reviewers have helped immensely in refining passages and editing muddled text. We particularly wish to thank Marc Feldesman, John Fleagle, Paris Pavlakis, and Sue Parker for their help in preparing the first book; their efforts have been retained in *Essentials*. Reviewers whose comments were invariably helpful to *Essentials* were Mark Fleischman, Syracuse University; Leonard Greenfield, Temple University; Lawrence A. Kuznar, Indiana University-Purdue University Fort Wayne; and Robert Shanafelt, Florida State University.

Our students contributed to the development of the book by their many questions and careful reading. Particular thanks for this round of student reviews go to Beth Bedrin and Nancy Cassquero. The excellent work of Leslie Khayatpoor and Margaret Kring on the study guide and instructor's resource manual, respectively, measures up to the task.

For much of the research in biological anthropology that has been conducted and reported in this volume we wish to thank the L. S. B. Leakey Foundation for their program of grants and awards and Dr. Karla Savage, grants officer for the Foundation, for her untiring efforts in this regard. Toward the support of new research in the field (and, thus, assuring that we will have something to write about in the future), a portion of the royalties from the sale of this book is being donated to the Foundation.

Finally, the forbearance, support, and encouragement of Barbara Almquist and Meleisa McDonell ensured that *Essentials* did not take the decade to complete that the first book did. For that we are all most grateful.