THE PAST IN PERSPECTIVE

An Introduction to Human Prehistory

THIRD EDITION



Kenneth L. Feder

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AN INTRODUCTION TO HUMAN PREHISTORY

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THE PAST IN PERSPECTIVE: AN INTRODUCTION TO HUMAN PREHISTORY, THIRD EDITION

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Preface

"The past is a bucket of ashes," said the poet Carl Sandburg. Surely he was wrong. The past is not cold, dead, and spent. It is alive in everything we are and will be. We live in a universe filled with its traces. The stars in the night sky shine with a light that began its journey millions of years ago. The fossilized remnants of creatures that once walked the earth lie entombed in the soil beneath our feet. Cooking hearths and food scraps, pyramids and pottery, stone tools and bone awls, cave paintings and ivory sculptures—all date to the ancient human past, yet exist in the present. The past is not a bucket of ashes, but rather, as writer L. P. Hartley put it, "the past is a foreign country." In this book, we will visit that country.

The Past in Perspective: An Introduction to Human Prehistory focuses on the dim echoes of the human past, presenting an accessible chronicle of human physical and cultural evolution. The readers of this text are undergraduates with no previous coursework in archaeology; for many it will be their only academic exposure to our prehistoric past. Rather than overwhelm beginning students with an all-inclusive, detailed survey of human antiquity, this text looks at the major themes of the human evolutionary story. It begins with the evolution of our earliest hominid ancestors, traces the evolution of the modern human species, and follows the various pathways our ancestors took in the development of food-producing societies and complex civilizations. My goal throughout is to instill in readers an appreciation for the long chronicle of humanity and the ongoing processes we use to construct and assess that story.

HOW THE TEXT IS ORGANIZED

Chapters 1 and 2 provide context and background for the discussion of human prehistory. Chapter 1 places the study of the human past in the context of science, specifically the science of anthropology. Chapter 1 also explains how a scientific approach to the study of prehistory developed. Chapter 2 is a brief overview of key methodologies employed by archaeologists and paleoanthropologists in their study of the human past. It represents a brief introduction to archaeology.

Following these introductory chapters, Chapters 3–14 go on to present a chronological survey of the human past. Each chapter follows a consistent format with these headings: Chapter Overview, Prelude, Chronicle, Issues and Debates, Case Study Close-Up, Visiting the Past, Summary, and To Learn More. A consistent format provides a pedagogical advantage, and the trajectory of

human physical and cultural evolution becomes far more apparent and connected. What we know, what we don't know, and what are still topics of vigorous debate will be clear to the reader.

The CHAPTER OVERVIEW introduces the primary topic of the chapter in several brief paragraphs.

The PRELUDE represents a conscious attempt on my part to provide a pedagogical "hook" for each chapter. Personal anecdotes or fascinating historical incidents, for example, immediately engage students in the key issue or issues of the chapter, whether it is upright locomotion, the origins of artistic expression, or the power of ancient civilizations.

The CHRONICLE presents in narrative form a consensus view of that part of the human past that is the chapter's focus. It represents the heart of each chapter, providing our current understanding of the time period covered, the hominids discussed, and the cultural evolutionary developments reflected in the time period.

ISSUES AND DEBATES discusses the answers we have been able to provide for key questions about human physical and cultural evolution as well as the unresolved issues that remain and the ongoing debates. These sections provide differing—and sometimes competing—perspectives. Students are thus exposed to the sometimes messy, always exciting, and inevitably human process of science fraught with disagreements, reassessments, shifting paradigms, and only hard-won consensus.

The CASE STUDY CLOSE-UP is a detailed examination of one or more sites considered diagnostic or emblematic of the time period or primary issue of the chapter.

VISITING THE PAST directs readers to key sites mentioned in the chapter that are open to the public, suggests museums where the materials from important sites discussed in the chapter are displayed, and points out CD-ROMs and Internet sites that provide the opportunity for "virtual visits" with detailed discussions, photographs, videos, and animations related to the chapter topic.

Each chapter **SUMMARY** provides a brief recapitulation of the key issues in the chapter.

TO LEARN MORE is divided into four sections: (1) "Technical Summaries," where students can find primary sources, including articles in professional journals and books; (2) "Popular Summaries," including secondary sources like magazine articles and trade books; (3) "On the Web," providing Internet sources related to the chapter topic; and (4) "Online Learning Center," describing the resources available at the Web site that accompanies this book and at the Anthropology SuperSite.











ADDITIONAL FEATURES

In addition to a consistent chapter format, I've included a number of other features that make this text a more useful learning tool.

- A **timeline** opens every chapter and helps place the key events and sites mentioned in the body of the chapter within a global historical context.
- To help students better orient themselves on the world stage, I've included abundant **maps** throughout the book. Each chapter (3–14) presents a map or, in some cases, multiple maps in which each of the sites mentioned in the chapter are located. Chapters 3–14 also include a **list of sites**—broken out by continent, region, or country—that are mentioned in the chapter, along with the page number where they can be found.
- A list of Key Terms at the end of each chapter identifies important terms
 that appear in boldfaced type within the chapters and includes page
 numbers for where they can be found. Definitions can be found in the
 end-of-book glossary.
- The text's visual appeal enhances its readability. Full-color photographs
 are cross-referenced to pertinent text discussions. Detailed, colorful
 charts and drawings, as well as abundant photographs, underscore significant points in the text. Captions add information rather than simply
 label the art.
- The **Glossary**, **References**, and a comprehensive **Index** make information readily accessible.
- An Online Learning Center (OLC), found at http://www.mhhe.com/ feder3/, now accompanies The Past in Perspective. The OLC includes learning objectives for each chapter, interactive timeline study guides to reinforce the information in the text, links to Web sites with more information about the archaeological sites in the text, and self-quizzes to test understanding of the material in each chapter.
- McGraw-Hill's Anthropology SuperSite, at http://www.mhhe.com/ anthrosupersite/, is an additional resource to accompany *The Past in Perspective*. The SuperSite includes breaking news in anthropology, job listings in anthropology, links to professional organizations, anthropology tutorials, and links to other anthropology sites.



WHAT'S DIFFERENT ABOUT THE THIRD EDITION

While maintaining the innovative organizational format from the first edition, I have introduced major content changes in the new edition based on the helpful comments of instructors who used *The Past in Perspective*. Here is a chapter-by-chapter overview of the significant changes:

- Chapters 1 and 2 from the second edition have been combined into a single chapter. The new Chapter 1 provides a more succinct and concise introduction to the science of the past and includes a new introductory hook, a fascinating story of how the past endures into the present, allowing us to study the past times and past lives of our species.
- Chapter 2 includes an expanded discussion of trace element analysis and a greatly expanded discussion of environmental reconstruction.
- A host of new hominid discoveries has resulted in a major rewrite of the sections in **Chapter 3** devoted to the earliest hominids. A new section on chimpanzee culture and their use of stone tools has been added.
- The section in Chapter 4 discussing the earliest hominids found in west Asia and Europe has been significantly rewritten. A discussion of the geographic distribution of hand axes has been added.
- Chapter 5 includes a greatly expanded discussion of the analysis of DNA to help students understand the relationships among fossil species and modern human beings.
- In Chapter 6, a substantial amount of new material has been added on
 the apparent cognitive leaps that accompanied the appearance of the earliest anatomically modern human beings more than 100,000 years ago. I
 address the key issue of an assumed gap in time between the evolution of
 humans whose skeletons look just like ours and the development of
 modern human intelligence.
- The focus on Europe in **Chapter 7** has been expanded to better reflect African and Asian developments.
- Updated material on the first settlement of Australia has been added to **Chapter 8.** New discussions of the first settlement of the New World, adding Topper and Cactus Hill sites, are included. A revamped and updated discussion of DNA haplogroup data as it relates to the source of the first peoples to inhabit the New World has also been included.
- For **Chapter 9** I have thoroughly revised the Case Study Close-Up, resulting in an entirely updated discussion of the site Star Carr.
- Chapter 10 contains new sections discussing how an archaeologist, botanist, or zoologist would recognize the presence of domesticated plants or animals in the archaeological record. New evidence of domestication of goats, maize, African cattle, cattle in Europe, and South American root crops has been added.
- I have provided a completely updated discussion of Çatalhöyük in **Chapter 11.** An all new section on the importance of Caral in our understanding of the evolution of complex societies in South America has been added.
- There is a new section in Chapter 12 on the development of writing.
 Also, there is an extensive rewrite of the section on the Indus Valley civilization.
- Chapter 13 incorporates a new discussion of the role of environmental change, especially drought, in the decline of ancient civilizations.

In Chapter 14, I have added the native cultures of the Northwest Coast
of North America to the discussion of complex, non-state societies.

SUPPLEMENTARY MATERIAL FOR INSTRUCTORS

- Instructor's Manual and Testbank include multiple-choice and shortanswer/essay questions, as well as chapter overviews, lists of key words, and suggested sources for videos, CD-ROMs, and Internet sites.
- PowerPoint slides provide complete, chapter-by-chapter slide presentations featuring text, tables, photographs, maps, and illustrations.
- Instructor's Online Learning Center is password-protected access to additional professional and teaching resources.
- PageOut allows instructors to create a course Web site using a template provided by McGraw-Hill.

ACKNOWLEDGMENTS

Textbooks, perhaps especially those about human biological and cultural evolution, are themselves evolutionary journeys. My invaluable guides on this voyage included colleagues who have made many useful suggestions concerning my route, both formally as reviewers and informally through letters, phone calls, and e-mails. Also assisting in this endeavor have been students, many of whom were generous with criticism, complaints, encouragement, and assistance. In particular, I wish to thank the reviewers of the third edition:

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I also would like to especially thank colleagues who have written to pass along suggestions to improve this edition of *The Past in Perspective* and those who have graciously provided me with copies of their own publications. I particularly appreciate the thoughtfulness and generosity of Miriam Stark, University of Hawai'i; Jeffrey Eighmy, Colorado State University; Denise Schmandt-Besserat, University of Texas, Austin; and Ted Goebel, University of Nevada. I also want to thank the many colleagues who provided photographs or line art for this book; they are credited individually in the figure captions.

I admit to being more than a little concerned when Mayfield Publishing, the publisher of the two previous editions of *The Past in Perspective*, was purchased by The McGraw-Hill Companies. I can happily report that my fears

were unfounded. Many of the terrific people I had worked with at Mayfield continue on in their same capacities at McGraw-Hill. Among those folks, many thanks are due to Robin Mouat, art editor, for her wonderful artwork, and Brian Pecko, photo researcher, for invaluable help with the photo permissions. Also many thanks to my production editor, Holly Paulsen, whose contributions to *The Past in Perspective* have been so significant but so seamless that, paradoxically, I almost forgot to credit her! A thousand thanks as well to Margaret Moore for the always onerous job of copyediting my prose. Among the new people I had to break in for McGraw-Hill, I must thank Kevin Witt, sponsoring editor, and Thom Holmes, senior developmental editor. It looks like these guys are actually going to work out.

In the way of personal thanks, I am grateful for having a colleague like Michael Alan Park. My sense of excitement about the world around me was kindled by my parents, and I thank them both. A special thanks goes to my globetrotting father for his wonderful photographs. Of course, no acknowledgment is complete without crediting one's immediate family. Thanks to my kids, Josh and Jacob, whose mere existence reminds me of my own very small place in evolution's drama. And expansive thanks to my wife, Melissa, the sweetest person on the planet. I can't lift heavy objects or fix cars, but I can write books. I think she's impressed. Finally, I must acknowledge my multiple partners in crime, kitties Randolph and Harpo, who are gone now, but who, in sharing their lives with me, disabused me of any foolish notion I may have had about the superiority of the human species. And thanks to our current generation of beasts, Busterella and Groucho, whose insistence that a scratch behind the ear is a more pressing need than whatever it is I am staring at on the screen is, more often than not, a quite reasonable belief.

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