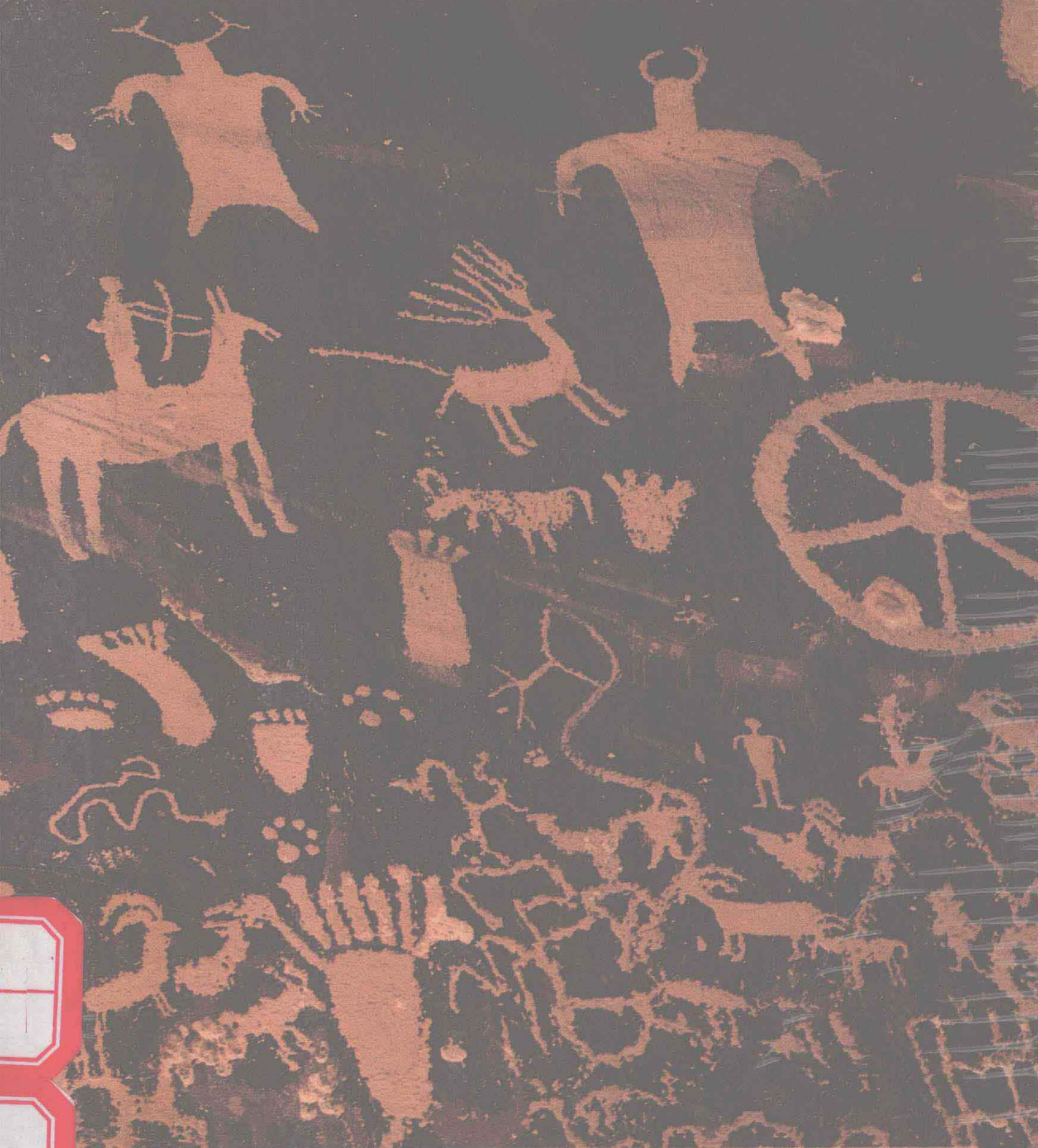


Frauds, Myths, and Mysteries

SCIENCE AND PSEUDOSCIENCE IN ARCHAEOLOGY

Second Edition



Kenneth L. Feder



FRAUDS, MYTHS, AND MYSTERIES

Science and Pseudoscience
in Archaeology

SECOND EDITION

KENNETH L. FEDER

Central Connecticut State University



Mayfield Publishing Company
Mountain View, California
London • Toronto

Copyright © 1996, 1990 by Mayfield Publishing Company
All rights reserved. No portion of this book may be reproduced in any form or by
any means without permission of the publisher.

Library of Congress Cataloging-in-Publication Data

Feder, Kenneth L.

Frauds, myths, and mysteries : science and pseudo-
science in archaeology / Kenneth L. Feder.—2nd ed.

p. cm.

Includes bibliographical references and index.

ISBN 1-55934-523-3

1. Forgery of antiquities. 2. Archaeology. I. Title.

CC140.F43 1995

930.1—dc20

95-39151

CIP

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

Mayfield Publishing Company

1280 Villa Street

Mountain View, CA 94041

Sponsoring editor, Janet M. Beatty; production editor, Melissa Kreischer;
manuscript editor, Melissa Andrews; art director, Jeanne M. Schreiber; text
designer, Jean Mailander; cover designer, Donna Davis; art editor, Jean
Mailander; illustrator, Willa Bower; manufacturing manager, Randy Hurst.
The text was set in 10/12.5 Palatino by Thompson Type and printed on 50#
Butte des Morts by Banta Book Group.

Cover photo: © Tom Till

FRAUDS, MYTHS, AND MYSTERIES



Preface

I have a set of files in a drawer at home, filled to overflowing with newspaper clippings, magazine articles, lecture notes, video and audiotapes, and books. The topics dealt with in these publications, lectures, television shows, and radio broadcasts are many and varied, yet they have something in common: they all present unverified, unproven, untestable, and extraordinary claims about the human past and its study. All of the things in my home archive have one more common element: all appeared *after* 1990—when the first edition of this book was published.

I was never naive enough to believe that with the publication of *Frauds, Myths, and Mysteries* the manufacturing of fantasies about the human past would come to a screeching halt. But neither did I expect that the myth makers would have been so busy concocting and promulgating a rich brew of recycled and brand new fantasies about human antiquity. From more visits to Noah's ark to new interpretations of the dating of the Shroud of Turin; from claims of a connection between Stonehenge and crop circles, to yet more pre-Columbian visitors to the New World; from the archaeology of Mars, to the cottage industry of New Age prehistory, the nonsense has been pumped out faster than anyone could have imagined. As much as simply wishing to update the book, this is why a second edition became a necessity.

As was true with the first edition, the purpose of this text is not primarily to "debunk" a series of unsubstantiated claims about the human past. Instead, the utility of *Frauds, Myths, and Mysteries* rests in its use of interesting and often hilarious archaeological hoaxes, myths, and mysteries to show how we can truly know things about the past through science.

What's New in *Frauds*?

The second edition of *Frauds* represents an extensive reworking of the book. More than one reviewer characterized *Frauds* as a “terrific little book” and I wished to keep it so in the second edition; consequently, I have added no new chapters, but rather updated and added new topics throughout. The illustration list has increased by about 25%, and includes a number of side-by-side comparisons of “pseudo” mysteries with veritable ones. Like the first edition of the book, the second edition is informally written, emphasizing the process of applying a scientific approach to the human past in order to assess popular claims about that past. Here is what's new in each chapter:

Chapter 1: Science and Pseudoscience

- Discussion of a new survey of student acceptance of unverified claims about the human past: Has student opinion on things like ancient astronauts or scientific creationism changed in ten years?
- Expanded discussion of the reasons, motives, and rationales for archaeological frauds or myths, with examples provided

Chapter 2: Epistemology: How You Know What You Know

- Expanded discussion of popular sources of information about anthropology and archaeology, focusing on the tabloids
- Discussion of the challenge posed by those who claim that “objective science” is just a Western myth

Chapter 3: The Goliath of New York: The Cardiff Giant

- Additional context surrounding the Giant's “discovery” and how scientists interpreted it

Chapter 4: Dawson's Dawn Man: The Hoax at Piltdown

- Extensive rewriting of “whodunnit” discussion, with each suspect given his own “Suspect” section. New material concerning the possible involvement of Sir Arthur Keith is presented

Chapter 5: Who Discovered America?

- Additional historical context for the Columbus voyages
- Expanded discussion of the archaeological evidence concerning the earliest settlement of the New World

Chapter 6: After the Indians, Before Columbus?

- Additional context for how archaeologists assess the movement of human groups into a new territory

Chapter 7: The Myth of the Moundbuilders

- Updated and expanded discussion of Cahokia
- Updated and expanded discussion of our current understanding of Moundbuilder culture

Chapter 8: Lost: One Continent—Reward

- Additional archaeological context for the Atlantis legend through a more in-depth discussion of the eruption on Thera and its possible impact on Minoan civilization

Chapter 9: Prehistoric E.T.: The Fantasy of Ancient Astronauts

- More on the archaeological context of Maya civilization
- The new field of “exo-archaeology” with a discussion of the so-called Mars Face

Chapter 10: Good Vibrations: Psychics, Dowsers, and Photo-Fields

- Detailed discussion of the historic context of psychic archaeology

Chapter 11: Old Time Religion—New Age Harmonics

- The New Age use of Native American beliefs—and how Native Americans react to this use

Chapter 12: Real Mysteries of a Veritable Past

- Discussion of the Ice Man and how this “mystery” is providing scholars with an opportunity to view the past in exquisite detail
- Discussion of Chauvet Cave and our understanding of Upper Paleolithic cave painting
- Crop circles and their supposed connection to Stonehenge
- Updated and expanded discussion of the Maya

Acknowledgments

I keep a pile of rejection letters—I lost track at fifteen—from various publishers of anthropology texts, responding to my submission to them of the manuscript that was to become *Frauds, Myths, and Mysteries*. Some were form letters, but some also were kind and considerate replies, praising the writing style and noting that the topics covered in the manuscript, indeed, were quite interesting. But in each case, the bottom line was the same: there could be no market for a book providing a detailed “deconstruction” of pseudoscientific claims about the past. Archaeologists, I was told, would not wish to devote valuable class time to such “side issues” and the reading

public would not be interested in the debunking of cherished notions about lost continents, ancient astronauts, and psychic archaeologists.

All of these publishers were wrong. The eventual publication of *Frauds, Myths, and Mysteries*, the remarkable and gratifying response on the part of the archaeological community, and now the publication of the second edition is a testament to the courage and confidence of Mayfield Publishing Company and, especially, to Jan Beatty of Mayfield who recognized that those of us who teach archaeology would value such a book. To Mayfield and Jan I am forever grateful.

To most authors, I think, books are like children, and it is difficult to hand over the supervision of their development to someone else. When you are lucky, you get people who understand your vision and goals and help you achieve them. Such has long been my experience with Mayfield. In this case, many, many thanks are due my production editor, Melissa Kreischer. She was a wonderful help in the second incarnation of *Frauds*. Also, to Melissa Andrews, my copyeditor, for your light touch in improving my prose, your contribution is greatly appreciated.

To my colleagues who helped by answering my questions, and providing me with photographs and counsel, I express my appreciation. I'm particularly grateful for the insightful comments of the reviewers of this edition: Kathy Cruz-Urbe, Northern Arizona University; Christopher R. DeCorse, Syracuse University; Gayle J. Fritz, Washington University; Heather McKillop, Louisiana State University; and Michael E. Moseley, University of Florida. To the many who wrote me with suggestions, comments, and criticisms concerning the first edition, and to the nearly universal support you provided in your comments, thank you. I am certain that the second edition is a better book as a result of your input. A special note of thanks is due John Cole, L. Sprague de Camp, Madeline Emerson, Charles Hoffman, Wade Kotter, Brad Lepper, Walter McCrone, Marshall McKusick, Joe Nickell, Brendan O Heir, Michael Park, Patricia Rice, Jeremy Sabloff, Dean Snow, Glenn Storey, Wade Tarzia, and Juri Vanderwoode.

My family has been, as always, infinitely patient with me in the production of this book. To Melissa, my wife, and to my sons Josh and Jacob, you have been terrific, and I owe you a debt of time that I fear I can never fully pay back. I promise I will try.

In the first edition of *Frauds*, I apologized to Josh for all the time I spent on the book—so much time that one of his first sentences was “Dada work, book.” Now Josh is nine, and thinks it’s pretty cool that his Dad writes books that he sees in the library. I can be paid no greater compliment. And, remarkably, but truly, as I write this preface, two-year-old Jacob has just walked into the office and, exemplifying the axiom that history repeats itself, asked, “Daddy working?” Yes, Jacob. But now “all done.”

For Lissa



Contents

Preface v

1 Science and Pseudoscience 1

The Morning of the Magicians 6

Pseudoscience and Archaeology 8

Why I Wrote This Book 10

2 Epistemology: How You Know What You Know 13

Knowing Things 13

Collecting Information: Seeing Isn't Necessarily Believing 14

Collecting Information: Relying on Others 16

Science: Playing by the Rules 17

There Is a Real and Knowable Universe 19

The Universe Operates According to

Understandable Laws 20

The Laws Are Immutable 20

The Laws Can Be Understood 22

The Workings of Science 22

The Case of Childbed Fever 24

Science and Nonscience: The Essential Differences 26

The Art of Science 29

Where Do Hypotheses Come From? 29

Testing Hypotheses 31

The Human Enterprise of Science 33

Science and Archaeology 34

3 The Goliath of New York: The Cardiff Giant 35

- The Cardiff Giant 36
 - The Discovery 37
 - The Beginning of the End 41
 - Hull's Confession 42
 - The End of the Giant 44

Why Did They Do It? 45

Current Perspectives: Frauds 47

4 Dawson's Dawn Man: The Hoax at Piltdown 49

- The Evolutionary Context 49
- A Remarkable Discovery in Sussex 53
- The Piltdown Enigma 59
- Unmasking the Hoax 61
- Whodunnit? 62
 - Suspect: Charles Dawson 62
 - Suspect: Arthur Smith Woodward 64
 - Suspect: Pierre Teilhard de Chardin 64
 - Suspect: W. J. Sollas 64
 - Suspect: Sir Arthur Conan Doyle 65
 - Suspect: Lewis Abbott 65
 - Suspect: Sir Grafton Elliot Smith 65
 - Suspect: Sir Arthur Keith 66

The Lesson of Piltdown 66

Current Perspectives: Human Evolution 67

5 Who Discovered America? 71

- The Discovery of a New World 72
- Biblical Exegesis and American Indians 76
- American Indians: From Israelites to Atlanteans 77
 - Joseph de Acosta and Gregoria Garcia 78
- Tracing the Movement of Ancient People 79
 - Tracing People by Their Culture 79
 - Tracing People by Their Biology 81
 - Tracing People by Their Materials 81

Out of Asia 82

An "American Genesis"? 82

- Current Perspectives: The Peopling of the Americas 84
 - Physical Anthropology 84
 - Archaeology 85

6 After the Indians, Before Columbus? 89

- A Trail of Artifacts: Sixteenth-Century Visitors to the New World 90
 - The Spanish *Entrada* into the American Southeast 90
- Archaeology and the Tasaday 91
- St. Brendan and His Ox-Hide Boat 92
- Fusang: The Chinese Discovery of America? 94
- Prince Madoc and Welshmen in the New World 95
- Africans in America? 96
- America B.C.? 101
 - Linguistics 102
 - Inscriptions 102
 - Architecture and Archaeology 104
- The Viking Discovery of America 111
 - Where Was Vinland and Who Were the Skraelings? 113
 - Archaeological Evidence of the Viking Presence 113
- Current Perspectives: The Norse Discovery of America 115
 - L'Anse aux Meadows 116

7 The Myth of the Moundbuilders 119

- The Myth of a Vanished Race 123
- Who Were the Moundbuilders? Identifying the Vanished Race 125
- The Moundbuilder Mystery Solved 129
- Rationale for the Myth of a Vanished Race 135
- Current Perspectives: The Moundbuilders 135

8 Lost: One Continent—Reward 141

- Atlantis: The Source of the Legend 142
 - The Timaeus Dialogue 142
 - The Critias Dialogue 144
 - The Source and Meaning of Timaeus and Critias 145
 - Where Did Plato Get the Story? A Minoan Source 146
- After Plato 150
 - Ignatius Donnelly: The Minnesota Congressman 152
- Atlantis After Donnelly 160
- Current Perspectives: Atlantis 161
 - Ancient Greece 161
 - Archaeological Evidence in the Atlantic: The Bimini Wall 162
 - The Geology of the Atlantic 163

9	Prehistoric E.T.: The Fantasy of Ancient Astronauts	165
	Gods in Fiery Chariots	165
	Hypothesis 1	166
	Hypothesis 2	172
	Hypothesis 3	173
	Ancient Egypt	174
	Von Däniken's Response	179
	More Mysteries of Ancient Egypt?	181
	More Ancestors, More Dummies	182
	Extraterrestrial Platinum?	182
	Extraterrestrial Calendars?	182
	Extraterrestrial Aliens in the Pacific?	184
	Extraterrestrial Megaliths?	186
	The Archaeology of Mars	188
	Current Perspectives: The von Däniken Phenomenon	191
10	Good Vibrations: Psychics, Dowzers, and Photo-Fields	194
	Psychic Archaeology	197
	The Roots of Psychic Archaeology	197
	Psychic Site Location	199
	Psychic Excavation	201
	Psychic Cultural Reconstruction	201
	Psychic Archaeology: The Verdict	205
	Dowsing Instead of Digging	205
	Testing the Dowzers	206
	Electromagnetic Photo-Fields	207
	Current Perspectives: Site Discovery	209
11	Old Time Religion—New Age Harmonics	211
	Scientific Creationism	212
	Noah's Ark	214
	Footprints in Time	220
	The Shroud of Turin	224
	New Age Prehistory	232
	Arizona in the New Age	233
	Current Perspectives: Religions Old and New	235
12	Real Mysteries of a Veritable Past	237
	The Ice Man	237
	The Cave Painters of Europe	239

Stonehenge	242
Circular Reasoning About Stonehenge	243
An Ancient Astronomy	246
The Civilization of the Maya	247
Explaining the Maya	249
Conclusion: A Past We Deserve	251

References 253

Index 275



Science and Pseudoscience

Extrasensory perception. Astrology. Thought-photography. Faith healing. Close encounters with extraterrestrial aliens. Precognitive dreams. Palmistry. Reincarnation. Pyramid power. Ancient astronauts. If all of the claims related to these and other supposed phenomena were true, this world would be an extraordinarily strange place, far different from what orthodox science would suppose.

Cats would be psychic and children could bend spoons with the power of their minds. Aliens from outer space would regularly fly over the earth, kidnap people, and perform medical examinations on them. They also would flatten farmers' wheat crops, leaving monumentally scaled, perplexing, but beautiful designs in their fields.

People could read minds, and by shuffling and dealing a special deck of playing cards (called Tarot), your future could be predicted. Sleeping under a pyramid-shaped bedframe would be conducive to good health, and wearing a quartz crystal suspended on a chain around your neck would make you more energetic.

Furthermore, the precise locations of enormously distant celestial bodies at the instant of your birth would determine your personality as well as your future. People could find water, treasure, and even archaeological sites with forked sticks or bent coat hangers. You could learn to levitate by taking a course. In the strange world we are pondering here, Elvis would still be alive, visiting shopping malls and making regular midnight runs to convenience stores for Slim Jims and Moonpies.

Beyond this, if all of the claims were true, people living today would actually have lived many times in the past and could remember when they

were kings or artists (few would remember being ordinary). And hundreds of boats and planes and thousands of people would have disappeared under mysterious circumstances in the dreaded "Bermuda Triangle."

Also, plants would think and have feelings, dolphins would write poetry, and cockroaches and even fertilized chicken eggs would be clairvoyant. Some people would spontaneously burst into flames for no apparent reason; and tiny ridges on your hands, bumps on your head, and even the shape of your behind could be used to understand your personality. People could have sex with ghosts or the devil.

In this world of infinite possibilities, all your problems could be solved by a stranger at the other end of a 1-900 psychic hot line. Finally, in this most peculiar world, human prehistory could best be understood as the result of supernatural occurrences, enormous cataclysms, and the interference of extraterrestrial space aliens.

It would be a strange world indeed, and the list of extreme, mysterious, and occult claims goes on and on (Figure 1.1). For many of you, some of the claims listed above (all of which have actually been published—even the clairvoyant chicken eggs!) might seem to be interesting to think about. Maybe you watch one of the growing list of television shows (*The X-Files* or *Sightings*, for instance) that blur the distinction between fantasy and fiction. Perhaps you have dialed a 1-900 phone number, looking for psychic insights into your future. Maybe you believe that it's good to have an open mind and that some of the remarkable claims listed above are plausible.

If you find yourself in embarrassed agreement with some of these claims, rest assured, you are not alone. Not long ago, an entertainment/news television show conducted a survey among watchers concerning their opinions on some controversial claims. More than a quarter of those responding believed in the accuracy of dreams in foretelling the future, 12 percent believed in the utility of astrological forecasts, and 22 percent accepted the reality of clairvoyance in predicting the future. In the same sample, 3 percent of those responding also expressed confidence in the accuracy of predictions contained in fortune cookies!

In a more scientific polling of 1,236 adults (Gallup and Newport 1991), it was determined that about 50 percent believed in extrasensory perception, 25 percent believed in astrology, another 25 percent believed in ghosts, and 27 percent believed that extraterrestrial aliens have visited the earth in the past.

One might think that people who watch "infotainment" TV are naive and that the American public is generally gullible. One might also think that bright, highly educated college students, on the other hand, are probably a lot less likely to fall for such claims. I have taken three surveys of college students (Feder 1984, 1987, and 1995b), however, and the results show no significant difference between this group and the general public on the kinds of claims listed (Figure 1.2). For example, 27 percent of my 1984 students



Figure 1.1 Actual headlines as they appeared in issues of various tabloid or “super-market” newspapers.