



# Contents

*Preface* xi

*Quick Start Guide* xvii

## 1 Science and Pseudoscience 1

Belief in the Unbelievable 2

*The Morning of the Magicians* 7

Pseudoscience and Archaeology 9

Why I Wrote This Book 12

Frequently Asked Questions 15

Best of the Web 16

Critical Thinking Exercises 17

## 2 Epistemology: How You Know What You Know 18

Knowing Things 18

*Collecting Information: Seeing Isn't Necessarily Believing* 20

*Collecting Information: Relying on Others* 22

Science: Playing by the Rules 23

*There Is a Real and Knowable Universe* 25

*The Universe Operates According to Understandable Laws* 26

*The Laws Are Immutable* 26

*The Laws Can Be Understood* 27

The Workings of Science 28

The Case of Childbed Fever 29

Science and Nonscience: The Essential Differences	33
<i>A Rule in Assessing Explanations</i>	35
The Art of Science	37
<i>Where Do Hypotheses Come From?</i>	37
<i>Testing Hypotheses</i>	39
<i>The Human Enterprise of Science</i>	40
Science and Archaeology	44
Frequently Asked Questions	44
Best of the Web	45
Critical Thinking Exercises	46

### **3 Anatomy of an Archaeological Hoax 47**

The Cardiff Giant: The Goliath of New York	50
<i>The Discovery</i>	51
<i>The Beginning of the End</i>	56
<i>Hull's Confession</i>	57
<i>The End of the Giant</i>	59
Why Did They Do It?	60
Current Perspectives: Frauds	63
<i>The Rules for a Successful Archaeological Hoax</i>	64
Frequently Asked Questions	67
Best of the Web	67
Critical Thinking Exercise	68

### **4 Dawson's Dawn Man: The Hoax at Piltdown 69**

The Evolutionary Context	70
<i>The Brain-Centered Paradigm</i>	71
A Remarkable Discovery in Sussex	73
The Piltdown Enigma	80
Unmasking the Hoax	82
Whodunnit?	84
<i>Suspect: Charles Dawson</i>	84
<i>Suspect: Arthur Smith Woodward</i>	85
<i>Suspect: Pierre Teilhard de Chardin</i>	85
<i>Suspect: Sir Grafton Elliot Smith</i>	86
<i>Suspect: Sir Arthur Keith</i>	86
<i>Suspect: Martin A. C. Hinton</i>	87
<i>Suspect: Lewis Abbott</i>	87
<i>Suspect: Sir Arthur Conan Doyle</i>	87
The Lesson of Piltdown	88
Current Perspectives: Human Evolution	89

Frequently Asked Questions	94
Best of the Web	95
Critical Thinking Exercise	96

## 5 Who Discovered America? 97

America's First People	97
<i>A New World—To Europeans</i>	98
<i>Biblical Exegesis and American Indians</i>	99
<i>American Indians: From Israelites to Atlanteans</i>	100
<i>Tracing the Source of Native Americans</i>	101
<i>Out of Asia</i>	103
<i>An "American Genesis"?</i>	103
Current Perspectives	105
<i>Tracing People by Their Morphology</i>	105
<i>Tracing People by Their DNA</i>	109
<i>Tracing People by Their Archaeology</i>	112
Frequently Asked Question	117
Best of the Web	118
Critical Thinking Exercise	118

## 6 Who's Next? After the Indians, Before Columbus 119

Artifact Trails: Evidence of Visitors to the New World	119
<i>The New England Model</i>	120
<i>The Archaeology of Columbus</i>	122
<i>The Spanish Entrada into the American Southeast</i>	122
<i>A Chinese Discovery of the New World?</i>	123
<i>Africans in Ancient America?</i>	125
<i>Other Europeans in the New World Before Columbus?</i>	128
America B.C.? 130	
<i>Mystery Hill: A Convergence of Evidence?</i>	131
<i>The Archaeological Verdict</i>	136
<i>Inscriptions</i>	138
<i>Archaeological Context: Digging Pits and Recovering Evidence</i>	140
Current Perspectives: The Norse Discovery of America	142
<i>A Newfound Land</i>	143
<i>Where Was Vinland and Who Were the Skraelings?</i>	145
<i>Norse Discovery of America: The Physical Evidence</i>	145
<i>Other Evidence of the Viking Presence?</i>	149
Frequently Asked Question	152
Best of the Web	153
Critical Thinking Exercise	153

## **7 The Myth of the Moundbuilders 154**

- The Myth of a Vanished Race 158
- Who Were the Moundbuilders? Identifying the Vanished Race 160
  - The Archaeology of the Myth* 161
- The Moundbuilder Mystery Solved 165
- Rationale for the Myth of a Vanished Race 175
- Current Perspectives: The Moundbuilders 175
- Frequently Asked Questions 184
- Best of the Web 185
- Critical Thinking Exercise 186

## **8 Lost: One Continent—Reward 187**

- Atlantis: Where Are You? 188
- Atlantis: The Source of the Legend 190
  - The Timaeus Dialogue* 191
  - The Critias Dialogue* 193
  - The Source and Meaning of Timaeus and Critias* 194
  - Who Invented Atlantis?* 195
  - Where Did Plato Get the Details of the Story? A Minoan Source* 196
- After Plato 203
  - Ignatius Donnelly: The Minnesota Congressman* 204
  - Atlantis After Donnelly* 212
- Current Perspectives: Atlantis 213
  - Ancient Greece* 213
  - Archaeological Evidence in the Atlantic: The Bimini Wall* 214
  - The Geology of the Atlantic* 216
- Frequently Asked Questions 216
- Best of the Web 217
- Critical Thinking Exercise 217

## **9 Prehistoric E.T.: The Fantasy of Ancient Astronauts 218**

- Ancient Astronauts: The Source of the Idea 219
- Gods in Fiery Chariots 220
  - The Inkblot Hypothesis* 221
  - The Amorous Astronaut Hypothesis* 229
  - The “Our Ancestors, the Dummies” Hypothesis* 231
- Extraterrestrial Calendars?* 231
- Extraterrestrial Aliens in the Pacific?* 233
- A Real Mystery* 236

The Archaeology of Mars 237  
Current Perspectives: The von Däniken Phenomenon 241  
Frequently Asked Questions 242  
Best of the Web 243  
Critical Thinking Exercise 244

## **10 Mysterious Egypt 245**

When Did People Get That Smart? 245  
Ancient Egypt 248  
    *Tutankhamun* 259  
Pyramids in Bosnia? 263  
Current Perspectives: How Did They Build the Pyramids? 266  
Frequently Asked Questions 274  
Best of the Web 275  
Critical Thinking Exercise 276

## **11 Good Vibrations: Psychics and Archaeology 277**

Psychic Archaeology 283  
    *Psychic Site Location* 283  
    *Psychic Excavation* 285  
    *Psychic Cultural Reconstruction* 286  
    *Psychic Archaeology: A Test* 286  
    *Psychic Archaeology: The Verdict* 288  
Current Perspectives: Archaeology Without Digging 288  
Frequently Asked Question 290  
Best of the Web 292  
Critical Thinking Exercise 292

## **12 Old-Time Religion, New Age Visions, and Paranormal Predictions 293**

Scientific Creationism and the Claim of Intelligent Design 293  
    *Creationist Strategies in Education* 294  
    *Intelligent Design* 297  
    *Noah's Ark* 299  
    *Footprints in Time* 306  
The Shroud of Turin 309  
    *Testing the Shroud* 312  
New Age Prehistory 317

Crystal Skulls	319
Current Perspectives: Religions Old and New	320
Frequently Asked Questions	321
Best of the Web	322
Critical Thinking Exercise	323

### **13 Real Mysteries of a Veritable Past 324**

The Cave Painters of Europe	325
<i>Explaining the Cave Paintings</i>	327
The Civilization of the Maya	330
<i>Explaining the Maya</i>	331
<i>The Mysterious “Collapse” of the Maya?</i>	334
If You’re Alive and Reading This, Then I Guess the World Didn’t End on December 21, 2012	336
<i>Surviving the Apocalypse</i>	339
<i>About the Maya Calendar</i>	339
Stonehenge	340
<i>Explaining Stonehenge</i>	343
<i>An Ancient Astronomy?</i>	347
<i>Circular Reasoning About Stonehenge</i>	348
<i>Why Was Stonehenge Built?</i>	351
Conclusion: A Past We Deserve	352
Frequently Asked Question	353
Best of the Web	353
Critical Thinking Exercise	354
<i>References</i>	355
<i>Index</i>	375