

A Trade Book Library for Investigating Pseudoscience

An annotated bibliography of literature
for teaching and learning about the natures of science
by investigating the claims of pseudoscience

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This resources is a companion resource to *Pseudoscience for Scientific Inquiry and Natures of Science: a lesson package for elementary science*

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SCIENCE, PSEUDOSCIENCE, AND THE PARANORMAL: ANNOTATED BIBLIOGRAPHY

What is Pseudoscience?

“Pseudo” means “false” and pseudoscience is false science. Pseudoscience is any body of knowledge claiming to be scientific (or at an even higher level than science) but which contradicts both the methods and content of science because it:

- Fails to comply with the usual scientific tests.
- Is inconsistent with existing, well-established scientific knowledge.

A major area of pseudoscience involves what is commonly known as the “paranormal”. “Paranormal” is a term used to describe a wide range of phenomena that are purported to be anomalous according to what is considered possible in terms of current scientific knowledge. Phenomena categorized as paranormal include ESP, astrology, reincarnation, ghosts, crop circles, UFOs, and alien abductions. Such phenomena are also referred to as “supernatural” and “occult”.

Why Investigate Pseudoscience in a Science Classroom?

Many people believe in the unsupported claims of pseudoscience and accept pseudoscientific explanations for natural and human events. Because pseudoscientific explanations are non-scientific and often contradict scientific ideas, the spread of pseudoscience poses a danger to the acceptance and advancement of science.

Investigating pseudoscientific claims scientifically is a way to challenge such claims. More specifically, in the science classroom, scientific inquiry into pseudoscience can:

- Teach students relevant science content. E.g., a lesson on astrology in an astronomy unit can teach students about constellations, while a lesson on firewalking in a heat energy unit can teach students about heat conduction.
- Clarify what science is (and isn't). E.g., reliable scientific knowledge has to be able to withstand repeated empirical testing. Knowledge based solely on personal anecdotes (“I saw Bigfoot”) is not considered reliable until further tested.
- Engage students in and clarify their understanding of scientific inquiry. E.g., scientific inquiry requires gathering evidence, developing explanations, and considering current scientific knowledge.
- Improve students' science-related cognitive skills. A card guessing test of extrasensory perception can engage students in gathering and interpreting data.
- Enhance students' creative and critical thinking skills. E.g., students create an experiment to test whether people have “auras”, and/or students critically read descriptions of experimental tests of paranormal phenomena.
- Engage students in scientific thinking and clarify what it means. E.g., scientific thinking involves skepticism toward unwarranted claims.
- Help students develop an evidential style of belief such that they are able to question and test their own beliefs and the beliefs of others. E.g., after conducting a set of experiments, students are encouraged to consider changing any beliefs contradicted by the evidence.
- Equip students to intelligently evaluate scientific and pseudoscientific claims in the future. E.g., students can analyze accounts of paranormal claims publicized in the news media.

FOR YOUNGER READERS

Aaseng, Nathan (1994). *Science vs Pseudoscience*. London: Franklin Watts. (Age 13 +.)

The author makes clear the importance of distinguishing science from pseudoscience. He discusses ESP, astrology, cold fusion, UFOs, and other controversial topics, which he evaluates against ten criteria for determining what is science. The source notes and bibliography are helpful additions for those who want to further investigate any of the issues.

Barker, Dan (1993). *Maybe Yes, Maybe No*. Amherst NY: Prometheus Books. (Age 7-10).

The author clarifies how and why a skeptic thinks in order to provoke children to question information that they are exposed to. Examples such as ghosts, UFOs, ESP, dowsing, levitation, and astrology are used. The author explains how to check claims using a scientific approach, for example, by repeating a test. The book's title refers to the suggested attitude to take toward such claims, i.e., "Maybe yes, maybe no."

Clayton, John (1998). *Alexander Fox and the Amazing Mind Reader*. Amherst NY: Prometheus Books. (Age 8 +).

Alexander Fox is a Grade 5 student who believes in thinking for himself, especially about extraordinary claims. If confronted with something mysterious, Alexander questions and explores the evidence. When the feats of the great Mystikos amaze the townspeople, however, Alexander starts to wonder, both about Mystikos and about his own scepticism. Alexander's attempts to find out the truth will encourage readers to be open-minded, critical, and to think independently.

Gordon, Henry (1989). *It's Magic!* Amherst NY: Prometheus Books. (Age 9-12).

The author is a professional magician who shows children how to perform seemingly amazing feats with readily available materials such as cards, coins, dollar bills, string, handkerchiefs, numbers, and their minds. Each trick is described using both drawings and step-by-step instructions. The author includes general tips about doing magic, e.g., never repeat a trick for the same audience, practice diligently, and most importantly, never reveal how a trick is done.

Klass, Philip (1996). *Bringing UFOs Down to Earth*. Amherst NY: Prometheus Books. (Age 9-12).

The author, an acknowledged expert on unidentified flying objects, explains how UFO reports are investigated and explained rationally. He exposes the media's role in promoting belief in the "mystery" of UFOs and stresses critical thinking and skepticism as an approach to such unfounded claims. Klass reminds readers that science requires that a theory be supported by evidence. The specific examples and explanations of UFO phenomena are concrete and will appeal to common sense.

Martin, Theresa (2002). *Flat Earth? Round Earth?* Amherst NY: Prometheus Books. (Age 8-12).

How do we know what we know? More specifically, how can we find evidence that our earth is round? The book's main character finds a number of ways to confirm that the earth is round rather than flat, ways that can be duplicated by others. The book will likely encourage readers to think seriously about other "common sense" claims, and to try to come up with ways that such claims can be supported, rather than merely accepting them based on the authority of others.

Nickell, Joe (1989). *The Magic Detectives: Join Them in Solving Strange Mysteries*. Amherst NY: Prometheus Books. (Age 9-14).

Children will enjoy trying to solve the 30 brief mysteries in this book by looking for facts and thinking for themselves. Each story contains useful clues and possible solutions are provided at the end. The book reinforces rational and scientific thinking over unfounded belief. Topics include ghosts, poltergeists, alien visitors, Bigfoot, and the Loch Ness monster. The suggested assignments and list of references for further reading will assist classroom teachers.

Nickell, Joe (1991). *Wonder-Workers! How They Perform the Impossible*. Amherst NY: Prometheus Books (Age 9 –15).

Former magician Joe Nickell, well-known for his investigations into the supernatural, uses science to help reveal the secrets behind apparent wonder-workers and their seemingly impossible feats. Some wonder-workers, such as Harry Houdini and Robert Dunninger, were masters of illusion, while others, such as Peter Hurkos and Edgar Cayce, claimed to have actual psychic powers. Nickell 's book encourage readers to question the unbelievable and to think critically about extraordinary claims.

Ruchlis, Hy (1991). *How Do You Know it's True? Discovering the Difference between Science and Superstition*. Amherst NY: Prometheus Books. (Age 12-15).

The author discusses how science differs from superstition, both as a body of knowledge and as a way of thinking about the world around us. He contrasts the story of Cinderella with how scientists establish reliable knowledge through the use of scientific methods, shows the danger of magical thinking, explores the contradictions of pseudoscientific beliefs such as astrology, and demonstrates how seemingly amazing events can be explained rationally. The book encourages rational and independent thinking.

Swanson, Diane (2001). *Nibbling on Einstein's Brain: The Good the Bad, and the Bogus in Science*. Cambridge MA: Cahners Business Information. (Age 10-14).

The author encourages readers to distinguish between good and bad science by asking questions and thinking clearly. She explains how to evaluate and understand scientific information and how to assess the validity of scientific studies. Other topics include how the media can misrepresent scientific findings and how our mind can mix up the information it assimilates. Readers are advised to be skeptics, to doubt while at the same time keeping an open mind.

Yule, Tim (2000). *Sasquatches from Outer Space: Exploring the Weirdest Mysteries Ever*. Amherst NY: Prometheus Books. (Age 10-15).

How can you judge what is fact and what is fiction? How can you figure out which claims are reliable and which are not? The author suggests that what is needed is some basic critical-thinking skills. To illustrate, he explores some of the many strange mysteries that are so often promoted in the media and shows the reader through simple experiments how to explore the validity of these stories. Readers will enjoy learning how scientists establish reliable knowledge.

For Younger Readers: Quick Reference Table

Author	Date	Title	Publisher	Age Level
Aaseng, Nathan	1994	<i>Science vs Pseudoscience</i>	Franklin Watts	13+
Barker, Dan	1993	<i>Maybe Yes, Maybe No</i>	Prometheus Books	7-10
Clayton, John	1998	<i>Alexander Fox and the Amazing Mind Reader</i>	Prometheus Books	8+
Gordon, Henry	1989	<i>It's Magic!</i>	Prometheus Books	9-12
Klass, Philip	1996	<i>Bringing UFOs Down to Earth.</i>	Prometheus Books	9-12
Martin, Theresa	2002	<i>Flat Earth? Round Earth?</i>	Prometheus Books	8-12
Nickell, Joe	1989	<i>The Magic Detectives</i>	Prometheus Books	9-14
Nickell, Joe	1991	<i>Wonder-Workers!</i>	Prometheus Books	9-15
Ruchlis, Hy	1991	<i>How Do You Know it's True?</i>	Prometheus Books	12-15
Swanson, Diane	2001	<i>Nibbling on Einstein's Brain</i>	Cahners Business Information	10-14
Yule, Tim	2000	<i>Sasquatches from Outer Space</i>	Prometheus Books	10-15

TEACHER RESOURCES

WEBSITES

General Skeptic Sites

- CSICOP: Committee for Skeptical Inquiry
World-wide organization that encourages the critical investigation of paranormal and fringe-science claims from a responsible, scientific point of view.
<http://www.csicop.org/>
- Amazing Randi
Home of super-skeptic and stage magician James Randi.
<http://www.randi.org/>
- Australian Skeptics
<http://www.sceptics.com.au>
- B.C. Skeptics (British Columbia)
<http://www.bcskeptics.info/index.cgi>
- CICAP: Italian Committee for Investigation of Claims of the Paranormal
Italian branch of CSICOP.
<http://www.cicap.org/en/>
- Jim Lippard's links
<http://www.discord.org/skeptical/>
- National Capital Area Skeptics (Washington DC area)
<http://www.ncas.org/>
- Sacramento Organization for Rational Thinking
<http://home.surewest.net/kitray/>
- Science and Pseudoscience
<http://home.scarlet.be/~tsg15649/pseudoscience.htm>
- Skeptics Canada
<http://www.skeptics.ca/>
- The Skeptic's Club (Penn State University)
<http://www.clubs.psu.edu/skeptics/>
- Skeptic's Dictionary
<http://www.skepdic.com>
- Skeptic News
<http://www.skepticnews.com>
- Society for Sensible Explanations (Seattle)
<http://seattleskeptics.org/>
- Tampa Bay Skeptics
<http://www.tampabayskeptics.org/>
- U.K. Skeptics
<http://www.skeptics.org.uk/>

Education

Inquiring Minds

An educational program sponsored by the CSICOP.

<http://www.inquiringminds.org/education/syllabus-cotton-scalise-lecture-notes.html>

University of Syracuse

http://physics.syr.edu/courses/modules/PSEUDO/pseudo_main.html

Pseudoscience as an Aid to Chemical Education

<http://www.mikeepstein.com/path/ref.html>

Science and Pseudoscience Course Syllabus, Polytechnic University Brooklyn, Jonathan Bain

<http://ls.poly.edu/~jbain/pseudoscience/revsched.pdf>

Science vs Pseudoscience Course Syllabus, Eastern Connecticut State University, Charles Wynn

<http://www.inquiringminds.org/education/syllabus-wynn.html>

Stout Science Program for Educators: Good Weblinks on Pseudoscience

http://physics.uwstout.edu/stoutsci/good_pseudoscience.htm

Specific Topics

Alien Autopsy: A Case for Skeptical Inquiry

<http://www.scire.com/pseudo/alien.html>

Bad Astronomy (Phil Plait)

<http://www.badastronomy.com/>

Publishing

Prometheus Books

The major publisher of books critical of pseudoscience.

<http://www.prometheusbooks.com>

MAGAZINES

The magazines *Skeptic* and *Skeptical Inquirer* can quickly and effectively provide teachers with skeptical articles on a wide variety of topics related to pseudoscience. Both magazines also have their own websites.

Skeptic

http://www.skeptic.com/the_magazine/

Skeptic magazine is the quarterly publication of The Skeptic's Society, an organization founded by science writer and historian of science Michael Shermer. The first issue of *Skeptic* was published in spring 1992. The editorial board currently includes Richard Dawkins, Jared Diamond, and James Randi.

Skeptic magazine helps carry out the mission of The Skeptic's Society, which is to promote scientific skepticism and to oppose pseudoscience, superstition, and irrational beliefs. Bound into most issues is a ten-page young reader's section called *Junior Skeptic*.

The website includes a "Reading Room" that is a free resource of articles relating to science, pseudoscience, and skepticism. Also available on the site is the Table of Contents for all back issues of the magazine. Back issues can be ordered.

Skeptical Inquirer

<http://www.csicop.org/si/>

Skeptical Inquirer is the bimonthly publication of the Committee for Skeptical Inquiry, formerly called The Committee for the Scientific Investigation of Claims of the Paranormal or CSICOP. *Skeptic* was first called *The Zetetic* and began publishing under that name in 1976, changing its name a year later. The current editor is Kendrick Frazier, former editor of *Science News*.

Skeptical Inquirer helps to carry out the mission of CSI, which is to "encourage the critical investigation of paranormal and fringe-science claims from a responsible scientific point-of-view and to disseminate factual information about the results of such inquiries to the scientific community and the public."

The website includes a large number of on-line articles from back issues of the magazine as well as an index of all articles published in every issue to date. Back issues of the magazine can be ordered.

BOOKS

Critical Thinking, Scientific Reasoning
General Pseudoscience Collections
Mental Powers/Parapsychology
 General Parapsychology
 Cold Reading
 ESP
 Psychic Detectives
 Uri Geller
Spirit World
 Carlos Castaneda
 Creationism
 Faith Healing
 Haunted Houses
 Intelligent Design
 New Age Movement
 Nostradamus
 Spiritualism/Channelling
Natural Mysteries
 Archaeology/Prehistoric Past
 Astrology
 Atlantis
 Bermuda Triangle
 Crop Circles
 Cryptozoology
 Dowsing/Water Witching
 Firewalking
 Graphology
 Perpetual Motion
 Spontaneous Human Combustion
 Talking With Animals
 Velikovsky, Immanuel: *Worlds in Collision*
 Von Daniken, Erich: *Chariots of the Gods?*
Aliens and UFOS
 UFOS
 Roswell Incident 1947
 Alien Abductions
 Intelligent Life Beyond Earth

CRITICAL THINKING, SCIENTIFIC REASONING

Bartholomew, Robert, & Radford, Benjamin (2003). *Hoaxes, Myths, and Mania: Why We Need Critical Thinking*. Amherst NY: Prometheus Books.

The author uses a case study approach to teach how to improve one's critical thinking, an approach that facilitates going into issues in depth. The aim is to learn critical thinking lessons from each case, and making application to other more current situations. One case is the famous "Martian panic" of 1938, created when radio listeners believed that Orson Welles' broadcast of H. G. Wells' fictional *War of the Worlds* was a real invasion. A lesson to be learned concerns the power of the mass media to influence our thinking.

University of Alberta H. T. Coutts Education Library BF 441 B297 2003

Giere, Ronald (1984). *Understanding Scientific Reasoning*. NYC: Holt Rinehart & Winston.

The author's goal is to help general readers to improve their critical thinking skills and enhance their scientific and technological literacy. More specifically, the author aims at helping first and second year college level students develop skills for understanding and evaluating the science found in college textbooks, as well as in other popular and professional print materials. The book has three main parts that focus on evaluating, respectively, theoretical hypotheses, statistical and causal hypotheses, and science-related decisions.

University of Alberta Cameron, Augustana Libraries: Q 175 G49 2006

Gilovich, T. (1991). *How We Know What isn't So: The Fallacy of Reasoning in Everyday Life*. NYC: Free Press.

The author suggests that the proliferation of illogical thinking in our society results mainly from inherent biases in how we attempt to reason from data. Common biases include seeing order in randomness, looking for confirmation of our beliefs, overlooking hidden data, and using mental strategies just because they are quick and easy. The second half of the book applies the first half by analyzing the logical weaknesses underpinning pseudoscientific beliefs such as ESP and paranormal phenomena.

University of Alberta H. T. Coutts Education Library BF 442 G488 1991; Canadian University College, King's University College, Red Deer College BF 442 G55 1991

Goode, Erich (1999). *Paranormal Beliefs: A Sociological Introduction*. Long Grove IL: Waveland Press.

The author investigates the social forces that generate widespread beliefs in such phenomena as ESP, psychics, astrology, and communicating with the dead, and looks at the role such beliefs play in our society. He suggests that improving our understanding of the kind of reasoning that leads to these beliefs reveals much about both believers and non-believers, as well as about our society. He notes that the reasoning that leads to science-related conclusions may also be suspect.

Grim, Patrick (ed.) (1982). *Philosophy of Science and the Occult*. NYC: SUNY.

This collection of articles analyzes the occult in order to raise questions in the philosophy of science. The authors discuss a variety of occult topics—e.g., parapsychology, astrology, and UFOs—from a variety of perspectives, in order to investigate issues such as confirmation, causality, explanation, laws, and the problem of demarcation. Authors include Paul Feyerabend, Karl Popper, Thomas Kuhn, Anthony Flew, and Philip Klass.

University of Alberta Book and Record Depository BF 1411 P56 1990; Augustana BF 1409.5 P47 1990, Concordia BF 1411 P49 1982

Humphrey, Nicholas (1999). *Leaps of Faith: Science, Miracles, and the Search for Supernatural Consolation*. NYC: Springer.

The author, a British psychologist, critiques the beliefs that many people have in the paranormal, miracles, and other supernatural phenomena. He argues that such beliefs usually arise because of anxiety about the future and are sustained by a belief in mind-body duality. The book goes beyond debunking to explore the psychology of our tendency for wishful thinking, striving to explain why we so often long for a make-believe world of magic and miracles.

Concordia BF 1042 H88 1999

MacDougall, Curtis (1983). *Superstition and the Press*. Buffalo NY: Prometheus Books.

The author, a professor of journalism and veteran newspaperman, critically investigates the role of the newspaper in popularizing beliefs in supernatural phenomena. He concludes from his empirical investigations into news stories through the 1960s and 70s that during those decades the newspapers almost always presented paranormal claims without questioning their validity. The book could be a model for conducting investigation into more recent news stories.

Nisbett, Richard, & Ross, Lee (1980). *Human Inference: Strategies and Shortcomings of Social Judgement*. Englewood Cliffs NJ: Prentice-Hall.

The authors explore how human judgements about the social world that are derived from evidence and reasoning are also influenced by various kinds of bias. These include the greater impact of concrete, personal information, the inability to recognize what evidence is missing, the tendency to perceive a consistent pattern when it is lacking, a reliance on inaccurate information, and the persistence of impressions created by evidence even when it is shown to be false.

Radner, Daisie, & Radner, Michael (1982). *Science and Unreason*. Belmont CA: Wadsworth.

The authors' focus on pseudoscience and how it differs from science, more specifically the patterns of reasoning and underlying assumptions of pseudoscience in comparison to science. Specific pseudoscience examples such as biorhythms, creationism, and parapsychology are used as example. Common characteristics of pseudoscience are discussed. "Borderline" cases such as continental drift and sociobiology are analyzed in light of the characteristics of pseudoscience.

University of Alberta Cameron Library Q 175 R126 1982, Red Deer College Q 175 R166 1982

Rothman, M. (1988). *A Physicist's Guide to Skepticism*. Buffalo NY: Prometheus Books.

The author scientifically examines various paranormal phenomena such as telepathy, poltergeists, perpetual motion, and UFOs in light of the general principles of physics, showing why such phenomena are not possible in the physical world as we understand it. Also discussed are some ideas popular in science fiction, e.g., faster-than light travel. The book is accessible to the general reader as well as to physicists and philosophers of science.

Sagan, Carl (1996). *The Demon-Haunted World: Science as a Candle in the Dark*. NYC: Random House.

The author is a well-known astronomer and opponent of pseudoscience who popularized the importance of science and critical thinking. His book comprehensively surveys late-twentieth-century fringe science and warns of the dangers of a public that cannot distinguish valid from bogus science. He presents a set of practical tools for skeptical thinking, such as looking for independent confirmation and detecting logical fallacies.

University of Alberta Cameron Library, Book and Record Depository, Augustana, Red Deer Q 175 S215 1996; Grande Prairie Q 175 S35 1997

Schermer, Michael (1997). *Why People Believe Weird Things: Pseudoscience, Superstition, and Other Confusions of Our Time*. San Francisco CA: W H Freeman.

The author, the founder of *Skeptic* magazine, looks at the positive power of skepticism. He explains how science differs from pseudoscience and how fallacious thinking leads to belief in weird things. He presents examples such as psychic phenomena, near-death experiences, UFO abductions, and creationism, and discusses how and why people might believe in them, e.g., comfort, immediate gratification, simplicity, moral meanings, and “hope springs eternal”.

Schick Jr, Theodore, & Vaughn, Lewis (1995). *How to Think About Weird Things: Critical Thinking for a New Age*. Mountain View CA: Mayfield.

The authors provide a brief comprehensive introduction to critical thinking and skepticism. Truth, knowledge, belief, evidence, and the nature of science are discussed. Sample paranormal claims such as ESP, astrology, near-death experiences, dowsing, and creationism are investigated, using the various principles for analyzing claims that are outlined by the authors, e.g., the fallibility of individual perception and memory. This book would serve well as a course text.

University of Alberta Rutherford BC 177 S32 1999; Lakeland BC 177 S32 1994

Vyse, Stuart (2000). *Believing in Magic: The Psychology of Superstition*. Oxford University Press.

The author addresses the basic question, “Why are people superstitious?” through a critical analysis of a number of empirical studies. He suggests a number of reasons: being the member of a particular social group, having certain personality traits, accidental conditioning, errors in reasoning, trying to control the uncontrollable, and wanting to pass the time. Proposed remedies include teaching critical thinking, teaching decision analysis, and promoting science education.

Concordia BF 1775 V97 1997

Wheeler, Robert (1993). *Dragons for Sale: Studies in Unreason*. Amherst NY: Prometheus Books.

The author looks at mass human gullibility from classical times to the twentieth century, and how it has stood in the way of rational knowledge. Chapters focus on topics such as medical cure-alls, witch hunting, Nazism, and prophecy. Possible causes and implications of mass unreason are examined to help readers guard themselves against being taken in. He suggests that rationality leads to a fuller richer life because it is free of unfounded and damaging beliefs.

GENERAL PSEUDOSCIENCE COLLECTIONS

Abell, George, & Singer, Barry (eds.) (1981). *Science and the Paranormal: Probing the Existence of the Supernatural*. NYC: Scribners.

The editors, an astronomer and a psychologist, have collected in one volume twenty articles by a variety of writers that deal with the rapidly growing popularization of paranormal beliefs. The articles provide a scientific perspective on topics such as psychic healing, Kirlian auras, pyramid power, Bermuda Triangle, and UFOs. Authors include Carl Sagan, Martin Gardner, James Randi, Ray Hyman, and Philip Klass.

University of Alberta Rutherford BF 1040 S42 1981; Lakeland BF 1045.S33 S38 1983

Bradley, Michael (2005). *World Mysteries Revealed*. NYC: Barnes & Noble.

Each chapter in this book poses a provocative question raised by a claim about a paranormal phenomenon such as crop circles, Bigfoot, or the Bermuda Triangle, then presents the pros and cons of the debate. This exposes the reader to alternative explanations for the same issue and motivates thought and discussion as to which explanation might be a better one and why. The cases provide a useful beginning point for further classroom research, debate, and discussion.

Frazier, Kendrick

The editor is a former editor of *Science News* and current editor of *Skeptical Inquirer*. The numerous articles in these four collections provide well-informed commentary on claims in the areas of ESP, astrology, UFOs, biorhythms, and other paranormal phenomena. Authors include Isaac Asimov, James Randi, and Carl Sagan. Each article provides a useful beginning point for further classroom research, debate, and discussion.

- **Frazier, Kendrick (ed.) (1981).** *Paranormal Borderlands of Science*. Buffalo NY: Prometheus Books.
Red Deer College BF 1031 P33
- **Frazier, Kendrick (ed.) (1986).** *Science Confronts the Paranormal*. Buffalo NY: Prometheus.
University of Alberta Book and Record Depository, Augustana, Grande Prairie BF 1045 S33 S385 1986
- **Frazier, Kendrick (ed.) (1986).** *Encounters With the Paranormal: Science, Knowledge, and Belief*. Buffalo NY: Prometheus.
- **Frazier, Kendrick (ed.) (1991).** *The Hundredth Monkey and Other Paradigms of the Paranormal*. Buffalo NY: Prometheus Books.
Augustana, King's College, Red Deer College BF 1045 S33 H86 1991

Gardner, Martin

The author is a popular mathematics and science writer, a well-known polemicist against pseudoscience, and a founding member of CSICOP, the Committee for the Scientific Investigation of Claims of the Paranormal. In his four books, Gardner probes into the veracity of many pseudoscientific claims, including ESP, dowsing, creationism, intelligent design, dianetics, psychic surgery, spontaneous human combustion, Carlos Castaneda, numerology, and UFOs. Gardner has dialogued with both allies and antagonists for many years.

- **Gardner, Martin (1952).** *Fads and Fallacies in the Name of Science*. NYC: Dover.
- **Gardner, Martin (1989).** *Science: Good, Bad, and Bogus*. Amherst NY: Prometheus Books.
University of Alberta Cameron Q 225 G22 1981, Kings Q 225 G22 1981, Concordia, Red Deer BF 1042 G37, Canadian University College Q 173 G354 1981, Lakeland Q 173 G354 1989
- **Gardner, Martin (1996).** *Weird Water and Fuzzy Logic: More Notes of a Fringe Watcher*. Amherst NY: Prometheus Books.
- **Gardner, Martin (2000).** *Did Adam and Eve have Navels: Debunking Pseudoscience?* NYC: W. W. Norton.
Red Deer College Q 173 G37 2000, Grande Prairie Q 172.5 P77 G37 2001

Gordon, Henry (1988). *Extrasensory Deception*. Toronto ON: Macmillan

The author is a well-known Canadian stage magician, a fellow of CSICOP, and chairperson of the Ontario Skeptics Society. His book is a collection of his skeptical essays on topics such as ESP, dowsing, firewalking, Nostradamus, astrology, poltergeists, auras, faith healing, and UFOs, based on his weekly *Toronto Star* newspaper columns. He includes accounts of some of his adventures among "big names" of the paranormal movement such as Uri Geller.

Harris, Melvin (1986). *Investigating the Unexplained.* Buffalo NY: Prometheus Books.

The author is a researcher and broadcaster for the British Broadcasting Corporation (BBC), who has investigated the primary sources for the stories of a number of “unexplained mysteries”, including the Amityville Horror, regressions to past lives, and the psychic (non)detection of Jack the Ripper. His finding in each case is that the story is a myth and/or hoax. The author provides enough detail to show how and why he reached each of his conclusions.

Hines, Terence (1988). *Pseudoscience and the Paranormal: A Critical Examination of the Evidence.* Buffalo NY: Prometheus Books.

The author, a psychology professor, investigates a number of pseudoscientific claims, including astrology, after-death experiences, faith healing, and creationism. He stresses the importance of developing testable hypotheses to evaluate claims. He discusses why people believe in pseudoscientific claims even in the face of overwhelmingly contradictory evidence. He demystifies tricks like cold reading, that are sometimes used to “prove” pseudoscientific claims.
University of Alberta Rutherford BF 1042 H55 2003

Hoggart, Simon, & Hutchinson, Mike (1995). *Bizarre Beliefs.* London: Richard Cohen.

The authors conduct a very comprehensive survey of popular “unexplained mysteries”, including fortune telling, astrology, Nostradamus, the Bermuda Triangle, crop circles, UFOs, and alien abductions. They strongly suggest the need for critical inquiry, for example, inquiry into psychic predictions needs to consider failed as well as “successful” predictions. They propose that such mysteries can be explained rationally and caution against the need to believe the unbelievable.

Huston, Peter

The author’s articles expose the fraudulent nature of a wide range of paranormal and other suspect claims and shows how scam artists use them to separate the gullible from their money. His targets include con artists from the fringe such as phony psychics and crop circle hoaxers, as well as those profiting from more seeming normal pursuits such as creationism and evangelism. The author also digs into some strange subcultures, e.g., believers in mythical beasts.

- **Huston, Peter (1997).** *Scams from the Great Beyond: How To Make Easy Money Off Of ESP, Astrology, UFOs, Crop Circles, Cattle Mutilations, Alien Abductions, Atlantis, Channeling, And Other New Age Nonsense.* London: Paladin Press.
- **Huston, Peter (2002).** *More Scams from the Great Beyond: How to Make Even More Money Off of Creationism, Evolution, Environmentalism, Fringe Politics, Weird Science, the Occult, and Other Strange Beliefs.* London: Paladin Press.

Kaminer, Wendy (1999). *Sleeping With Extraterrestrials: The Rise of Irrationalism and Perils of Piety.* NYC: Pantheon.

In this collection of eight essays, the author investigates the social implications of widespread irrationalism in America, defined as believing in something without any basis in evidence. Topics include pseudoscience such as Deepak Chopra, The Celestine Prophecy, alien abductions, and the Heaven’s Gate cult, as well as more “respectable” beliefs such as school vouchers. The author points to parallels between religious and pseudoscientific beliefs.

University of Alberta Internet, Kings College BF 773 K35 1999

Kelly, Susan (2005). *The Skeptic’s Guide to the Paranormal.* NYC: Thunder’s Mouth Press.

The author uses a case study approach to carefully examine the scientific basis for over twenty common paranormal beliefs, including spontaneous human combustion, the Bermuda Triangle, firewalking, and the yeti (abominable snowman). Each alternative explanation is seriously considered in light of the available evidence, concluding with the scientific explanation. The cases are models of how to scientifically approach such issues.

Kurtz, Paul

The author is the chairman of CSICOP. In *The Transcendental Temptation* he examines the basis of various religious claims. In *The New Skepticism* he explains what is meant by scientific skepticism, i.e., it is the use of critical thinking to inquire into and oppose claims that lack empirical evidence. In *Skeptical Odysseys*, he provides accounts of various scientific inquiries into the paranormal that have been conducted by a wide range of investigators.

- **Kurtz, Paul (1986). *The Transcendental Temptation: A Critique of Religion and the Paranormal*. Buffalo NY: Prometheus Books.**
University of Alberta Rutherford BL 2775.2 K96 1986, Augustana, Red Deer, BL 2775.2 K87 1986 Grande Prairie, Canadian University College BL 2775.2 K87
- **Kurtz, Paul (1992). *The New Skepticism: Inquiry and Reliable Knowledge*. Buffalo NY: Prometheus Books.**
University of Alberta Rutherford BL 2775.2 K87, Red Deer College B 837 K87 1992
- **Kurtz, Paul (ed.) (2000). *Skeptical Odysseys. Personal Accounts by the World's Leading Paranormal Inquirers*. Amherst NY: Prometheus Books.**

Neher, Andrew (1981). *The Psychology of Transcendence*. NYC: Prentice Hall.

The author presents a critical but brief examination of various paranormal phenomena such as psychokinesis, mediums, ghosts, religious visions, faith healing, auras, out-of-the-body experiences, astrology; the Bermuda Triangle, and UFOs. He tries to find some credibility in these beliefs while at the same time maintaining a scientific approach. The bibliography contains nearly 900 references.

University of Alberta Rutherford BF 1031 N39 1980, King's University College, Red Deer College BF 1031 N43

Nickell, Joe

Joe Nickell is a former stage magician, a senior research investigator for CSICOP, and Associate Dean of the Center for Inquiry Institute. He has personally led numerous scientific investigations into a wide variety of paranormal phenomena, many of which he has chronicled in his many books for both adults and young readers. Nickell's writings (sometimes with other authors) strongly emphasize that the proper evaluation of any paranormal claim requires the rigorous scientific methods that he employs in his own investigative work.

- **Baker, Robert, & Nickell, Joe (1992). *Missing Pieces: How to Investigate Ghosts, UFOs, Psychics, and Other Mysteries*. Buffalo NY: Prometheus Books.**
- **Nickell, Joe (1995). *Entities: Angels, Spirits, Demons, and Other Alien Beings*. Amherst NY: Prometheus Books.**
- **Nickell, Joe (1999). *Looking for a Miracle: Weeping Icons, Relics, Stigmata, Visions & Healing Cures*. Buffalo NY: Prometheus Books.**
- **Nickell, Joe (2001). *Real Life X-Files: Investigating the Paranormal*. Lexington: University Press of Kentucky (also published as, *Investigating the Paranormal*. NYC: Barnes & Noble).**
- **Nickell, Joe, & Fischer, John (1991). *Secrets of the Supernatural: Investigating the World's Occult Mysteries*. Buffalo NY: Prometheus Books.**
Red Deer College, Lakeland BF 1029 N53 1988
- **Nickell, Joe, & Fischer, John (1992). *Mysterious Realms: Probing Paranormal, Historical, and Forensic Enigmas*. Buffalo NY: Prometheus Books.**
Lakeland College BF 1029 N526 1992
- **Nickell, Joe, Karr, Barry, & Genoni, Tom (eds.) (1996). *The Outer Edge: Classic Investigations of the Paranormal*. NYC: CSICOP.**

- Nickell, Joe, & Randi, James (2004). *The Mystery Chronicles: More Real Life X-Files*. Lexington: University Press of Kentucky.

Randi, James

James Randi, aka The Amazing Randi, is a famous Canadian stage magician, skeptic, and founding member of CSICOP, who is best known for his continuing efforts to debunk pseudoscience. He offers a \$1 million prize, still unclaimed, to anyone who can demonstrate evidence of a paranormal, supernatural, or occult event, under scientifically controlled conditions. Randi has written a number of books that criticize paranormal claims as well as expose those who exploit the paranormal for personal gain.

- Randi, James (1982). *Flim Flam*. Amherst NY: Prometheus Books.
- University of Alberta Rutherford, Concordia, Augustana, Red Deer, Lakeland, BF 1042 R24 1982
- Randi, James (1991). *James Randi: Psychic Investigator*. London: Boxtree.
- Randi, James (1997). *An Encyclopedia of Claims, Frauds, and Hoaxes of the Occult and Supernatural*. NYC: St. Martins.

Rawcliffe, D. H. (1959). *Illusions and Delusions of the Supernatural and the Occult*. NYC: Dover.

The author, one of the first modern skeptics, presents one of the first comprehensive exposes of supernatural and occult claims. Through the pages he conducts rational examination into illusions and delusions that include ESP, stigmata, séances, auras, levitation, ghosts, and dowsing. He shows over and over that even the most convincing “evidence” for supernatural and occult phenomena vanishes under close and careful analysis.

Schultz, Ted (ed.) (1989). *The Fringes of Reason: A Whole Earth Catalogue*. NYC: Harmony Books.

In this special issue of the popular *Whole Earth Catalogue*, various authors ranging from skeptics to true believers explore and discuss the validity of numerous rather strange New Age beliefs, including crystals, dowsing, spontaneous human combustion, cryptozoology, and flying saucers. The subject matter ranges from obvious hoaxes to genuine puzzles. References to helpful sources of further information are included after each article.

University of Alberta Book and Record Depository BF 1042 F73 1989, Lakeland BF 1999 F75 1989

Stenger, Victor (1990). *Physics and Psychics: The Search for a World Beyond the Senses*. Buffalo NY: Prometheus Books.

The author, a physicist and a skeptic, uses the principle of Occam's razor (defer to the simplest explanation) and the test of the predictive value of a model to show how little evidence there is for paranormal claims such as ESP and astrology. He concludes that paranormal phenomena have no basis in science but are due to fraud, hallucination, error, or a will to believe.

Red Deer, Lakeland QC 6 S812 1990, Grande Prairie QC 6 .S8123

Winters, Paul (ed.). *Paranormal Phenomena: Opposing Viewpoints*. San Diego: Greenhaven.

This is one of a series of books that present opposing viewpoints on a variety of topics, in this case, paranormal phenomena. The four sections address, respectively, different authors’ perspectives on: paranormal beliefs in general, UFOs, ESP, and life after death. Authors (pro and con) include Paul Kurtz, John Mack, Susan Blackmore, Ray Hyman, and Harold Puthoff. The articles provide a useful beginning point for students to examine ideas critically, engage in further research, and discuss and debate.

Wynn, Charles, Wiggins, Arthur, & Harris, Sydney (2001). *Quantum Leaps in the Wrong Direction: Where Real Science Ends and Pseudoscience Begins*. Washington DC: National Academy Press.

The authors, who are science professors, distinguish between science and pseudoscience, discuss the importance of scientific methods and reasoning, then carefully examine a selection of fringe topics, including ESP, astrology, out-of-body experiences, creationism, UFOs, and extraterrestrial life. The book is illustrated by well-known science cartoonist Sydney Harris. The book is available online at <http://www.nap.edu>.

University of Alberta Internet, University of Alberta Rutherford, King's College Q 172.5 P77 W96 2001

MENTAL POWERS/PARAPSYCHOLOGY

General Parapsychology

Parapsychology is the study of evidence for paranormal psychological phenomena (sometimes referred to as "psi") such as telepathy, precognition, clairvoyance, and telekinesis. Proponents refer to parapsychology as a science, however, scientists disagree, pointing to problems with both theoretical models and research methodology. Most parapsychological research is statistical and conducted under the assumption that any significant deviation from the norm is evidence of psi (e.g., rather than, say, a statistical anomaly, poor experimental design, or fraud). There is as yet no experimental evidence that the scientific community accepts as valid evidence of any parapsychological phenomena.

- **Alcock, James (1981). *Parapsychology: Science or Magic?* Oxford: Pergamon.**

The author, a Canadian psychologist, explores various factors that can lead to belief in the paranormal. These include inferring non-existent causality, interpreting the ordinary as extraordinary, dismissing contradictory evidence, and accepting beliefs because they relieve anxiety and fear. He examines parapsychology and concludes it to be pseudoscience rather than science. A special chapter on the use of statistics in parapsychology research is included.

Augustana, Red Deer College BF 1042 A39 1981

- **Alcock, James (1990). *Science and Supernature: A Critical Appraisal of Parapsychology*. Buffalo NY: Prometheus Books.**

The author critically evaluates parapsychological research and reviews the current status of the evidence for and against. He first discusses a number of key questions in the field of psychic phenomena such as "How can psychic phenomena be detected?" He then rigorously considers the validity of two specific research projects which believers designate as among the "best" in the field. One study is on psychokinesis and the other is on clairvoyance.

Red Deer College, Canadian University College BF 1045 .S33 A42 1990

- **Blackmore, Susan (1986). *The Adventures of a Parapsychologist*. Buffalo NY: Prometheus Books.**

The author, who completed a PhD in parapsychology, describes her journey from a young believer in parapsychology to a more mature skeptic. She makes clear that it was the findings of her own research into verifying the paranormal that eventually led to her newfound skepticism. She asserts that she wrote her book to help others who might set out on the same path. A revised edition titled *In Search of the Light* was published in 1996.

Red Deer BF 1042 B54 1986

- **Blackmore, Susan, & Hart-Davis, Anthony (1995).** *Test Your Psychic Powers: Find Out the Truth for Yourself.* London: Thorsons.

The authors describe simple experiments for testing a wide variety of paranormal claims, including those involving telepathy, psychokinesis, astrology, crystals, dreams, dowsing, pendulums, premonitions, ouija boards, and palmistry. The experiments are straightforward and can be carried out with simple materials.

- **Hyman, Ray (1991).** *The Elusive Quarry: A Scientific Appraisal of Psychic Research.* Buffalo NY: Prometheus Books.

The author, a psychology professor and stage magician, is a member of CSICOP and a long-time critic of parapsychology. The book compiles most of his major writings on topics such as the methodology of psychic research, scientists' involvement in psychic research, the reality of psychic phenomena such as dowsing, and the psychology of belief.

Red Deer College BF 1042 H96 1989

- **Kurtz, Paul (ed.) (1985).** *A Skeptic's Handbook of Parapsychology.* Amherst NY: Prometheus Books.

The book contains thirty articles on topics in parapsychology by authors such as Ray Hyman, C. Hansel, James Randi, Martin Gardner, Susan Blackmore, and James Alcock. The articles are almost entirely critical and are classified under six general categories: historical overviews, the argument from fraud, parapsychologists reply, parapsychology: science or pseudoscience, some methodological and theoretical issues, and further critiques.

Concordia, Augustana Red Deer, Grande Prairie BF 1042 S55 1985

- **Taylor, John (1980).** *Science and the Supernatural: An Investigation of Paranormal Phenomena.* London: Granada.

The author, a physicist and mathematician, became interested in the proliferation of paranormal literature during the 1970s and decided to conduct his own scientific investigations into the field. He began prepared to be a believer but after inquiring into phenomena such as psychic healing, clairvoyance, telepathy, precognition, and photokinesis, he concluded that 'we have searched for the supernatural and not found it.'

University of Alberta Rutherford BF 1031 T24 1980, Red Deer BF 1031 T32 1980

Cold Reading

Cold reading is a method used by alleged "psychics" to convince another person that the psychic knows much more about the person than the psychic actually does. A trained cold reader can very quickly obtain personal information by analyzing the person's body language, clothing, hairstyle, manner of speech, etc. Cold readers make high probability guesses about the other person, quickly picking up on feedback as to whether their guesses are on the right track. They then reinforce any chance connections made while quickly passing over any missed guesses.

- **Earle, Lee (1989).** *The Classic Reading.* Phoenix AZ: Lee Earle.

The author provides an excellent introduction to all aspects of cold reading, which he refers to as a "combination of flim flam, applied psychology, and glib entertainment." An updated version of the book in CD form, entitled *The Gentle Art of Cold Reading*, is filled with hints, tips, and techniques for practitioners.

- **Rowland, Ian (2002).** *Full Facts Book of Cold Reading*. London: Ian Rowland Ltd.
This comprehensive volume is the most thorough exposition of cold reading published to date. It includes many examples of the described techniques and is accessible to stage magicians, psychic investigators, psychiatrists, and anyone else with an interest in the subject. Unfortunately it is no longer available except second-hand.

ESP

ESP (extrasensory perception), the popular term for “parapsychology” refers to the ability to pick up information without using any known senses. ESP is usually considered to take four main forms: telepathy (communicating with others using the mind), clairvoyance (knowing about unseen events elsewhere), precognition (knowing the future), and telekinesis (moving objects with the mind). Many believers and non-believers have carried out ESP experiments over the years, usually using simple materials like playing cards, dice, drawings, and photographs.

- **Christopher, Milbourne (1970).** *ESP, Seers, and Psychics*. NYC: Crowell.
The author, the chairman of the Occult Investigation Committee of the Society of American Magicians, was an one of the first systematic investigators into parapsychology. He challenges the claims of the self-proclaimed psychics of his era and shows how their feats of ESP can be duplicated using stage magic techniques.
- **C. E. M. Hansel**
The author was one of the first scholars to critically assess the evidence for ESP. He carefully reviews numerous experimental and non-experimental studies, pointing out their weaknesses. He emphasizes the need for clear findings from replicable experiments as the only valid data. He reveals how often error and deception have compromised the claimed objectivity of ESP research. He concludes that demonstrable evidence of ESP has yet to be found.
 - **Hansel, C. E. M. (1966).** *ESP: A Scientific Evaluation*. NYC: Charles Scribners.
University of Alberta Rutherford, Book and Record Repository BF 1321 H3 1966, Concordia, Kings, Grande Prairie, Lakeland BF 1321 H3 1966
 - **Hansel, C. E. M. (1980).** *ESP and Parapsychology: A Critical Re-evaluation*. Buffalo NY: Prometheus Books.
University of Alberta Rutherford BF 1028 H25 1980, Red Deer, Grande Prairie BF 1042 .H23
 - **Hansel, C. E. M. (1989).** *The Search for Psychic Power: ESP and Parapsychology Revisited*. Buffalo NY: Prometheus Books
Augustana, Grande Praire, Lakeland, Canadian University College BF 1031 H256 1989
- **Marks, David, & Kammann, Richard**
The authors are psychologists and founders of the New Zealand Skeptics Society. They critically examine and reject the paranormal claims of alleged psychics. The 1980 book focuses mainly on Kreskin and Uri Geller. The expanded 2000 book discusses the paranormal claims of “serious” parapsychologists. The authors describe case studies in conjunction with trying to explain how people can believe so strongly in paranormal claims, e.g., by linking randomly paired events.
 - **Marks, David, & Kammann, Richard (1980).** *The Psychology of the Psychic*. Buffalo NY: Prometheus Books
University of Alberta Rutherford, Book and Record Depository BF 1042 M34 1980, Augustana, Red Deer, Grande Prairie
 - **Marks, David (2000).** *The Psychology of the Psychic. 2nd Edition*. Amherst NY: Prometheus Books.

- **Randi, James (1982). *Test Your ESP Potential*. NYC: Dover Publications.**

The author, a Canadian magician, skeptic, and well-known debunker of pseudoscience, provides a very practical kit of educational materials and accompanying instructions that can be used by students in classrooms (and others) to experimentally test for the presence of ESP. Specifically, the kit includes a set of Zener cards (developed in the early 1930s for parapsychology researcher J. B. Rhine), guidelines for controlled experiments, and statistical tables.

- **Wiseman, Richard (1997). *Deception and Self-deception: Investigating Psychics*. Amherst NY: Prometheus Books.**

University of Alberta Rutherford BF 1042 W76 1997

- **Wiseman, Richard, & Morris, Robert (1997). *Guidelines for Testing Psychic Claimants*. Amherst NY: Prometheus Books.**

The author, a psychologist and practicing magician turned psychic investigator, has exposed many psychic frauds. He outlines the scientific procedures that can be used to test psychic ability or expose trickery during an investigation, providing practical flexible guidelines that anyone can use. He urges the need for responsible scientific investigations into the paranormal.

Psychic Detectives

A psychic detective is a person who investigates crimes using supposed psychic powers. A number of people, for example, Peter Hurkos, have claimed to have these powers and to have used them to help the police in their investigations. In contrast, police departments around the world have issued official statements declaring that they do not view psychics as credible or useful and do not accept their offers of assistance.

- **Nickell, Joe (1994). *Psychic Sleuths: ESP and Sensational Cases*. Buffalo NY: Prometheus.**

The author provides an in-depth look at those who supposedly use psychic powers to help solve crimes. For the book, the author assigned twelve experienced psychic investigators, mostly professors, to each study a famous psychic for one year, then report on him or her at length. The book includes a description of a controlled experiment performed by the Los Angeles Police Department involving 12 crimes and 4 psychics. An afterword offers an overall negative assessment of the numerous claims of psychic sleuths.

Red Deer College, Grande Prairie, Lakeland BF 1045 C7 P79 1994

Uri Geller

Uri Geller, a former stage magician, is an Israeli-British performer who claims to have psychic powers. He became famous in the 1970s after performing a series of demonstrations on television which he claimed were paranormal performances. His purported feats included telepathy, telekinesis, spoon bending, and remote viewing. Critics such as magician James Randi have long stated that all Geller's "psychic" feats can be duplicated by stage magic.

- **Christopher, Milbourne (1975). *Mediums, Mystics, and the Occult*. NYC: Crowell.**

The author, a famous magician, challenges the feats of Uri Geller and other self-proclaimed psychics. Based on careful research, he concludes that Geller was a clever stage magician and suggests various tricks Geller used to perform his supposed paranormal feats. The author arrives at similar conclusions in regard to other psychics.

- Fuller, Uriah (1975). *Confessions of a Psychic: A Factual Account of How Fake Psychics Perform Seemingly Incredible Paranormal Feats*. Teaneck NJ: Karl Fulves.
- Fuller, Uriah (1980). *Further Confessions of a Psychic: Inside Secrets of Seemingly Incredible Psychic Feats*. Teaneck NJ: Karl Fulves.

Using a pen name that parodies the name of self-proclaimed psychic Uri Geller, skeptic Martin Gardner wrote these two books to explain to other professional magicians how to fake such apparent psychic feats as bending keys, starting broken watches, and duplicating drawings. Copies of the books are difficult to obtain due to limited printing run.

- Randi, James (1975). *The Magic of Uri Geller*. NYC: Ballantine. Republished in 1982 as *The Truth About Uri Geller*. Buffalo NY: Prometheus Books.

The author describes his investigations into the “powers” of self-proclaimed psychic Uri Geller, who first appeared on the scene in 1973. Geller claimed he could use his mind to bend spoons, teleport himself, reproduce drawings in sealed envelopes, etc. Using a variety of approaches, Randi exposes Geller as a stage magician who uses trickery to accomplish his supposed psychic feats.

SPIRIT WORLD

Carlos Castaneda

Beginning in the late 1960s, the author wrote twelve popular books—starting with *The Teachings of Don Juan: A Yaqui Way of Knowledge* (1968)—which he claimed described his apprenticeship into Yaqui shamanism. His mystical and supernatural ideas attracted a cult following. He was awarded a doctorate in anthropology by UCLA, but most academics have been highly critical of his work. Many details he has provided about his own life have turned out to be inaccurate.

The following books are critical of the authenticity of Castaneda’s claims and conclude that his books are works of fiction.

- Demille, Richard (1978). *Castaneda’s Journey: The Power and the Allegory*. Santa Barbara CA: Capra Press.
- Demille, Richard (1980). *The Don Juan Papers: Further Castaneda Controversies*. Santa Barbara CA: Ross-Erikson.
- Fikes, Jay (1993). *Carlos Castaneda: Academic Opportunism and the Psychedelic Sixties*. Victoria BC: Millenia Press

Creationism (see also Intelligent Design)

Creationism is the belief that life and the universe were created by a supernatural deity (or deities) whose existence is presupposed. Creationism has come to be most strongly linked to the branch of Christian fundamentalism in which the book of Genesis is held to reveal the truths of creation. When scientific research produces conclusions that contradict creationism, e.g., dates of artifacts, the creationist response is to reject the conclusions, underlying theories, and/or methodology.

The following books argue against creationism and in support of evolution/natural selection.

- **Berra, Tim (1990).** *Evolution and the Myth of Creationism: A Basic Guide to the Facts in the Evolution Debate.* Stanford CA: Stanford University Press.
- **Eldredge, Niles (2000).** *The Triumph of Evolution and the Failure of Creationism.* NYC: Henry Holt.
- **Futuyama, Douglas (1995).** *Science on Trial: The Case for Evolution.* Sunderland MS: Sinauer.
- **Gilkey, Langdon (1985).** *Creationism on Trial: Evolution and God at Little Rock.* Cambridge MS: Harper & Row.
- **Kitcher, Philip (1982).** *Abusing Science: The Case Against Creationism.* Cambridge MA: MIT Press.
- **Moore, John (2002).** *From Genesis to Genetics: The Case of Evolution and Creationism.* Berkeley CA: University of California Press.
- **Ruse, Michael (ed.) (1996).** *But is it Science? The Philosophical Question in the Creation/Evolution Controversy.* Amherst NY: Prometheus Books.

Faith Healing

Faith healing, often associated with religious evangelism including televangelism, is the use of spiritual means to treat disease, sometimes with the explicit exclusion of modern medical techniques. Claims of its success rest wholly on anecdotal evidence. Critics of faith healing refer to it as a hoax, noting that the few scientific studies that have been carried out to test it have not substantiated any positive results.

- **Randi, James (1989).** *The Faith Healers.* Amherst NY: Prometheus.

The author, a well-known magician and skeptic, conducts an extended inquiry into the history and practice of faith healing. Themes of deception, trickery, greed, gullibility, and misplaced but unshakeable faith emerge from his investigations. Clever tricks used by some of the faith healers discussed are exposed for the first time. The latter half of the book looks in particular at the practice of modern televangelists such as Peter Popoff, Pat Robertson, and Oral Roberts.

University of Alberta Book and Record Depository BARD

Haunted Houses

A haunted house is a building that allegedly contains ghosts and is the site of supernatural events and/or paranormal phenomena. The ghosts in a haunted house are usually said to be spirits of former residents of the property. Their activity in the house is claimed to be mainly associated with violent or tragic events in the building's history, such as murder or suicide. The spirits, who may be benign or malevolent, make noises, appear as phantoms, and move or propel physical objects (poltergeist activity). It is claimed that exorcism can clear a haunted house of its spirits.

- **O'Neill, Terry (2004). *Haunted Houses*. San Diego: Greenhaven Press.**

This is one of a series of books that present opposing viewpoints on a variety of topics, in this case, haunted houses. Are haunted houses really haunted, or are there more ordinary explanations? This book investigates various famous haunted houses from the perspectives of those who have allegedly witnessed the hauntings and those who have investigated them.

University of Alberta H. T. Coutts Education BF 1475 H32 2004

Intelligent Design (see also Creationism) *Evolution and the Myth of Creationism*.

Intelligent design, the "new creationism", is the belief that certain features of the universe and living things are best explained by an intelligent cause rather than by natural processes. Advocates believe that God is the designer but also try to deny that they have this belief. Advocates claim that intelligent design is a scientific theory equal to, or superior to, scientific theories regarding the evolution and origin of life, however, the scientific community asserts that intelligent design is religion and not science.

The following books argue against intelligent design and in support of evolution/natural selection.

- **Brockman, John (ed.) (2006). *Intelligent Thought: Science vs the Intelligent Design Movement*. NYC: Vintage Books.**
- **Perakh, Mark (2004). *Unintelligent Design*. NYC: Prometheus Books**
- **Shermer, Michael (2006). *Why Darwin Matters: The Case Against Intelligent Design*. NYC: Times Books.**
- **Young, Matt and Taner Edis (2004). *Why Intelligent Design Fails: A Scientific Critique of the New Creationism*. Newark NJ: Rutgers University Press.**

Near Death/Out-of-Body Experiences

A near-death experience is an experience reported by someone who almost died, or who experienced clinical death and then revived. Described characteristics of NDEs include floating above oneself, entering a tunnel, and seeing a light. An out-of-body experience (OBE) involves a sensation of floating outside of one's body and, in some cases, seeing one's physical body from a place outside one's body. Both NDEs and OBEs are studied in the field of parapsychology.

- **Blackmore, Susan (1982). *Beyond the Body: An Investigation of Out-of-Body Experiences*. London: Heinemann.**

The author, a leading academic expert on consciousness and consulting editor of *Skeptical Inquirer*, examines out of body experiences (OBEs) scientifically and thoroughly. She conducts a historical survey of the phenomenon, from ancient shamans to current experts in the field. She considers alternative explanations, concluding that OBEs are most likely illusions caused by anoxia (deprivation of oxygen) in the brain.

University of Alberta Rutherford BF 1389 A7 B62 1982, Concordia, Red Deer BF 1389 A7 B53 1983

- **Blackmore, Susan (1993). *Dying to Live*. Buffalo NY: Prometheus.**
The author assembles and examines theories about near-death experience (NDE), challenges spiritual claims, and reviews historical and cross-cultural attitudes toward death. The book includes numerous interviews with people who almost died. The author concludes that the scientific "Dying Brain Hypothesis" better explains NDE than any paranormal hypothesis.
Red Deer, Lakeland BF 1045 N4 B53 1993

- **Christopher, Milbourne (1979). *Search for the Soul*. NYC: Crowell.**
The author, a stage magician and leading historian of magic, looks into the quest by both scientists and psychics for evidence that there is life after death. His investigation considers the soul, reincarnation, communication with the dead, and near-death experiences.
Red Deer BF 1031 C54 1979

New Age Movement

America's "New Age" of non-religious spiritual exploration and speculation began in the late 1980s, some claim with the publication of Erich von Daniken's *Chariots of the Gods*. New Agers grafted new ideas about ecology and psychology onto ideas from traditional religions. Especially influential were Eastern religions such as Buddhism and Hinduism, as well as shamanism, "neo-paganism", and mysticism. The New age subculture embraced practices such as meditation, channeling, reincarnation, crystals, psychic experiences, and holistic health, as well as anomalous phenomena such as crop circles and UFOs.

- **Basil, Robert (ed.) (1988). *Not Necessarily the New Age*. Buffalo NY: Prometheus Books.**

This collection, edited by the former editor of *Free Inquiry* magazine, contains some of the first skeptical essays on the New Age movement. Contributors include Carl Sagan, Philip Klass, Martin Gardner and Susan Blackmore. Topics include reincarnation, channeling, and UFO abductions. The history, politics, and culture of the movement are also examined.

- **Gardner, Martin (1988). *The New Age: Notes of a Fringe Watcher*. Amherst NY: Prometheus Books.**

The author, a well-known skeptic and author of a number of debunking books, takes on the claims of the New Age movement, present and past, by attempting to put the "unexplainable" into an explainable context. He addresses such topics as psychic powers, celebrity New Age spokesperson Shirley McLaine, perpetual motion, psychic surgery, channeling, and Scientology. Half of the book is composed of the author's columns from *Skeptical Inquirer*.
University of Alberta Rutherford, Augustana BF 1042 G22 1988

- **Gordon, Henry (1988). *Channeling into the New Age: The Teachings of Shirley MacLaine and Other Such Gurus*. Buffalo NY: Prometheus Books.**

The author, a Canadian stage magician, attempts to characterize the New Age movement and its beliefs. He focuses in particular on celebrity spokesperson Shirley MacLaine. He confronts and critiques ESP, astrology, crystals, channeling, reincarnation, and other similar topics. He explains why he believes that such New Age beliefs may be dangerous.
Concordia BP 605 N48 G67 1988

- **Jerome, Lawrence (1996). *Crystal Power: The Ultimate Placebo Effect*. Amherst NY: Prometheus.**

Crystals became the main symbol of the New Age movement, which attributed to them many supernatural powers. The author, a statistics specialist, critically examines the claims for crystal

power from historical, scientific, theoretical, and experimental perspectives. He finds that crystals' many scientific attributes have been translated by New Agers into spiritual properties. He concludes that any perceived effects of crystals are due to the well-known placebo effect.

Nostradamus

Michel de Nostredame (1503 –1566) aka Nostradamus, was a reputed prophet who in 1555 began publishing collections of obscurely written predictions that have become famous. His supporters claim that he accurately predicted major world events such as the rise of Hitler and the assassination of John F. and Bobby Kennedy. His detractors argue that any connections between his predictions and actual events are misinterpretations.

- **Randi, James (1993).** *The Mask of Nostradamus: The Prophecies of the World's Most Famous Seer.* Buffalo NY: Prometheus.

The author provides the first in-depth biography of the 16th century astrologer and physician who became the world's most famous "prophet". The author describes how Nostradamus became a counselor to the European courts and exposes the tricks he used to make his predictions seem authentic. The author shows how Nostradamus' followers arbitrarily interpret the seer's words to try to claim that he foretold key historical events.

Augustana BF 1815 N8 R35 1990, Red Deer BF 1815 N8 R363 1993, Lakeland BF 1815.N8 R35 1993

Spiritualism/Channeling

Spiritualism is a movement based on the belief that people called "psychic mediums" or "channels" can contact the spirits of the dead. These spirits are believed to exist on a higher level than humans and are purportedly able to offer worldly and spiritual guidance. The modern spiritualist movement began in New York in 1848 when the Fox sisters reported they had contacted the spirit of a dead peddler through rapping noises. The sisters became famous and spiritualism became popular entertainment.

Harry Houdini

Houdini was a famous stage magician who specialized in escapes and other spectacular tricks. He spent the latter part of his rather short life challenging the claims of psychic mediums and spiritualists such as the Fox sisters, the Davenport Brothers, and Henry Slade, repeatedly showing how deception and stage magic could duplicate the mysterious events occurring at séances. Houdini's fellow magician, Joseph Dunninger, also investigated many psychics.

- **Houdini, Harry (1924/1972).** *A Magician Among the Spirits.* NY: Harper.
 - **Houdini, Harry (1980).** *Miracle Mongers and Their Methods.* Toronto: Coles. University of Alberta Internet, University of Alberta Rutherford GV 1543 H68 1980
 - **Houdini, Harry, & Dunninger, Joseph (1967).** *Magic and Mystery: The Incredible Psychic Investigations of Houdini and Dunninger.* NYC: Weathervane Books.
- **Keene, M. Lamarr (1976).** *The Psychic Mafia.* NYC: St. Martins.
- The author, a former successful "psychic medium", describes his own lucrative thirteen-year career in spiritualism. He shows how people like himself use the tricks of the trade to produce such fake phenomena as ghostly apparitions to make millions of dollars by exploiting sincere people's hopes and fears. He emphasizes that the unshakeable belief of the victims is the ultimate guarantor of the psychic medium's success.
- University of Alberta J. A. Weir Law, University of Book and Record Depository BF 1042 K26 1976

- **Moore, R. Laurence (1977).** *In Search of White Crows: Spiritualism, Parapsychology, and American Culture.* NYC: Oxford.

The author, a professor of American history, places present-day parapsychology in historical context and reveals it to be part of a tradition of research into "supernormal" phenomena dating back to nineteenth-century spiritualism. He brings a broad cultural perspective to bear on the central figures and organizations that have supported spiritualism and parapsychology.

- **Polidoro, Maasimo (2003).** *Secrets of the Psychics.* Amherst NY: Prometheus Books.

The author, cofounder of the Italian CSICOP, describes a number of investigations and experiments related to paranormal claims, and discusses the psychology of psychic deception. He first narrates some historical investigations into the authenticity of famous spiritualists such as Eusapia Palladino. He then presents his own experimental studies of some of today's psychics and their alleged "miracles" such as clairvoyance.

NATURAL MYSTERIES

Archaeology/Prehistoric Past

Many unsubstantiated, occult, and speculative claims have been made about our prehistoric past that appear to wholly discount the findings of modern archaeology. The products of human ingenuity and labour like the Pyramids, Stonehenge, Easter Island, and the Nazca Lines are attributed to mysterious aliens from outer space. Myths and hoaxes such as "vanished super-races", e.g., Atlantis are maintained in the face of contradictory evidence. Claims are also made that psychic powers such as ESP can be used to illuminate the archaeological record.

- **Feder, Kenneth (1990).** *Frauds, Myths, and Mysteries: Science and Pseudoscience in Archaeology.* Mountainview CA: Mayfield.

The author, a professor of archaeology, found that many of his students' beliefs about human antiquity contradicted scientific findings. His book places the analysis of such questionable claims within scientific archaeology, beginning with a discussion of epistemology. Each subsequent chapter addresses a specific topic: the Cardiff Giant, Piltdown Man, the discovery of America, the moundbuilders, Atlantis, "ancient astronauts", psychic astrology, and creationism. University of Alberta Rutherford, University of Alberta Book and Record Depository, Red Deer CC 140 F43 1996

- **Hawkins, Gerald (1965).** *Stonehenge Decoded.* NYC: Dell.

The author, a professor of astronomy, was one of the first to challenge the theory that 3500-year old Stonehenge was a Druid temple. His lengthy investigation led him to conclude that it was really a sophisticated astronomical observatory which was designed to predict eclipses. He provides a fascinating and informative account of investigative archaeology as he slowly decodes the meaning of this "neolithic computer".

University of Alberta Rutherford, University of Alberta Book and Record Depository, Concordia DA 142 H39, Kings, Red Deer, Grande Prairie DA 142 H3

- **James, Peter, & Thorpe, Nick (1999).** *Ancient Mysteries*. NYC: Ballantine.
The authors, who are archaeologists, discuss artifacts, myths, and legends from the ancient world, such as the Pyramids, Nazca lines in Peru, and Atlantis. The authors concern themselves with compiling rational explanations for these mysteries, as well as critiquing popular pseudoscientific explanations such as that aliens built the pyramids, the Nazca lines indicate an ancient airport, and Atlantis was a perfect society that sank to the bottom of the ocean.
- **Nickell, Joe (1991).** *Ambrose Bierce is Missing: And Other Historical Mysteries*.
Lexington: University Press of Kentucky.
The author, a well-known investigator into current-day paranormal phenomena, inquires into a number of historical mysteries, including the 1913 disappearance of American satirist Bierce. All the major categories of mysteries are included: ancient puzzles, biographical enigmas, hidden identities, "fakelore", suspect artifacts, dubious documents, lost texts, obscured sources, and scientific challenges. The book was republished in 2005 as *Unsolved History: Investigating Mysteries of the Past*.

Astrology

Astrology is a set of ancient traditions, and beliefs in which knowledge of the relative positions of heavenly bodies and related details is claimed to be useful in understanding, interpreting, and organizing information about human personality, human affairs, and other earth-related matters. Although astrology and astronomy share a common origin, they are distinct. Astronomy is the scientific study of astronomical objects and phenomena, while astrology focuses on relating these phenomena to earthly affairs.

- **Benski, Claude, et al (1996).** *The Mars Effect. A French Test of Over 1,000 Sports Champions*. Amherst NY: Prometheus.
The author and six other researchers conducted an exhaustive study of the Mars Effect, an astrological idea put forward by French writer Michel Gauquelin who claimed that sports greatness is related to the behaviour of the planet Mars. Data was gathered on 1066 French sports figures. The reader can review the study and the data in order to draw her own conclusions.
- **Culver, Roger, & Ianna, Phillip (1984).** *The Gemini Syndrome: A Scientific Evaluation of Astrology*. Buffalo NY: Prometheus.
University of Alberta Book and Record Depository, Red Deer BF 1713 C84 1984
- **Culver, Roger, & Ianna, Phillip (1988).** *Astrology: True or False? A Scientific Evaluation*. Buffalo NY: Prometheus.
Olds College BF 1713 C84 1988
The authors, professional astronomers, investigate claims by modern astrologers that their theories are scientifically based. The authors clarify the glaring internal inconsistencies associated with many basic concepts of modern astrology such as the Zodiac and refute the "evidence" concerning supposed astrological influences. The claim that "astrology works" is laid to rest in the face of more than three thousand wrong astrological predictions.
- **Gallant, Roy (1974).** *Astrology: Sense or Nonsense?* NYC: Doubleday.
The author, an experienced astronomer and science writer, looks into the validity of astrology. He concludes as a result of his analysis that "The subjective kind of truth astrology is after is not to be found in Galileo's telescope or in Pasteur's microscope, any more than the objective kind of truth science is after is to be found in the astrologers' horoscope".
University of Alberta H. T. Coumts Education BF 1708.1 G16 1974

- **Jerome, Lawrence (1977). *Astrology Disproved*. Buffalo NY: Prometheus.**
The author, a statistics specialist, conducts a thorough analysis of astrology. He debunks the premises of its claims from all angles and clarifies a number of key topics. These include the actual effects of planets on the earth, the origins of astrology as an instrument of power, the absence of any causal link between astrology and human personality, and how the abstruseness of astrology is what makes it appear to believers as real and effective.
- **Martens, Ronny, & Trachet, Tim (1998). *Making Sense of Astrology*. Amherst NY: Prometheus Books.**
The authors, two prominent Belgian skeptics, critique astrology using rational, intelligent arguments. They look in detail at key astrological ideas such as signs and houses, explain the basic issues, and consider some of the empirical evidence as provided by studies published since 1982. They conclude that their final judgement on astrology "is without any doubt negative" but that, even so, astrology is likely to be with us for a long time.
- **Moore, Patrick (2005). *Stars of Destiny: A Scientific Look at Astrology*. Bristol UK: Canpus.**
The author, a well-known British popularizer of astronomy, investigates two questions: "Is there any scientific basis for astrology?" "Does it work - And if so why?" In the course of his analysis he uses the opportunity to teach some basic astronomy, then relates this to his questions about astrology. At one point he invents his own constellations to rather humourously make his point! In the end he concludes that the answer to both his initial questions is "No".

Atlantis

Atlantis, a legendary island first mentioned in Plato's dialogues, was said to be a naval power which conquered parts of Western Europe and Africa around 9400 BC. After failing to invade Athens, Atlantis sank into the ocean. The possible existence of a genuine Atlantis was discussed throughout antiquity but usually rejected. The story was rediscovered by humanists at the very beginning of modern times. Atlantis has become a catchphrase for any supposed prehistoric but advanced (and lost) civilization.

- **de Camp, L. Sprague (1954/70). *Lost Continents: The Atlantis Theme in History, Science, and Literature*. Mineola NY: Dover.**
The author, a historian and science fiction writer, provides a history of the Atlantis legend, including its origin, its exaggeration over time, and its use as a setting in novels. He outlines the related research in geology, geography, and archaeology and reprints major references to Atlantis from classical texts. He also discusses another lost continent named Mu or Lemuria that is alleged to have sank beneath the southern Pacific Ocean.
- **Ellis, Richard (1999). *Imagining Atlantis*. NYC: Vintage.**
The idea of Atlantis, the lost continent that sank to the bottom of the ocean, has tantalized the human imagination since Plato first mentioned it. Over the centuries the question as to whether Atlantis actually existed has inspired many theories, from the scientifically challenging to the undeniably crackpot. The author takes the reader on a journey through the history of the search for Atlantis, involving characters such as Francis Bacon, Jules Verne, and Indiana Jones.
[University of Alberta Internet](#)

Bermuda Triangle

The Bermuda Triangle, or Devil's Triangle, is an area in the Atlantic Ocean bordered by San Juan, Miami, and Bermuda, that is said to be the site of the unexplained disappearances of many people, aircraft, and ships. The events have been attributed by some to the paranormal, a suspension of the laws of physics, or activity by extraterrestrial beings, rather than to human error or acts of nature. The documentation for most incidents suggests that the Bermuda Triangle is an exaggerated legend.

- **Kusche, Lawrence (1975).** *The Bermuda Triangle Mystery-Solved.* NYC: Warner.

The author investigates the question as to why so many people, planes, and ships seem to vanish within the Atlantic Ocean area known as the Bermuda Triangle. He researches a large number of accounts of disappearances and sums up the results, including possible explanations. He finds in the end that the Bermuda Triangle is essentially a myth and that many of the disappearances are not nearly as mysterious as has been claimed.

Crop Circles (Cereology)

Crop circles are geometrical formations of flattened crops that began appearing in England in the late 1970s. Various scientific and pseudoscientific explanations from vortices to aliens were offered for the phenomenon, which soon spread around the world. The study of crop circles was even given a name, "cereology". In 1991, two Englishmen revealed that they had been making crop circles in England for the past thirteen years using planks, rope, and wire.

- **Delgado, Phil, & Andrews, Colin (1989).** *Circular Evidence.* Grand Rapids MI: Phanes.

The authors provide the first detailed report on the crop circle phenomenon, based on their ten year study. They spend little time speculating on causes but rather focus on providing the facts in the form of photographs, measurements, sketches of flattened crops, and interviews with farmers in whose fields the circles appeared. The book is a good introduction to the subject.

- **Schnabel, Jim (1994).** *Round in Circles: Physicists, Poltergeists, Pranksters, and the Secret History of the Cropwatchers.* London: Penguin.

The author, a science writer, describes his investigation into the crop circle phenomenon, which began for him with the 1980 circle in Wiltshire, spread to other areas of England, and then became an international phenomenon. In his search for an explanation he encounters physicists, believers in magic, mediums, New Agers, dowsers, UFO enthusiasts, and, most importantly, the crop circle artists themselves.

Cryptozoology: Hypothetical Animals

Cryptozoology is the search for animals that are hypothesized to exist, but for which confirming evidence is missing. The field also includes the search for known animals believed to be extinct. The hypothetical creatures involved are sometimes called "cryptids". The most well-known cryptids are Bigfoot (sasquatch), Yeti (abominable snowman), Loch Ness monster, and Kraken. Cryptozoology has never been fully embraced by the scientific community.

- **Binns, Ronald (1984). *The Loch Ness Mystery Solved*. Buffalo NY: Prometheus.**
The author, who has made numerous visits to Loch Ness since the 1960s and has never seen a monster, describes his own investigation into the Nessie legend. He carefully examined 50 years of the numerous stories, newspaper accounts, and photographs, as well as the results of sonar investigations. He concludes that there is no scientific evidence of any monster in the loch.
University of Alberta Book and Record Depository BARD
- **Campbell, Steuart (1985). *The Loch Ness Monster. The Evidence*. Buffalo NY: Prometheus.**
The author provides a detailed evaluation of the many “photographed sightings” of the Loch Ness monster since 1933. For each, he outlines a plausible explanation that invalidates any claim for the existence of the monster. He also considers other contradictory factors such as the nature of Loch Ness itself and the negative results of any sonar and radar imaging of the loch.
University of Alberta Book and Record Depository BARD
- **Daegling, David (2005). *Bigfoot Exposed: An Anthropologist Examines America’s Enduring Legend*. Lanham MD: Rowman & Littlefield.**
The author, an anthropologist specializing in primate anatomy and biomechanics, makes an objective scientific study of Bigfoot aka the Sasquatch. He draws on his expertise to investigate footprints and photographs, notes the complete lack of any empirical evidence such as found body parts, and concludes that Bigfoot is a myth.
University of Alberta Rutherford, Red Deer QL 89.2 S2 D34 2004
- **Long, Greg (2004). *The Making of Bigfoot: The Inside Story*. NYC: Prometheus Books.**
The author looks into the famous 60-second Roger Patterson “Bigfoot film” of 1967 and the people behind it. His four year investigation concludes that Bigfoot was a man in a gorilla suit and that the film was staged as a hoax. He names names, describes who played what role, and identifies the film’s location as North Bluff, California.
- **Messner, Reinhold (2000). *My Quest for the Yeti*. NYC: St. Martin’s Griffin.**
The author, a famous mountaineer, narrates a story of his search for the identity of the legendary yeti (abominable snowman) of the Himalayas. He sights an unknown creature while on an expedition, and his journey then takes him to Nepal, Bhutan, India, and Tibet. He hears many stories, and comes to understand the importance of the legend to the peoples of the area. He provides a plausible alternative explanation for the mystery.
University of Alberta Cameron, University of Alberta Book and Record Depository QL 89.2 Y4 M4713 2000

Dowsing/Water Witching

Dowsing, also called water witching or divining, refers to practices said to enable a person to detect hidden water, metals, valuable gems, coins, or other objects, which are concealed underground. The dowser holds out a simple device which is commonly a Y-shaped twig, L-shaped rod, or pendulum and walks in the search area. Movement or vibration of the device is said to indicate the presence of what is being looked for. Some practitioners claim they can be successful without a device. Dowsing has been practiced for thousands of years.

- **Vogt, Evon, & Hyman, Ray (1979).** *Water Witching U.S.A.* Chicago: University of Chicago Press.

The authors conduct a comprehensive study of dowsing, which is still practiced in many areas today. Included are personal accounts, historical background, data from controlled experiments, and results of a nationwide survey. The book is illustrated by photographs, drawings, and historical woodcuts showing the tools and techniques over the years. The dowser's explanation of groundwater is contrasted with that of the geologist.

Red Deer BF 1628 V6 1979

Firewalking

Fire-walking involves walking barefoot over a bed of hot coals. Due to the apparent danger, fire-walking has a long history in many cultures as a test of faith. It is currently used in modern motivational seminars to demonstrate the "power of personal belief". Stage performers and scientists assert that fire-walking is little more dangerous than walking over hot sand. The science behind fire-walking has to do with heat capacity and thermal conductivity.

- **VIDEO: Willey, David (1994).** *Firewalking-Myth vs Physics.* Madison WI: Hawkhill Associates.

In this video, University of Pittsburgh physics professor, David Willey demonstrates firewalking and explains the relevant physics. The purpose is to stimulate discussion about heat transmission in introductory post-secondary physics courses. Safety note: Firewalking should not be carried out by non-experts. A plug-in from the Willey video can be downloaded from:

<http://www.pitt.edu/~ciddeweb/video/projects/vid1312.html>

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Lakeland BF 891 W75 1992

Perpetual Motion

Perpetual motion literally means motion that goes on forever. In popular culture, a perpetual motion machine has come to mean a device or system that puts out (or stores) more energy than is put into it. Throughout history, numerous individuals have tried and failed to create such a machine. This is not surprising, as perpetual motion is impossible by the current laws of physics. Specifically, perpetual motion violates the law of conservation of energy, which states that energy can neither be created nor destroyed.

- **Ord-Hume, Arthur (1980). *Perpetual Motion: The History of an Obsession*. NYC: ST. Martin's.**

The author, an engineer, draws on numerous old as well as modern publications to provide a book-length history of perpetual motion from medieval times to the present. He describes a host of failed schemes, including attempts using overbalancing, magnets, steam, rolling balls, and radium. He tells the stories of colorful inventors such as John Keely and Girabed Giragossian. The book includes many illustrations and photographs.

University of Alberta Cameron, Alberta Book and Record Depository, Concordia TJ 181.3 O65 1977

Spontaneous Human Combustion

Spontaneous human combustion (SHC) is a hypothesis with a long history which claims that a person's body can burn without an external source of ignition. The fire usually occurs indoors, is very intense, and is confined to the body. Many theories have been put forward to try to explain SHC and how it may occur, some linked to current scientific understanding. The two most common explanations are the non-spontaneous "wick effect" where human fat acts like a candle wick and the "static flash fire" involving a sudden discharge of high voltage static electricity.

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- **Sebeok, Thomas, & Rosenthal, Robert (eds.) (1981). *The Clever Hans Phenomenon: Communication with Horses, Whales, Apes, and People*. NYC: New York Academy of Sciences.**

The authors, a linguist and a psychologist, have collected together 24 articles by various authors related to animal-human communication. The articles discuss topics such as Clever Hans the “talking” horse, circus animals, ape signing, porpoise training, the role of unwitting cues in communication, psychic reading, magical thinking, and paranormal communication. Authors include Ray Hyman, Persi Diaconis, and James Randi.

University of Alberta Rutherford QL 776 C635 1981

- **Terrace, Herbert (1979). *Nim*. New York: Alfred Knopf.**

The author, a psychology professor, led an extended experimental project about animal language acquisition centred on a chimpanzee he named Nim Chimpsky (!). Project Nim was an attempt to replicate a study of another chimpanzee, Washoe, that claimed the animal learned to understand and use sign language. Project Nim concluded that Nim did learn to repeat a number of his trainers’ signs in appropriate contexts, but he did not acquire anything defined as “language”.

University of Alberta Book and Record Depository, Kings, Augustana QL 737 P96 T47 1979

Velikovsky, Immanuel: *Worlds in Collision*

Velikovsky, a Russian-born psychiatrist, published *Worlds in Collision* in 1950. He theorizes that events in the Christian bible were actually the record of great natural catastrophes. The main cause was the close encounters of Venus with Earth when Venus, originally ejected from Jupiter, had not settled into its orbit. Velikovsky elaborates on his ideas in three more books. The scientific community strongly disagrees with Velikovsky’s theories.

- **Goldsmith, David (ed.) (1977). *Scientists Confront Velikovsky*. NYC: W. W. Norton.**

The editor, a professor of astronomy, has collected seven articles from papers presented at the 1974 American Association for the Advancement of Science symposium on Velikovsky. Three astronomers (one is Carl Sagan) and an expert on ancient astronomy analyze Velikovsky’s ideas in light of currently accepted ideas in astronomy. Isaac Asimov contributes an introduction analyzing the role of “heretics” in science.

University of Alberta Book and Record Depository QB 32 S42 1977, Grande Prairie, Canadian University College QB 32 S34 1977

Von Daniken, Erich: *Chariots of the Gods?*

Von Daniken, a Swiss writer, published the first English-language edition of his cult book *Chariots of the Gods?* He claims that extra-terrestrials have influenced human culture since prehistoric times, e.g., through creating artifacts such as Stonehenge and the Easter Island statues (note: the “ancient astronaut hypothesis”). Von Daniken elaborates on his ideas in nine more books. The scientific community has ignored or rejected his theories.

- **Garner, Gordon (1972). *Chariots of the Gods-A Critical Review*. Australian Institute of Archaeology: Melbourne.**

The author, an Australian archaeologist, presents the first comprehensive critical review of the methodology and conclusions of Von Daniken's first book *Chariots of the Gods?* from an archaeological perspective. This book is out of print and difficult to find.

- **Story, Ronald (1976).** *The Space Gods Revealed: A Close Look at the Theories of Erich von Daniken.* NYC: Barnes & Noble.

- **Story, Ronald (1980).** *Guardians of the Universe.* New York: St. Martin's Press.

The author, a philosopher and science writer, became von Daniken's nemesis in the 1970s and 80s. In his two books, he critiques von Daniken's theories in a detailed manner from a scientific perspective, referring to specific claims and archaeological sites and pointing out how often assumption is substituted for evidence. He also reveals how von Daniken's core ideas are taken from other writers. Astronomer Carl Sagan provides an introduction to the 1976 book.

University of Alberta Rutherford CB 156 S787 1980, Canadian University College CB 156 S75

ALIENS AND UFOS

UFOS

A UFO or unidentified flying object is a real or apparent flying object that the observer cannot identify. Popularly speaking, the term has become synonymous with an alien spacecraft or flying saucer. Reports of UFOs became more common after a widely publicized sighting by a U.S. pilot, Kenneth Arnold, in 1947. There been many thousands of additional reports since then. In almost all cases, UFOs are eventually identified as aircraft, weather balloons, satellites, etc., however, the extraterrestrial origin hypothesis persists to the present day.

- **Condon, Edward (1969).** *Scientific Study of Unidentified Flying Objects.* NYC: Bantam.

The author, a physics professor at University of Colorado, was commissioned by the U.S. Air Force to direct the first detailed scientific examination of the UFO phenomenon. The chief field investigator was chemistry professor Dr. Roy Craig. The 18-month study explores history, eye-witness reports, laboratory reports, and related scientific principles. The full report is available online at <http://www.ncas.org/condon/text/contents.htm>.

University of Alberta Cameron TL 789 F49 1969

- **Frazier, Kendrick, Karr, Barry, & Nickell, Joe (eds.) (1997).** *The UFO Invasion: The Roswell Incident, Alien Abductions, and Government Coverups.* NYC: Prometheus Books.

The editors, who are all experienced investigators into the paranormal with links to CSICOP, have gathered together a wide range of articles on UFO-related topics including sightings, encounters, abductions, the Roswell incident, the "alien autopsy", and crop circles. In each case, the paranormal claims are fully investigated and documented. The authors include UFO expert Philip Klass, Colonel Richard Weaver, and SETI coordinator Thomas McDonough.

- **Glenday, Craig (1999).** *The UFO Investigator's Handbook.* Toronto: Elan Press.

The author, a member of the British UFO Research Association, provides a comprehensive, practical field guide to researching, identifying, and documenting unexplained sightings, with an emphasis on the need for hard evidence. The book discusses sightings, landings, and encounters; the collection and assessment of visual evidence; research; and UFO "hotspots". UFO expert Philip Klass praised the book as "significant and useful."

- **Klass, Philip (1974). *UFOs Explained*. NYC: Vintage Books.**

The author, an electrical engineer, founding fellow of CSICOP, and acknowledged expert on UFOs, is a leading debunker of the extraterrestrial hypothesis of UFOs. He argues that all UFO sightings can be explained by misidentification of normal phenomena such as airplanes, satellites, planets, and stars. He has since 1966 offered a reward of \$10,000 to anyone who can produce conclusive evidence that an alien spacecraft has visited earth.

- **Klass, Philip (1983). *UFOs: The Public Deceived*. Buffalo NY: Prometheus Books.**

The author wrote this second comprehensive book because he felt that it was “time to talk sense to the public about UFOs.” His particular focus is the claim that the U.S. government and military have solid evidence of alien visitations which they are covering up. He provides a detailed, well-researched, and well-documented account which contradicts this assertion. He also examines the Walton “abduction”, which was heavily popularized through a Hollywood movie. Grande Prairie TL 789 K575

- **Sagan, Carl, & Page, Thornton (1972). *UFOs: A Scientific Debate*. NYC: W. W. Norton.**

The editors, an astronomer and a physicist, produced this book as a result of the 1969 American Association for the Advancement of Science conference on the findings of the Condon Committee regarding UFOs. The articles provide a wide spectrum of views and include both advocates and non-advocates of an extraterrestrial origin of UFOs. Authors include Alan Hynek, Donald Menzel, and Carl Sagan.

- **Sheaffer, Robert (1998). *UFO Sightings: The Evidence*. Buffalo NY: Prometheus Books.**

The author a freelance writer and fellow of CSICOP, presents a broad overview of the UFO situation to the late 1990s in an updated version of his 1986 book. He considers the major cases from a skeptical perspective, using scientific methods to examine accounts and photographs. Cases include Betty and Barney Hill’s alleged abduction, the incidents at Exeter, the Jimmy Carter sighting, Men in Black, and mothmen.

Roswell Incident, 1947

In July 1947, materials were recovered from the Brazel Ranch near Roswell, New Mexico. The materials have since become the subject of widespread speculation, rumour, and research. The U.S. military states that the remains are of a crashed top secret weather balloon. Many UFO proponents claim that the remains are of a crashed flying saucer and its alien occupants, and that the military is covering this up. Roswell is likely the most famous alleged UFO incident.

- **Klass, Philip (1997). *The Real Roswell Crashed Saucer Coverup*. NYC: Prometheus Books.**

The author, an editor for *Aviation Week & Space Technology Magazine*, has been investigating and writing about UFOs for decades. His investigation into the “Roswell incident” over many years reveals hard evidence of a cover-up. But it has not been by the military, but by certain UFOlogists who have been in possession of the real facts but have concealed them in order to promote a fictional story of an alien-piloted spaceship.

- **Korff, Kal (1997). *The Roswell UFO Crash: What They Don't Want You to Know*. Amherst NY: Prometheus Books**

The author, a researcher into UFOs and the paranormal, reports on the results of his 16-year investigation into the "Roswell Incident." He systematically examines the statements of all those involved and assesses claims by new witnesses. He evaluates the crash site, the materials recovered, and the alleged military cover-up. He also reports on the so-called Roswell "alien autopsy" video which has been shown on television.

Alien Abductions

Apparently, many North Americans have been visited by members of an alien species and taken from their homes or cars to an alien craft. The typical story begins with a person home in bed at night or in a car who sees lights, hears buzzing, feels fearful, and senses a presence. The person is then somehow transported into an alien craft and undergoes various medical procedures carried out by silent, telepathic, large-headed, almond-eyed aliens. The aliens may implant a physical object into the abductee's body.

- **Clancy, Susan (2006). *Abducted: How People Come to Believe They Were Kidnapped by Aliens*. Cambridge MA: Harvard University Press.**

The author, a Harvard psychologist, has investigated many abduction claims. She describes her interviews with many abductees and the psychology behind their experiences. She presents her own scientific explanations behind why people might think they have been abducted. She suggests that the phenomenon of "sleep paralysis" may be behind many of the experiences.
University of Alberta Rutherford BF 2050 C56 2005

- **Klass, Philip (1989). *UFO Abductions: A Dangerous Game*. Buffalo NY: Prometheus.**

The author, an internationally recognized authority on the subject, has been investigating claims of UFO abductions for over twenty years. He traces the history of alleged abductions from the Betty and Barney Hill case of 1966 which first focused attention on the phenomenon. He finds no claims credible and offers a reward of \$10,000 to any "abductee" whose story is confirmed by an FBI investigation.

- **Korff, Kal (1995). *Spaceships of the Pleiades: The Billy Meier Story*. Amherst NY: Prometheus.**

The author examines the case of Billy Meier, a Swiss farmer who claims to be in ongoing contact with aliens from the Pleiades star cluster. Meier alleges he has taken over 1,000 photographs and made twelve videos of the visiting spacecraft, as well as written 1,000's of pages of notes from conversations that contain new wisdom and technical knowledge. The author concludes that Meier is carrying out an elaborate hoax.

- **Matheson, Terry (1998). *Alien Abductions: Creating a Modern Phenomenon*. Amherst NY: Prometheus.**

The author, a professor of English and scholar of science fiction, shows the long history of the abduction narrative as a literary genre. He describes how the image of the alien has changed from friendly or curious to sinister and destructive. He points out how best-selling authors have played a role in marketing the abduction narrative, creating in the process a new societal myth.

Intelligent Life Beyond Earth

The question of whether intelligent life exists elsewhere in the universe has long been a topic of human speculation. As yet there is no solid evidence that confirms extraterrestrial life so its existence remains theoretical. Direct search for extraterrestrial life is being carried out using instruments and space probes. The main indirect searches have been through Project SETI, which searches for radio signals that might indicate alien communication, and through identifying habitable planets in other solar systems.

- **Bova, Ben (2004).** *Faint Echoes, Distant Stars: The Science and Politics of Finding Life Beyond Earth.* NYC: William Morrow.

The author, president emeritus of the National Space Society and science fiction writer, presents an excellent general introduction to astrobiology, the science of life in the universe. His discussion touches on astronomy, the politics and technology of NASA, the history of life on earth, and what we are looking for beyond earth and our solar system. He presents his view of the human race's best chances for survival into the distant future.

University of Alberta Cameron QB 54 B665 2004

- **Drake, Frank, & Sobel, Dava (1992).** *Is Anyone Out There? The Scientific Search for Extraterrestrial Intelligence.* NYC: Delta.

The lead author is professor emeritus of astronomy and astrophysics at University of California Santa Cruz, and a groundbreaking researcher into the question of extraterrestrial life. He is the creator of the "Drake Equation" which attempts to provide an estimate of the number of extraterrestrial societies humans may encounter, and the originator of the SETI Project, which listens for intelligent radio signals from space. His book recounts his career-long quest to gather hard data to answer the question, "Is anyone out there?"

University of Alberta Cameron QB 54 D72 1994

- **Regis, Edward (ed.) (1985).** *Extraterrestrials: Science and Alien Intelligence.* Cambridge UK: Cambridge University Press.

The editor, a science writer and professor of philosophy, collects a number of articles on topics related to the possibility of extraterrestrial life. Contributions address whether extraterrestrials exist, whether they have evolved from simpler forms, whether they have acquired intelligence and how they might understand the world, how we might communicate with them, and whether they might have a moral code. The authors include distinguished scientists such as Marvin Minsky and Carl Sagan.

Augustana QB 54 E947 1985

- **Sagan, Carl (1973).** *The Cosmic Connection: An Extraterrestrial Perspective.* NYC: Dell. (New updated edition published 2000 by Cambridge University Press).

The author, a well-known astronomer and popular science writer, first came into the public eye with this account of his conclusions about the possibility that intelligent life exists somewhere else besides earth. He reviews the state of planetary studies as of the early 1970s and speculates about what might lie just beyond the horizon. He calls for a major human endeavor to explore the solar system and to look for signs of life beyond it.

University of Alberta Cameron QB 54 S24 2000

VIDEOS/DVDS

General

The Eyes of Nye, Episode 2: Pseudoscience. KCTS Television. 60 min.
Science Guy Bill Nye looks into pseudoscience on his new show.

James the Amazing Randi. Skeptics Society. 112 min.
A first-hand analysis of extraordinary claims encountered in a European visit.

Secrets of the Psychics. Nova. 60 min.
Master magician James Randi uncovers the secrets of the alleged psychics.

Specific Topics

Firewalking-Myth vs Physics. Willey, David (1994). Madison WI: Hawkhill Associates.
Physics professor, David Willey demonstrates firewalking and explains the relevant physics.

The Great Water Divining DVD. Australian Skeptics. 120 min.
A look into the world of water divining in Australia over the decades.