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Ghost Hunters: William James and the Search for Scientific Proof of Life After Death by Deborah Blum. Penguin Press, 2006. 384 pp. \$25.95. (hardcover). ISBN 1-594-200-904.

I have a good friend who earned his Ph.D. in chemistry from Harvard. He's a college dean and professor of oceanography at a name-brand U.S. university. He's authored textbooks in his field of research. In short, he's the very model of a modern, major-league scientist. He tolerates my membership in SSE, but has no interest himself in joining or reading my *JSE*. He doesn't believe in ghosts and scoffs at mediums who claim to contact the dead. He steadfastly refuses to look at any evidence offered to the contrary. To him, it's all unscientific bunkum.

He's also a practicing Catholic. In church every Sunday, he fervently recites a creed that affirms his belief in scientifically impossible phenomena—a virgin birth, the magical changing of bulk table wine into real blood. More to the point, he believes all people rise from the dead (along with their actual physical bodies), and he believes in the existence of an invisible world populated with angels, devils and demons who share it with his deceased grandmother and assorted others.

The contradiction eludes him, and frustrates me.

He believes in an afterlife but won't look for, or at, collected scientific evidence suggesting its reality. Compartmentalization is his solution to the triumph of science over traditional religion, a process that started with the Renaissance, accelerated in the Victorian age, and ended in dominance in the early 20th century. Reason rules unchallenged from Monday through Saturday, faith on Sunday. His disconnect epitomizes the uneasy accommodation existing today between faith and science. The two protagonists divide up territory like Mafiosi and try to avoid interfering in each others' business.

Harvard professor William James, the father of American psychology, together with a small band of exceptional, Nobel Award-winning European scientists and thinkers hoped to avoid this separate-boxes solution. They made a valiant attempt at the turn of the last century to produce scientific proof for religion's boldest assertion, which would allow faith and science to share a common, consensual reality. Their melancholy story is told with admirable skill by author and career science writer Deborah Blum in *Ghost Hunters: William James and the Search for Scientific Proof of Life After Death*.

Three years of serious research shine through these pages. A professor of science journalism at the University of Wisconsin, Blum read widely; worked with primary documents; focuses on the best evidence (mediums like Leonora

Piper, Margaret Verrall and the controversial Eusapia Palladino, seminal publications like *Phantasms of the Living*); serves up historical context (1842–1910, the span of James' life, the early history of the Society for Psychical Research (SPR) and American Society for Psychical Research (ASPR), the unstoppable march of science); extensively footnotes her quotes and sources; and narrates her story with a scholarly grace approaching today's gold standard in historical writing, David McCollough.

This is a book my Harvard scientist friend should read—not that he will. The fact that he and James share old school ties, or that James was a recognized giant in his field, won't be enough to entice them to spend a few hours together. Like too many scientists today, he lives and works in a confined mental cubbyhole, with little time to read anything outside his academic field, even if he were so inclined.

If he did, what would he think of the evidence of the afterlife produced by James and his apostles?

I am familiar with most of the evidence (fairly compelling), but I came away with new facts, information and insights I might have uncovered in my own three years spent researching the best scientific evidence of life after death, but never did. Example? Mark Twain's personal run-in with the paranormal and his subsequent endorsement of "mental telegraphy" (telepathy) in the December 1891 issue of *Harper's*. Twain skewered organized religion repeatedly and acidly in his lesser-known writings, but his beef with religion didn't close his mind. He remains a hero of mine.

Blum came away changed in the way she thought. William James and his colleagues "questioned and explored possibilities so accurately that it was impossible not to reevaluate my assumption." Along the way, "I read reports by psychical researchers that I couldn't explain away. I thought all over again about the shape of the world, about the limits of reality and who sets them, illuminated by history, philosophy, theology as well as science. There were days when I could feel the hinges of my brain, almost literally, creaking apart to make room for new ideas." She remains still grounded in the current, consensual definition of reality, but adds, "I'm just less smug than I was when I started, less positive of my rightness."

The melancholy part? James came away with a tenuous epiphany he tried but ultimately failed to share with his fellow scientists, whose downright pigheaded prejudice and intellectual dishonesty allowed so few of them to look at—much less fairly judge—the intriguing evidence he uncovered. At the end of his career, his brilliance and towering achievements in the infant field of psychology forever tainted in the public eye and press by what they judged unwise dabbling in supernatural hokum, James felt betrayed and bitter towards many of his scoffing colleagues. "Let them perish in their ignorance and conceit," he concluded.

SSE members wishing to avoid being lumped in with that cursed lot should familiarize themselves with the rich, early history of serious scientific research

on life after death, if they haven't already. You can't do better than Blum, and James' ghost—should you subsequently decide it exists—will rest easier.

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Leaps in the Dark by John Waller. Oxford University Press, 2004. 292 pp. \$24.95 (hardback). ISBN 0-192804847.

Understanding the history of science may be of little if any practical use to most scientists, who are engaged in the routine puzzle-solving that Kuhn described as "normal" science; but history of science does have important lessons for those whose work is in any way unorthodox. For people who take a watching brief over science, a proper understanding of the history of science is essential. This book offers a necessary corrective for common misunderstandings about the history of science. It features detailed analysis of some fascinating cases, and should be required reading for anomalists, scientific explorers, so-called "skeptics", and other pundits of science. Anomalists in particular should note the evidence that belligerence and stridency against entrenched power are self-defeating.

The chief point expounded by Waller is that scientific reputations, both high and low, may be undeserved. Corollary points include:

- Like all history, the history of science is a complex story that becomes distorted when it is set out as a tale of heroes and villains.
- Since it is written by the victors, history may mislead in important ways.
- A proper understanding of the past requires that actions be assessed in the context of their own time.

Waller points out, correctly, that there exists no infallible "scientific method" (1). Science is always a matter of trial and error. When some counter-orthodox claim is first made, the evidence for it is rarely conclusive, and the opposition to it is not entirely misguided; "Those deemed right in the long run . . . have rarely had a monopoly over reason and good sense" (p. 3).

This book makes few demands on special background knowledge, apart from occasional unelaborated references to "the Leaning Tower of Pisa experiment" or the "tall poppy syndrome" (the latter is a common phrase in Australia). This reviewer's chief reservation is that Waller—far from alone among pundits of science—implicitly equates scientific theories with scientific knowledge, which can be subtly misleading in various ways at various points (for example, pp. 239, 273, 274). Theories are *always* applicable only temporarily, and they are never "true". Waller is also more sanguine than I am about self-correction in science: "a credible scientific theory will usually gain acceptance once a decent