

# When superstition displaces science

## Behind the Crystal Ball: Magic and Science from Antiquity to the New Age

by Anthony Aveni

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Martin Gardner

Recent decades have seen an astonishing upsurge of popular infatuation with fringe science and the paranormal. A hundred years ago, no newspaper in the United States carried a horoscope. Today almost every paper except *The New York Times* has such a feature. A recent US president and his wife, Ronald and Nancy Reagan, were firm believers in the influence of stars on human events. Polls show that about half of all Americans believe in Satan, angels, demons, extrasensory perception, precognition and alien spacecraft invading our skies.

How does this compare with people's beliefs in earlier ages? It is the opinion of Anthony Aveni, in his entertaining history of Western occultism, that until the rise of modern science a belief in magic was rational, mainstream common sense. Not until after Galileo and Newton was such magic demoted to the fakery of stage conjuring. This shift surely has occurred among those knowledgeable about science. But has it also taken place among the masses whose knowledge of science could be scribbled on a postcard?

Two-thirds of Aveni's book can be seen as a skilful summary of Lynn Thorndike's multi-volumed *History of Magic and Experimental Science*, and one-third as taking up where Thorndike left off. The volume is amusingly illustrated, its bibliography extensive, and its facts carefully documented by footnotes. No recent popular history of occultism has covered such a wide swath.

Aveni begins with the "magic" of ancient Egypt and Mesopotamia, followed by Greece and Rome. After a colourful romp through the Middle Ages and Renaissance, he turns to the scientific rubbish of the nineteenth century. There are excellent accounts of the origin of modern spiritualism in the toe rappings of the Fox sisters, the levitations and other paranormal feats of the medium D. D. Home, Madame H. P. Blavatsky's theological twaddle, and the worldwide spread of phrenology.

Chapters on twentieth-century "magic" include the emergence of parapsychology, the spoon-bending of Uri Geller, crystal power, UFO abductions, dowsing, channeling, near-death experiences, alternative medicines and many other marvels.

Although Aveni, a professor of astronomy and anthropology at Colgate University in Hamilton, New York, clearly does not

believe any of the humbug he writes about, for some reason he feels obliged to be objective, to give balanced accounts of everything. "My goal will not be to attack alternative ways of perceiving reality," he writes. "I have no desire to pronounce all magic superstitious flotsam — science gone awry. Nor do I wish to demystify magic and reduce it to a set of explanations that are inferior to my own scientifically trained way of understanding the world."

I find it incredible that an astronomer would not wish to say that belief in the magic he covers so well in his book is inferior to his beliefs as a scientist. It is this tinge of cultural relativism — springing no doubt from Aveni's anthropologist's hat — that, to an old debunker like me, detracts from the value of his history. For example, although Aveni surely knows that Ted Serios, the Chicago bellhop who projected his thoughts on to Polaroid film, is not a genuine psychic, he cannot bring himself to say this outright. Instead, after mentioning that magician James Randi can duplicate all the feats of Geller and Serios, he adds: "Does this prove that Geller and Serios are fakes? In other

words, does the possibility of fraud mean that it actually had occurred?" Later, Aveni soberly considers the theory of some parapsychologists that spoon-bending can result from the mind using quantum laws to alter metal.

Aveni certainly agrees with Houdini that Home was "a hypocrite of the deepest dye" yet, after publishing Robert Browning's damaging account of a Home seance, he has to "balance" it with Mrs Browning's high praise of Home. One longs for Aveni to abandon his curious notion that science and magic are somehow equally valid ways of seeing the world.

I would have liked to see some mention of Chinese and Hindu astrology, each of which is based on star patterns entirely unlike those of Western astrology. (If one is right, the other two are wrong.) His discussion of alchemy misses the intense labours of Isaac Newton. A chapter on anthropology deals with the sorcery of primitive cultures, but is silent on Margaret Mead's naive beliefs in magic and UFOs, and on modern anthropologists and sociologists who are deep into the paranormal. There is nothing about St



## Dabbling in the world of the waterfowl

The Wood Duck of North America (left) and the Mandarin of Asia are closely related species that have been described as the world's most beautiful wildfowl. *The Wood Duck and the Mandarin* (University of California Press, \$45, £28) follows the birds as

they court, search for nesting places, raise their young and migrate between their breeding and wintering grounds. The authors, Lawton L. Shurtleff and Christopher Savage, have studied the birds in the wild for many years.