The Editorial Essay of the October issue discussed forgery in art, pointing out the extraordinary value attached to original paintings and first editions of books as magically special. Copies, or later editions appearing identical, lack this magic and have much lower value. Opening a first edition of one of Darwin’s books is as close as we can get to the door of Down House, hearing the great man’s voice from his study.

A colleague, developmental psychologist Bruce Hood, is relating the sense of magic, and occult beliefs to processes of normal perception. In a recent paper “The Intuitive Magician: Why belief in the supernatural persists”, Bruce Hood looks to infant intuitive knowledge for the origins of beliefs in magic and the supernatural. He writes:

“I propose that a belief in supernatural forces originates in the same way that also lead us to rational explanations through what is called intuitive reasoning ... [which] emerges early in the development of knowledge ... a group of specific problem-solving mechanisms designed to manage different types of knowledge, rather than a general, all-purpose mental process.”

He asks:

“How do scientists form conclusions about a baby’s reasoning when language has not yet developed? Quite simply, they show the baby magic tricks.”

Bruce Hood goes on to say that although babies do not gasp or applaud with surprise at conjuring magic, such as objects suddenly disappearing, the infants look longer at apparently impossible sequences. He suggests that normal perceptual processes—filling information gaps, predicting—are the basis of magic.

He points out that the brain builds theories of the world to explain unobservable properties, such as invisible forces ‘seen’ in cartoon films, and collisions of billiard balls. Important, also, is belief in the unchanging essence of things, persisting through changes of appearance. And, there can be a sense of pollution from touching an object, such as clothing, owned by an evil person. This is the converse of being blessed with a sacred relic, or a first edition. Every word that Darwin published has just become available for free on the web; but I am willing to bet that this will, if anything, increase the value of early editions of his books—for one is buying into magic. One owns and touches a little of the essence of Charles Darwin.

Magical beliefs are often simply written off as irrational. Bruce Hood suggests that magical notions of hidden causes may usefully confer confidence and reduce stress. So, pragmatically, it may be rational to embrace irrational beliefs and customs. Indeed, when these are innate, there may be no practical alternative. Generally speaking, avoiding associations with evil and courting good is a sensible strategy.

Mysterious hidden forces are the bases of much of science. During his lifetime Newton was criticised for the magical action-at-a-distance of gravity; but this has not consigned his books to the shelves of occult fiction. Readers accept that there is magic in the universe, the weirdest appearing in quantum physics. At present, there is great debate on evils of irrationality and its threat to science thinking and teaching; yet the
acknowledged irrationality of art is not seen as a threat to science, and science itself has many self-supporting beliefs, standing up as bridges, created as much by imagination as following from data.

There is certainly logical discipline in science, with its all-important critical challenges—but can its history of rejected theories be written off as irrational? It would seem that rationality is not fixed, but follows developments and fashions of accepted understanding. Phlogiston (heat as a substance), the Aether (a medium carrying electromagnetic waves), élan vitale (life force) are just some ideas that were central to science and accepted as orthodoxy, but now look magically irrational. We are born with intuitive knowledge, modified by adult experience, and experiment and teaching. There seems always to be a background of magic.

It is not always the most likely theory that is accepted in science; for there may be attractive possibilities in less likely alternatives, and, of course, the more unlikely the theory or observation the more information, in the technical sense, it will provide. So rationality can hardly be equated with maximum probability of truth. It is hard to find a rational definition of rationality, and so for what is irrational.

The Socratic method is undoubtedly useful for exposing inconstancies in beliefs, and making assumptions explicit; but this is hard to apply to intuitive beliefs held implicitly, often recognised only from behaviour.

If the developmental psychologists are right, we start out and continue our lives with intuitive beliefs that may be deeply misleading, even downright dangerous. The lesson seems to be that we need to grow up. But can we grow out of magical beliefs? Wouldn't this be to reject art, and dismiss the wonder of science, as childish? Developmental psychology gives fascinating insights into the origins of beliefs that, throughout life, affect how and what we perceive.

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