

What should we believe?

Belief:

***What it means to believe and why our convictions are so compelling* (2018)**

by James E. Alcock

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Near the beginning of James Alcock's book, *Belief*, is an epigraph from the *Bhagavad Gita*: "Man is made by his belief. As he believes, so he is" (p. 43). This seems likely to be true of man, and also of woman. According to this precept, psychology has an important center in what we believe, and how we believe it.

There are several leading ideas in Alcock's book. The first is this. We easily make mistakes in our beliefs about the physical world, about ourselves, and about each other. So, if we are what we believe, then we had better try to make fewer such mistakes. Thereby we would become more rational. A second leading idea is to review the many things that human beings believe for which there is no valid or reliable evidence.

For any reader who would like a catalogue of insubstantial beliefs that people hold, it is hard to imagine a more comprehensive or better book than this. Alcock writes of each kind of such belief clearly. He indicates its weaknesses along with the problems to which its adoption can lead. Among the many kinds of belief that are covered are those of suicide-terrorists, things that are remembered

that did not occur, hunches and intuitions that turn out to be wrong, ideologies, propaganda, deceit, quack medicine, things that go bump in the night, magic on the stage. One can read on the Internet that Alcock himself is an accomplished stage magician, with this kind of magic being a mode in which what we see and almost believe is not what happens.

Into his extensive range of examples of people's beliefs, Alcock inserts critical pieces of psychological understanding. In this way, for instance, after Chapter 1, "Beliefs to die for"—sometimes in war, sometimes in feuds, sometimes for honor, sometimes in acts of suicide—comes Chapter 2, "Seeing is believing," which starts with optical illusions. This juxtaposition of chapters suggests that when people die for what they believe—a country perhaps, or a cause, or a religion—the belief for which they die might be based on illusion. In this Alcock argues what most psychologists now believe, that we humans have no direct access to reality. What we see and the way in which we understand the world are constructed by us. We accept input from the world: from our perceptual systems and from what people tell us. The ways in which we then construct our understandings from these inputs are based on our idiosyncrasies and our membership of the societies in which we live. So—warns Alcock—when we can choose what to believe, we had better be careful in doing so.

Chapter 3 is on learning and memory, with discussion of how much of what we remember is also constructed, and how findings about this kind of construction bear on what goes on in courts of law, with eye-witness testimony being not always accurate. Then there is a discussion of how phenomena of

recovered memories are sometimes affected by what therapists have said to their patients.

Alcock is on the executive council of the Committee for Skeptical Inquiry, and is a member of the editorial board of the magazine *Skeptical Inquirer*. He has been named as being among the world's most eminent skeptics. He has been, and in this book continues to be, especially dubious about parapsychology, belief in supernatural phenomena. He discusses extrasensory perception, when a person believes that she or he knows what is happening, or what someone is thinking, when there is no possibility of any direct perception or communication. He covers, too, psychokinesis, when a person seems able to move something without affecting it physically. His penultimate chapter is entitled "A caboodle of strange beliefs." It includes such matters as reincarnation, astrology, the works of psychics, and visitors from beyond the earth. He argues that for none of these supposed phenomena is there any good scientific evidence.

So what kinds of beliefs are most important to us? Which of them contribute most strongly to how we act, to who we are in ourselves, and to how we are with others? Alcock discusses "transcendental belief systems," for instance in religion. Here, he says: "Many religious parents, not to mention religious leaders, promote faith over reason when it comes to religious matters" (p. 138). Later in the book Alcock discusses transcendental experiences that have been regarded as spiritual but which, he suggests, might be better explained as altered states of consciousness, and compared with effects of psychedelic drugs, and with hallucinations that occur in psychotic states.

The conclusion, and principal recommendation, of Alcock's book comes in Chapter 20: "A firewall to folly." The firewall, he suggests, is the means to keep out destructive intrusions, that is to say beliefs for which the evidence is thin, or misleading, or non-existent. Here, he says:

Systematic application of critical thinking is our best defense against the appeal of false beliefs, the temptations offered by propaganda and con-artists, and our own tendencies towards self-deception promoted by intuition and emotion (p. 531).

Alcock ends his ending with eight suggestions of elements with which the firewall is to be built. They are of critical thinking. Here are four of them: "*We can all be fooled ... Be wary of your intuitions ... Beware of reliance on a single source of information ... Beware of mistaking coincidence for causation*" (pp. 531-533, italics in the original). In other words, the plea is for readers of this book to act like scientists.

Alcock's proposal, here, amounts to the suggestion that science should not be just an activity of a few people with equations and laboratories. It should be for all of us, in our day-to-day lives. What might this mean?

Testing our ideas is likely to be more complex than is suggested by the metaphor of the firewall to keep out false beliefs. For many issues we might start with an idea: a hypothesis, a sort-of pre-belief. To treat this in a scientific way requires that we operationalize it so that it can be tested empirically, rather than simply just looking out for further confirmatory instances, which is a method that can easily lead to error. Although Alcock doesn't mention Karl Popper's (1962)

work, it is relevant here. The tests we make should include those that could refute any conjecture in which we are interested. Only when it has been operationalized and tested in this way can a pre-belief become belief-worthy. Another problem is with probability, which Alcock discusses. We humans are simply not very good at thinking about probabilities.

We might reflect that methods of reasoning about hypotheses and inference, and about probabilities, were formulated in Western society only in the last few centuries. We might also reflect that, with this, only a small number of people have trained over the several years it takes to think scientifically.

Alcock raises fundamental questions about how what we believe affects how we live. He discusses Isaac Newton, thought by many to be the most important person to bring in the scientific age. Alcock writes that it was Newton who “forcefully demonstrated that there is a logical order to the world that can be understood through rational analysis” (p. 526). We might think, then, that Newton would be the sort of person to embody the principles that Alcock recommends. The matter, however, seems to be more complicated. Sarah Dry (2014) presents a project to review all of Newton’s private papers: notes, correspondence, and manuscripts. This written material contains about ten million words. In these documents, the subject matter of science and mathematics occupies some three million words. But, as Dry reports, in all this material, “Newton’s private writings on religious and alchemical topics, some 7 million words” (p. 209), are more than twice as plentiful as the manuscripts he left on science. Although we might imagine that Newton would be a person to be particularly skeptical of religious

beliefs, his unpublished and published writings make clear that he was not. Religious topics were what he preferred to think and write about. What are we to make of this?

One of the many virtues of his book is that Alcock invites us to think further than we may previously have done about such issues. He argues that, from the time of Newton onwards, belief in magic and such matters gradually began to disappear. That seems, indeed, to have been the case, but what might we think of Newton himself, along with the many successful scientists who have worked more recently, for whom religion has been important and who seem, in these matters, not to have built the kind of firewall that Alcock recommends? The question here is not so much about issues like magic, the shortcomings of which are indeed understood better today than three centuries ago, but about what beliefs in religion, and in certain kinds of political system, can mean to people, even when their bases do not comply with the standards of evidence required in science.

An extension of this question, that may also set readers thinking, is how religion can contribute to people's lives. Alcock discusses this, and offers three principles.

1. Religious beliefs provide coping mechanisms for dealing with stress and deprivation, thereby lessening the likelihood that the individual will suffer from anxiety and depression. Religious beliefs can inspire positive thinking, resulting in cognitive reappraisal of stressful events in a way that makes them more bearable.
2. Religions tend to embody important

rules about how to live one's life and how to interact with others ... 3.

Most religions encourage communal activities, which provide important social support (pp. 436-427).

Alcock then goes on to write that "while religion plays a central role in the lives of many people, a secular belief system that addresses these important needs can do the same" (p. 437). This is an interesting proposal. Should we regard it as a pre-belief, a hypothesis? It raises another question. How might research be conducted scientifically on how and whether the content of particular beliefs in religion, politics, and social systems, contribute to the building of communities, and to connections among community members? Research on such matters is only just beginning (e.g. Hayward & Krause, 2014).

The psychology of belief is fascinating. So how might we move forward? Critical thinking? Yes, certainly, as Alcock suggests. This would involve wider education in scientific methods and principles of inference, not just for a small number of people as happens at present, but for the many. An approach to critical thinking, addressed specifically to psychologists, is by Keith Stanovich (2012): *How to think straight about psychology*. The book is very useful. It is also popular; it is now in its tenth edition.

A major implication of Alcock's book is that we need more and better education. Even here, however, implications may not be straightforward. Frank, Gilovich and Regan (1993) found that people who completed a degree in economics, supposedly a science-based discipline, became, in the process of doing so, more likely to believe that we humans act only in our own self-interest.

Most of us, including James Alcock, may perhaps be pleased to know that the neuroscientist Tania Singer has found in experiments that this is not always true. The idea of universal self-interest, developed in the scientific age, has enabled economists to construct mathematical models from which rationally they make predictions. The economists' idea is a basic assumption—really a kind of pre-belief. Yes, says Singer, we humans can act in our own self-interest. We can be selfish, sometimes very selfish. She points out (e.g. 2015), however, that economic models based on this are defective in that they mistake the part for the whole. We are not always self-interested. Sometimes, even quite often, we act in the interests of others.

Implications of Alcock's proposals are not just about education. Among issues raised by this book are questions of what kinds of beliefs enable people to make their lives meaningful: beliefs about themselves and each other. In Western society, among the methods that have focused on this issue are those of psychotherapy. Substantial progress is being made, here, in showing empirically how well the different methods work.

And how might we compare beliefs that we can change with those that seem more permanent, beliefs that Alcock writes about early in his book, those deeper aspects in which we are what we believe, and by which we are enabled to make our way through life each day?

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Keith Oatley

Department of Applied Psychology and Human Development

University of Toronto, Canada