



It makes you think...



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The door of a bigoted mind opens outwards so that the only results of the pressure of facts upon it is to close it more snugly.

Ogden Nash (1902-1971)

The key lesson of the mathematics of scientific inference is ultimately very simple: the credibility of all evidence is a matter of trust."

Robert Matthews
New Scientist
2438:39-41

Does what you believe influence what else you believe? You will probably answer 'yes'. If you did answer 'yes', then your beliefs about the world and how it operates will be influenced by your belief about your beliefs.

If you answer 'no', then your beliefs about the world and how it operates will be influenced by your belief about your beliefs.

So it seems that whether you believe that your beliefs influence your beliefs or that they don't, they in fact do. Your very belief that they don't will dictate your answer to the question: 'Can anyone be objective?'. Your answer will be 'yes', because if your beliefs do not influence your view of the universe, then that view must truly reflect what is actually out there.

I answer 'Yes, what I believe influences what else I believe'. And, I believe that everyone's beliefs influence what else they believe. Therefore I believe that no-one can be objective. As a believer, I do not believe that there is a universe waiting to be discovered, observed, measured and described. All that can be discovered, observed, measured and described is what my beliefs allow me access to.

Those who believe that the universe exists independently of beliefs, to be objectively discovered, observed, measured and described, will live their lives consistent with those beliefs. And the universe will be consistent with those beliefs.

We were all brought up on a belief system - in fact a number of overlapping belief systems. Our parents had beliefs - two belief systems which overlapped to, probably, a large degree. Your relatives would each have had their belief systems. The school you went to would have represented an overall belief system, overlaid by the personal belief systems of your teachers. Your friends would have had their individual, developing, belief systems.

In this environment, you would have developed your own belief system. You have accepted or rejected information, ideas and thoughts, often without being conscious of the process. By adulthood, you would have developed a belief about the universe which did not totally overlap with those of your parents, siblings, teachers, friends or enemies.

Anyone who makes a discovery which upsets the majority of people in their society, will have had to move their beliefs from the predominant belief system. An example is the discovery by Copernicus that the Earth moved around the Sun — this was directly opposed to the predominant belief system that the Sun moves around the Earth.

Before he was able to make his discovery, Copernicus would have to at least have been willing to think outside his existing belief system. And he is not alone. Before anyone can contemplate that what they see or hear or taste or feel or smell means that the universe is different from the way others believe it to be, that person needs to be willing to encompass a new set of beliefs. If they are unwilling to do so, they will ignore or dismiss the information they have.

It is inconceivable that any researcher is not influenced by what he or she believes. There is even evidence that what a person believes can influence the very conduct and results of an experiment — not just the conduct of the experiment, but the way things/animals/people in the experiment behave. An article in a recent issue of *New Scientist* (13 March 2004, p. 34) looks at the so-called 'experimenter effect', specifically in the area of parapsychology research. Then, in the same issue of *New Scientist* (p. 39) there is an article about the paradox that the more entrenched someone is about a belief, the more entrenched they will become as evidence mounts up that they are wrong in holding that belief. Thus, many sceptics are not sceptics at all — they are entrenched non-believers.

What is there to be learned from this?

I believe that ideas follow fashions or trends and that anyone who thinks unfashionable or un-trendy thoughts, will have an extremely hard time getting others to take on their ideas, no matter how good the evidence. Add to this the idea that many current beliefs are vigorously maintained and protected by people and institutions which benefit from those beliefs, and it becomes clear that it is very difficult to change the predominant belief system. Try and get action based on a new belief, and you will face trenchant opposition.

The current fashion of EBM (evidence-based medicine) is such an entrenched idea. It is based on the premise that objective evidence must be applied to the practice of medicine. But, I would ask, whose objective evidence?

Can anyone be objective? The short answer is 'no'. If I ask whether anyone can claim to be objective, the short answer is 'yes'. Anyone can make that claim, but the claim does not make it so. Or does it?

