## From the Kitchen

## 17 August 2011



What are the consequences of patients being fed information about their health by the media, and then consulting doctors who do not have the time to keep up with important developments in medicine? This question and the answers to it are complicated by the quality of the information which each relies on.

The issue of too much information pervades our lives. The Internet can be a goldmine. However, if you don't know what gold looks like, you may well be satisfied with anything that glitters. Gideon Haigh pointed out in a thoughtful article in *The Monthly* magazine<sup>1</sup> that a Google search on any topic will bring up the pages most looked at by others or with the most related links to them, but that this may not be the most accurate or reliable information.

Because there is such an overwhelming amount of information on almost any subject you might be interested in, you need to rely on other people's ideas of what is important. You are unlikely to have direct access to the means of getting to what is accurate. Again, we can ask: what is real? And how would you know? What rules of judgement do you apply? Is the most popular the most believable?

There are some 500 000 medical articles published annually. How can any practising doctor keep up with this? S/he can't! The doctor has to rely on people who earn a living digesting the material in these articles and drawing conclusions from them. But these digesters are rarely practitioners. Add to this the fact that the majority of medical articles are reports of trials which are set up in a controlled (i.e. artificial) way to allow statistical analysis, and that the information in these digests (including meta-analyses) is quite removed from what is useful to a doctor trying to help a particular patient.

Any doctor you consult has beliefs based on hospital, university and specialist training, where the teachers presented the consensus knowledge. By the time the doctor has ten years' experience in practice, that knowledge may be more than twenty years old. The information the doctor has added in that ten years will have come largely from the digested medical literature and from pharmaceutical companies. The most reliable and useful knowledge that that doctor will have after ten years is his/her clinical experience: what works and what doesn't work.

How do engineers keep up with the burgeoning body of knowledge in their field? What about industrial chemists or physicists?

How can a lay person form opinions on any subject based on published information? Are your beliefs based on verifiable facts or are your beliefs based on ... well, on beliefs?

You drive across a bridge in the belief that the engineers who designed it knew what they were doing. Or is it pure trust? If so, trust based on what?

The people working in the World Trade Center believed the buildings to be safe, as no doubt did the architects and engineers who designed it. No-one predicted the towers would collapse because of the fires near the top.

We trust authorities to do the best possible to make air travel safe and secure. Yet we learned in 2005 that there were important failings in security arrangements at Australian airports and that crime there was rife.<sup>2</sup> Did hearing about this change your beliefs about the safety of air travel? Did it change your behaviour? Did it change your beliefs about other things?

Did you perhaps not hear about the report and, thus, continue your belief in and trust of the system 'blindly'?

Our society operates on people's trust. This trust is based on beliefs. The political system is possible because of trust. The whole economy is based on trust. Money has no inherent value – only the value we agree to place on it. When you accept a cheque or currency from your employer for having worked for a week, you believe that others will place the same value on that cheque or currency as you do – the bank, the restaurant, the local supermarket, the gardener, etc. When that trust disappears, when the belief in the value of the money changes, the economy collapses.

Are you even aware of the extent to which the society you are part of operates on the basis of your beliefs and those of others? You could say that we live in a make-belief world.

The stock exchange similarly relies on make-belief – the market value of shares often bears no relation to the 'real' value of a company.

## John Lily wrote<sup>3</sup>:

"In the province of the mind, what one believes to be true either is true or becomes true within certain limits, to be found experientially and experimentally. These limits are beliefs to be transcended."

In other words, John Lily tells us that we create the world around us with our beliefs. I hark back to Columbus' ships, the presence of which seemed not to be noticed by people whose beliefs had no way of encompassing their presence.

What Lily also seems to be saying is that we limit our reality by our limited beliefs and that we can expand that reality by transcending our limited beliefs. In other words, we can have the world be any way we want it to be. While this may sound like hocus pocus, it is probably true that those who invent startlingly new things or come up with strange new theories, are able to transcend their earlier beliefs.

Copernicus was able to transcend the almost universally-held belief that the sun moved around the earth. Newton was able to make a leap of imagination and come up with the idea that there is a force which holds heavenly bodies in each other's thrall. Einstein was able to make a further leap to imagine gravity as being a curvature of space-time.

Many current theories about the way the universe is constructed are attempts by people to transcend limits of belief. When we hear or read about string theory or 'branes', or that there are ten or more dimensions, or that this universe started because of an explosive event in another universe, it beggars belief. We find it difficult to transcend our limited beliefs. There is little if any connection between what the theorists would have us believe and our own direct, sensory experience. It is akin to religious belief, where we have no way of knowing through our senses.

- 1. The Monthly, February 2006, p. 25
- 2. "Independent Review of Airport Security and Policing." Sir John Wheeler, 21 September 2005.
- 3. The Center of the Cyclone; an autobiography of inner space. John P Lily, 1973.