## From the Kitchen

17 January 2016



"What's in a name?" Call a rose a squirrel, it will smell the same. Or will it? Would my preconceived idea of what a squirrel smells like – I've never smelled one – change my experience of the flower's scent? Was Shakespeare wrong?

How much of what we experience is mediated by our expectations and by what we believe? Some philosophies hold that our entire world is created by our own thoughts; on the other hand, many people believe that the physical world is out there, ready-made, and we rattle and bounce along like a ball in a pinball machine. If the 'we make our world through our thoughts' (MOWTOT) philosophies are right, then so are the pinball people.

How can any of this be tested? If it can't, it is not worth considering further, because any untestable theory is no more than a belief and does nothing to advance our understanding. We can but speculate, although perhaps those speculations will lead us to testable theories.

How do the MOWTOT philosophies deal with the continuing discoveries about our planet and the rest of the universe? Do we discover new things because people start believing them into existence? Why would those discoveries then be available to everyone, not just those who 'dreamed' them up?

When you see drawings and paintings made by English artists very shortly after the first convict fleet arrived in 1788 in what is now NSW, the animals and plants bare little if any resemblance to the way we see them today. It seems that the artists were only able to see them through minds that were used to seeing animals and plants on the other side of the world. This would indicate that they either could not see them as we 'know' they are and must have been then, or the shapes of these things have changed with time. Most people would say that the latter is not possible. And then there are the Aborigines, who drew and painted them differently again. Which representation is correct?

Our language may limit or expand how we see the world. In English we either wear our overcoat or carry it (if it is too warm to wear it). In many other languages that distinction does not exist, the one word meaning both to wear and to carry: for instance, in Dutch it is *dragen*, in French, *porter*. Only context may convey the intended meaning.

We have distinct words in English for different kinds of precipitation: rain, sleet, hail, snow, drizzle. Other languages may not have distinct words for each of these, describing one as a modification of the other, such as 'sleet' in Latvian, which is rendered as 'rain with snow' (*lietus ar sniegu*). Would someone from Latvia therefore experience sleet differently from the way I do? If so, would there even be any way for us to describe that difference to each other? In English we do have such 'mixed' descriptions, e.g., freezng rain and ice needles. We also borrow the German *graupel*, as there is no English word.

The way we perceive colours and the colours we perceive are tied to the equipment we have available. This equipment includes the structures in our eyes and the way our brains

interpret neural impulses. We say that some people are 'colour blind' and they see arrangements of coloured dots (as in the Ishihara plates) differently from those with 'normal' colour vision. The equipment also includes our computer and smart phone screens. My first colour computer monitor (a bulky CRT device) could display only 256 distinct colours; my current LED monitor can display more than sixteen million. I probably cannot distinguish that many subtly different shades, whereas others may be able to.

How is my perception of colour coloured by the language I have available to describe it? The rainbow is said in English to have seven colours (apparently only because Newton decided that the mystical number seven was appropriate and split the sixth colour into indigo and violet). But what about the places where red transitions into orange or green becomes blue? I have been involved in arguments about whether we were looking at a green sea or a blue sea. Some linguists argue that the ancient Greeks may not have had a word for the colour of the sea, leading to Homer rendering it as the "wine-dark" sea.

In the days of intrepid sailors setting forth from Europe, they often came back with tales that were unbelievable to those who had stayed put; or they brought back pelts of animals that those who believed that they knew all there was to know labelled as fraudulent artefacts. This was the case with the first platypus shipped back to England from Australia – in 1799, Dr George Shaw had no conceptual framework when confronted with this apparent enigma and he set to with scissors, looking for the stiches that held the 'duck bill' to the body.

To return to Shakespeare: he was correct when he had Hamlet say to Horatio, "There are more things in heaven and earth ... then are dreamt of in our philosophy."