

Chapter 43

Of Cabbages and Crystals

A little spider just ran across my desk toward me (we don't get big spiders in Scotland). It gave me a start as I caught the movement out of the corner of my eye. It was one of those fast ones but – man v spider – I managed to catch it in an envelope and expel it alive from the building. I now feel like Jim Corbett, although, truth be told, our only similarity is the inclination to write about it.

It's just too easy to kill these tiny creatures, but what a marvel of nano-biotech they really are. Not surprising that, overcome by wonder, so many human beings attribute such skill to a Creator. Although many have tried to educate away such childlike incredulity from the population, a major enigma still remains: have you ever stopped to look at a little dead fly and wondered, '*What is it that makes the difference between a fly that's dead, and a fly that's not?*' Or, on a more solemn note, a human body that is dead, and one that is not. The answer is of course, life itself, and it is a very great and enduring mystery.

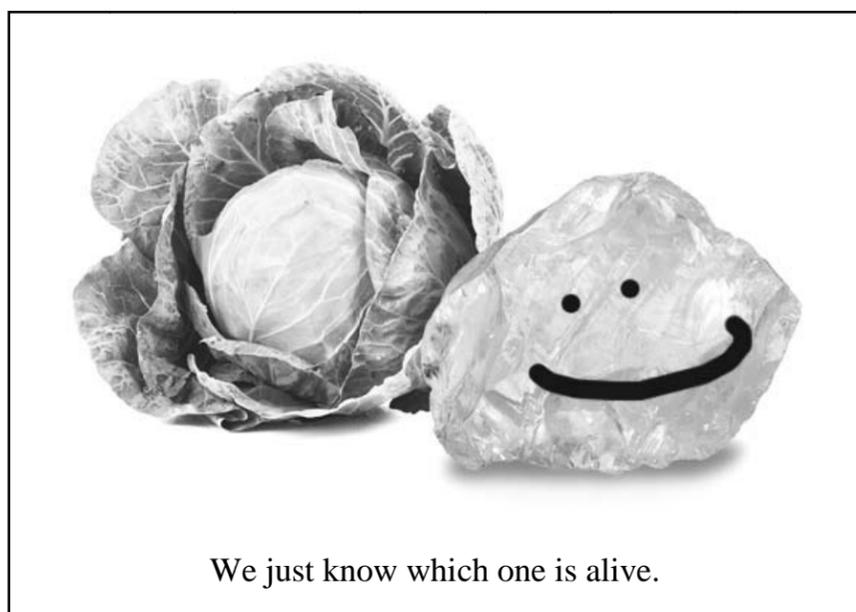
Reflection... A whole branch of science has now sprung up known as biomimetics which seeks in our own (by comparison) clumsy way to emulate nature's genius, with designs based on the fur of polar bears, the hydrophobic properties of leaves, the ability of geckos' feet to instantly reverse their adhesion, etc – even the Wright Brothers were inspired by pigeons!

Orphans of Nature

The Australian philosopher David Chalmers said in a 2014 *TED Talk*, "*Understanding consciousness is a real key, I think, both to understanding the universe, and to understanding ourselves.*"^a But what does it even mean – to understand consciousness?

When we are small we learn that a cabbage is alive whilst a crystal is not^b. After that, we just *know* (or maybe we already knew). Our instinct is to maintain a very sharp division between the animate and the inanimate, the sentient and the non-sentient, that which is alive and that which is not; which is strange when you consider that the default position of science – widely considered the pinnacle of human knowledge – is materialism. In other words, the view is largely taken for granted that both life and death are merely the chance arrangement of chemicals. Essentially, we are being instructed to overrule the heart with the head, which, let's face it, never really works.

Philosophically, modern science likes to distance itself from René Descartes and his 'dualism' of mind and body. Dualism is outdated and unfashionable (and of course René didn't do himself any favours with his attitude toward animals), but I suspect its major sin is that it is too mysterious and,



^a https://www.ted.com/talks/david_chalmers_how_do_you_explain_consciousness?language=en#t-3247 - Accessed 6th July 2016

^b Of course there are those who maintain that crystals are alive, but we won't go there.

if real, threatens to place the whole realm of life outside the domain of the physical sciences, which would never do.

Historically, many cultures have taken the oneness of life and nature in a whole other direction from science's cold and dispassionate stance. The Australian Aborigines for example, whose place in the grand sweep of nature and the unseen realms of mind and spirit is not so easy to define, have traditionally experienced themselves as a holistic mixture of all that is, and might find it hard to imagine themselves apart from nature, or required to be 'objective'.

Chief Seathl of the Duwamish tribe, who lived in what is now the state of Washington, is said to have written to President Franklin Pierce in 1855, "*We do not own the freshness of the air or the sparkle of the water. How can you buy them from us?*"; whilst the famous Crazy Horse declared, "*One does not sell the land people walk on.*" Not one for a quick buck old Crazy Horse. How could man – a mere speck in nature's eye – 'own' parts of the land? To many of the indigenous nations of North America, the European concept of owning the land seemed foolish. It was obvious to them that the human being and the land were all part of the same, greater whole, which all belonged to the Great Spirit (or whichever conception thereof was culturally held). Instead, understanding the brevity of their sojourn through the grand scheme of things, they experienced the sense of stewardship and responsibility expressed in this ancient American proverb,

Treat the earth well: it was not given to you by your parents, it was loaned to you by your children.

We do not inherit the Earth from our ancestors, we borrow it from our children.

But the 'Western' mindset is very different... Historically, with *Rule Britannia, God Bless America* or whatever ringing in our ears, owning stuff has never been a problem to us. When we die we just 'leave it' to someone else. To the cultures of European, Middle Eastern, and even Eastern origin – and all those adopting a 'westernised' approach – the natural world is out there to be claimed, partitioned and exploited. This has brought a sense of administrative order but also, fostering greed, great injustice and oppression.

In our minds we feel ourselves somehow separate from the land, orphans of the natural world. No longer *subject* to nature we have become the masters of all we survey, and now we have even reached out to tow the moon, the planets and the asteroids into line. But now the environment is rising up to bite us in the butt, reminding us that *we borrow it from our children* after all.

Just maybe, we chose the wrong system.

Roses are White

The world of science, proud as it is of its rise, still struggles with the idea of a distinction between consciousness and the physical universe. But technically, although the scientific method has proved extremely resilient (particularly when combined with the gun) it has no more claim on the *whole* of reality than any other worldview – a word which the Free Online Dictionary defines as: '*The overall perspective from which one sees and interprets the world.*'^a

^a <http://www.thefreedictionary.com/worldview> - Accessed 25th Aug 2017

Our culture polices the boundaries of knowledge according to the prevailing worldview – for us the scientific method – insisting it must be the only arbiter of reality. Aware that life's boundary is hazy, the response of science is to deny the boundary's existence, along the lines of... *roses are red, but here is a white rose, well it can't be a rose then because roses are red...* If something cannot be accessed via repeatable experiment and mathematics, we treat it with suspicion or discredit it as superstition.

Scientifically, life tends to be regarded as a mind-bogglingly complex, but not miraculous, molecular process – the ‘*collective property of the neurons in your brain*’^a approach described by Graham Lawton, Editor of the UK *New Scientist* magazine. Consciousness, morality, free will, purpose... these are all crammed into the folder of physical reductionism which acts as a respectably intellectual explanation. As a result, many scientists give little thought to the mystery of consciousness. Indeed there has been resistance bordering on hostility, as physicist Roger Penrose confirmed in a 2004 interview with the Observer,

“Yes, I got it in the neck... Colleagues liked my equations but not the contentious stuff about the mind and urged me to write a straightforward book on physics.”^b

In a corporate act of regression to what Werner Heisenberg termed a ‘*rigid frame of concepts of the nineteenth century*’^c, it would appear that many perceive the very mind they employ to investigate the natural world as largely irrelevant to the enquiry. However, as one of my friends once quipped, “*We are all going to be seen to have been wrong, but nobody has a monopoly on it.*”

So is denial really the way forward? Galen Strawson, Professor of Philosophy at the University of Texas, Austin, certainly does not agree, going so far as to maintain that consciousness is not actually the thing that’s the mystery, because,

‘... we know exactly what consciousness is... It’s the most familiar thing there is, whether it’s experience of emotion, pain, understanding what someone is saying, seeing, hearing, touching, tasting or feeling. It is in fact the only thing in the universe whose ultimate intrinsic nature we can claim to know. It is utterly unmysterious.’

He reminds us of the answer that Louis Armstrong is said to have given to someone who asked him what jazz was: “*If you gotta ask, you ain’t never going to know.*”

Strawson continues, ‘*The nature of physical stuff, by contrast, is deeply mysterious, and physics grows stranger by the hour.*’^d



^a New Scientist, *I am the One and Only*, Graham Lawton, 23rd Feb 2013

^b <https://www.theguardian.com/books/2004/aug/15/scienceandnature.features> - Accessed 7th June 2017

^c Werner Heisenberg, *Physics and Philosophy*, Penguin Classics 2000, (original copyright 1958), P138

^d <https://www.nytimes.com/2016/05/16/opinion/consciousness-isnt-a-mystery-its-matter.html> - Accessed 5th Feb 2017

The Hills are Alive

Looking at the bigger picture it is truly fascinating how different cultures have endeavoured to solve the riddle of consciousness in polar opposite ways. Whereas some view consciousness as emergent from physical complexity, others, such as those who follow the Hindu^a faith, may view it the other way round. Indeed, to the animists the very rocks are alive, and it is the physical world that is somehow generated by a universal consciousness – a view to some extent shared by Max Planck, father-figure of modern science, who declared, “*I regard consciousness as fundamental. I regard matter as derivative from consciousness.*”

So, who’s right? Looked at in terms of our *Flatland* Dimensionality, these two polarised worldviews may actually be two sides of the same coin. In a 2005 article on *LiveScience.com* Ker Than writes,

‘Instead of trying to reduce consciousness to something else, [David] Chalmers believes consciousness should simply be taken for granted, the way that space and time and mass are in physics. According to this view, a theory of consciousness would not explain what consciousness is or how it arose; instead, it would try to explain the relationship between consciousness and everything else in the world.’^b

In the article, Oxford pharmacologist Susan Greenfield is quoted as opposing his view, being firmly of the opinion that any breakthrough on consciousness must needs ‘explain’ consciousness. However, Chalmers has a point: physics has thus far not succeeded in *explaining* what space, time, mass and charge are, and has been forced to accept them as is^c. Therefore the same standard should, technically, be applied to consciousness.

Perhaps we need to step outside of our cultural bias whatever that may be, and consider the possibility that the 4th Dimension may act as a kind of bridge between the non-sentient and the sentient, between the lower dimensions and the higher, such that the consistent geometrical principles of EA Abbott’s *Flatland* are able to describe unflinchingly the relationship of consciousness to the established quantities of physics. In such a case – without taking anything away from either – the sharp distinction between the two melds into a whole new paradigm which might be expressed as follows: *what we experience as exhibiting life or not may be the result of our shared (4D) central position on the dimensional structure as a whole.*

Such centrality ought not to surprise us since science has already shown that living things occupy something of a central position between the quantum micro-world and the macroscopic cosmos. In addition, as we have seen, the dimensional structure indicates that each and every observer may be considered the occupant of the centre of one 3D spherical cross-section of our 4D universe. To facilitate this centrality – this observer-centricity – we are about to investigate the idea that the 5th Dimension may be the place where the spine of the dimensional structure passes up through the individual.

In other words, we *are* the dimensional structure.

^a <http://blog.sivanaspirit.com/the-hindu-concept-of-the-mind-and-consciousness> - Accessed 5th Feb 2017

^b <http://www.livescience.com/366-great-minds-grasp-consciousness.html> - Accessed 23rd April 2017

^c Of course the faithful will argue that, one day, all things will be explained by science.