

## Permaculture in Chester, Week 4: with Jack Hunter.

Proposed dates for field trip – weekends 7<sup>th</sup> April or 14<sup>th</sup> April.

We have Jack for 2 weeks while Steve is in Uganda. [jack\[at\]sector39.org.uk](mailto:jack[at]sector39.org.uk)

He's just gained a PhD in Social Anthropology, on spirit, mediumship and consciousness. He completed his PDC in Chester last year, and teaches Psychology, Sociology and Religious Studies. He does alternative cultural approaches to tackling climate change, like folklore and myth, with One School, One Planet. He does cross-curricular permaculture courses in secondary schools and post-school education. He's developing a PC textbook for schools. He finds farmers' children are negative (what can PC teach us farmers?) He has to tell them farming's at the forefront of tackling the problem.

### **Systems Thinking and Feedback in Nature**

Apply self-regulation and accept feedback – “The sins of the fathers are visited on the children of the seventh generation”.

A **system** is a set of things working together as parts of a mechanism or interconnecting network; a complex whole

To understand its importance, look at its opposite – **reductionism**. Scientific and industrial revolutions were built on a form of reductionist materialism. Work on elementary particles gets stacks of money, while social sciences gets little. We've tended to work on Newtonian mechanics, looking at discrete entities – ‘the best way to understand things is to break it down into smaller parts. The whole can then be understood in terms of its parts.’

In *Animate Earth*, Stephen Harding (2016, p38) described “Reductionism is built on a broader set of important assumptions, such as that objects matter much more than the relationships between them, that the world is ordered hierarchically, that knowledge can be objective, and that the knowing intellect can detach itself from the material world in order to attain a purely objective, 'God's eye' view of any given phenomenon.”

Rene Descartes held that animals could be reductively understood as automata. Only 2 years ago Cambridge scientists recognised animals had consciousness. We reckon plants have too.

Breaking complex ecosystems has led to our current mess. Reductionism ignores fundamental connections between component parts. In Alberta, the ‘overburden’ (ecologically rich forest) is removed for access to one element – tar sands.

Similarly we grow monocultures.

“We cannot solve our problems with the same thinking we used when we created them.”

Albert Einstein

Read more at: [https://www.brainyquote.com/quotes/albert\\_einstein\\_121993](https://www.brainyquote.com/quotes/albert_einstein_121993)

Systems thinking emerged in the 1920s, thanks to biologists, psychologists, ecologists. It's not really new but only started being taken seriously then. Hence Ecosystems and Social Systems.

Notable Anthropologists Gregory Basin and Margaret Mead.

“The whole is greater than the sum of its parts” So best understood in terms of relationships, not constituents individually.

James Lovelock realised you could detect life on alien planets by looking at the atmosphere; there's an active relationship between the atmosphere and biological life. So astronomy beats sending a probe all that way.

<question – does increased CO<sub>2</sub> lead to increased photosynthesis – answer for next time>

Theodore Roszak, writer of ‘Voice of the Earth’, coined eco-psychology and counter-culture.

Rozzak said life took charge of the global environment in a creative way....

The goal of life is global homeostasis.

Lovelock avows ‘Gaia’ is just an analogy, but could there be intelligence in nature?

Rupert Sheldrake, of ‘The Science Illusion’, is matter unconscious?

Theosophy.

Watch ‘[Daisy World](#)’, short video from NASA. Lovelock showed how self-sustaining the world can be.

Feedback can be: negative, as in prey and predators

Or Positive, as in motivation and success.

Dynamic equilibrium is sensitive, like cycling – you can fall off.

Self regulating systems can only maintain homeostasis within certain limits. If exceeded, the collapse or undergo radical change. Like your body temperature is held within certain limits, outside of which you're ill or die.

Earth has limits too.

Two short films – [how wolves change the course of rivers](#), and [how whales change climate](#).

Capra – all phenomena are interrelated and interdependent, be they biological, physical, psychological, social or cultural.

Systems thinking encourages us to think of ourselves as part of ecology.

Many indigenous and traditional societies already live in sustainable symbiosis with their ecosystem.

Animists are people who recognise that the world is full of persons, only some of whom are human. (Harvey, 2005, page xi)

Roszak reasons animism can have ecological utility, and make humans more ethical.

The Whanganui River in New Zealand now has legal status as a person. Gerard Albert, on behalf of Whanganui, said we are part of ecology.

Older ways of respecting environmental features have been built into folklore.

PC is a design system rooted in ecological observation. It can help us restore, even enhance, ecosystems damaged by humans. "If it goes mainstream, the benefits could be staggering"

Another reference – Cutting Edge Anthropology – "How Forests Think...", E Kohn, 2013