

### Working on and Learning for Sustainability through Networked Learning NL Conference Maastricht April 2012

# Working with action research and systemic thinking/ practice

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Notes towards a conversation







Environmental sustainability as 'the capacity for continuance into the long-term future'

(Porritt, Jonathan, 2007:33, *Capitalism as if the world matters*)

Thoroughly interwoven with issues of social (in)justice

Current challenges call us to review the purposes and practices of all we do, including networked learning







### Action research and systemic thinking/practice...

As resources for *living life as inquiry* in a complex unfolding co-created oftenpolitical world – in challenging times

- Take shape and become alive in practice what are our/my purposes and what is our/my inquiry <u>here</u>?
- Concerned about climate change, loss of biodiversity and more and our seeming inability to do much to address such issues
- Curious about recurrent patterns and resilience amidst apparent or rhetorical change
- We need radical learning to engage with challenging issues

Any/all of us as potentially *taking* leadership for sustainability tempered radicals – inside-outsiders (Meyerson and Scully, 1995; Marshall et al, 2011) institutional entrepreneurs (Hardy and Maguire, 2008) All embedded in growth-addicted societies





### Working with systemic thinking and practice

Informed by work of Gregory Bateson (Steps to an Ecology of Mind ) & others

- Attending to patterns of relationships rather than 'things' (is no 'system' tho tempting image)
- Complex patterns of interconnection
- Feedback loops negative (balancing) and positive (amplifying)
- Questioning how we 'punctuate' the world, draw boundaries, create separations eg humans-nature
- Notions of cause and effect are arbitrary
- 'Effects' are often distanced in time and space from their 'causes'
- Emergent properties
- Apparent 'stability of self-organizing systems is utterly dynamic and must not be confused with equilibrium' (Capra, 1982:309)
- '... the organism which destroys its environment destroys itself. The unit of survival is a flexible organism-in-its-environment.' (Bateson, 1972:426)
- 'Of course, the *whole* of the mind could not be reported in a *part* of the mind.' (*ibid*:408)
- Our understanding will always be partial value of distributed intelligence, approach of *continual inquiry*, creating/attending to feedback loops, ongoing learning orientation
- Privilege and entitlement of the view rights we take









### Sustainability as an epistemological matter

- 'If you put God outside and set him vis-à-vis his creation and if you have the idea that you are created in his image, you will logically and naturally **see yourself as outside and against the things around you**. And as you arrogate all mind to yourself, you will see the world around you as mindless and therefore not entitled to moral or ethical consideration, The environment will seem to be yours to exploit. Your survival unit will be you and your folks or conspecifics against the environment of other social units, other races and the brutes and vegetables.
- If this is your estimate of your relation to nature *and you have an advanced technology*, your likelihood of survival will be that of a snowball in hell. You will die either of the toxic by-products of your own hate, or, simply, of over-population and over-grazing. The raw materials of the world are finite.
- If I am right, the whole of our thinking about what we are and what other people are has got to be restructured.' (Bateson, 1972:436-7)







Systemic thinking helps us to consider....

Recurring patterns generally

- eg potential rebound effects re climate change actions...

Exponential curve of carbon emissions despite world summits etc\*

Eg Rise of 21.85% in UK CO2 emissions between 1992 and 2008 Also UK has contracted out lot of production related carbon emissions to more carbon-intensive economies (especially China)

Despite eco-efficiency measures

Despite making 'the business case' for sustainability – ie arguing for the environmental and social in economic terms - the 3 pillars (?!) of the 'triple bottom line' [need to recognise economy as subset of ecology – **not** the other way round]

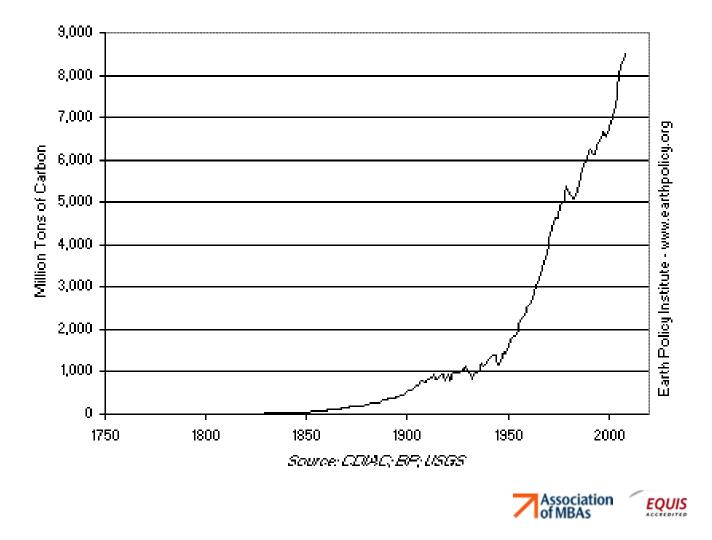
\*but collapsing life to numbers (esp economics) is a dimension of our problems – can we attend more to qualities?





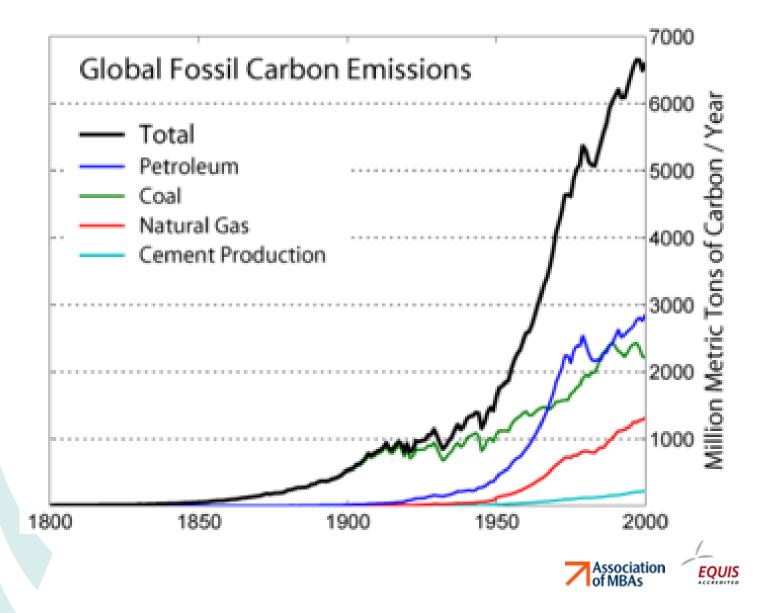


#### Global Carbon Dioxide Emissions from Fossil Fuel Burning, 1751-2009













## If everyone in the world lived like an average European we would need three planets to live on...



One Planet Living is a global initiative based on 10 principles of sustainability developed by BioRegional and WWF.





## What contributions are information and communication technology (ICT) making?

'Technology analysts estimate that the manufacture, use and disposal of ICT equipment contribute around 2% of global emissions of carbon dioxide. This is about the same as aviation....'

UK Parliamentary Office of Science and Technology postnote *ICT and CO2 emissions, Dec 2008 #319* 

Footprint of world's data centres currently 1/4% of global greenhouse gas emissions and escalating – heading for >1%?

Berners-Lee, Mike (2010) How bad are bananas? The carbon footprint of everything

ICT can also increase energy efficiency and reduce emissions in other sectors – and its own

ICT as embedded in/reflective of/ promoting consumerist growth society?

Who is noticing? What are they noticing?

How are these issues represented and debated in NL communities?



### 'Rebound' effects?

Eco-efficiency reduces costs - so we may use more – or we may spend the 'savings' on other things (eg a plane trip)

The additional financial profit of 'savings' contributes to the economic bottom line and fuels current forms of capitalism

Ineffective change approach?

The more things change, the more they stay the same?

Espousing change we seem to be heading in the opposite direction

Some of the many tensions and contradictions in seeking to act for sustainability – *seen through systemic thinking* 

So what then can we say, do? Time for major review!!



EOUIS





No idea?!

Are we puzzling with inappropriate mind – and sense of mind?

What does learning now need to mean?

Perhaps we should stop talking?

Tentative offerings.....







### Offering from.... Action research and inquiry

Ever-provisional attempt to act reflexively with a sense of agency and integrity in complexity - experimenting, learning

AR – a multi-dimensional tribe – from organizational consulting to participatory action research

Core characteristics of action research (?):

- Concerned with knowledge in practice
- Iterative cycles of action and reflection
- Working with multiple ways of knowing
- Seeking collaboration, participation
- Disciplined and Emergent and developmental
- Values-aware concerned with worthwhile purposes human & ecological flourishing
- Sensitive to context & timing go against/disturb as well as seek to fit in
- Paying attention to issues of power







1 way to tell the AR story – group different forms in terms of their main focus of activity

- 1st person inquiry someone adopting an inquiring approach to their assumptions and actions – reflexivity and its conundrums
- 2nd person inquiry people inquiring together into issues of mutual interest
- 3rd person inquiry seeking to prompt inquiry in a wider community – organization, town, professional network etc.

Blending 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> person inquiry

In relation to and influenced by systemic patterns and multiple processes of power – which people seek to engage with reflectively - *dancing with systems* (Donella Meadows)





## An example of integrating action research and networked learning

### The Leadership for Sustainability Learning Network (LSLN)

Bringing people from different sectors together in a voluntary learning network (outside formal education) to support them in taking leadership for sustainability

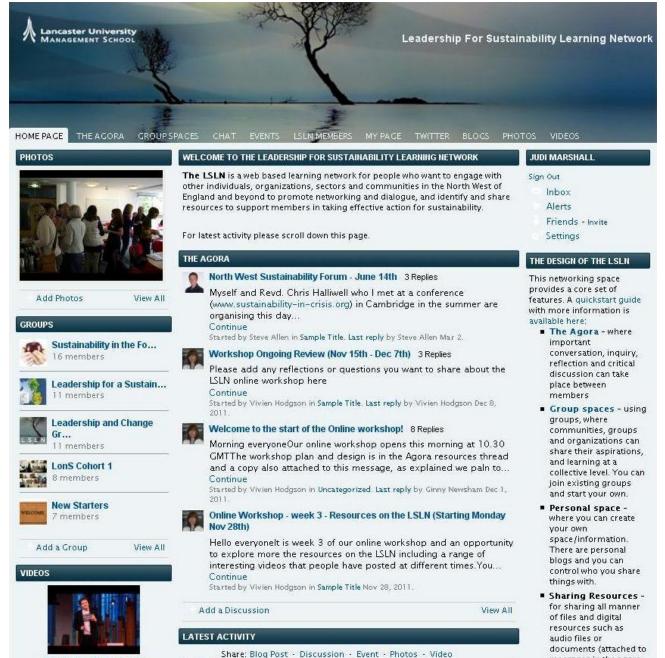
Connecting people and network resources through Agora forums; group spaces; personal space; resource & links sharing etc

Vivien Hodgson and Judi Marshall Higher Education Innovation Funded Project From August 2009 and ongoing

www.lums.lancs.ac.uk/departments/dml/lsln







**TEDxEast - Bjarke Ingels** - Hedonistic Sustainability

messages in the agora or group forums) as well as photos and videos



Enacting systemic inquiry – steps towards learning for sustainability?

- Accepting incompleteness living thru attitude and practices of inquiry
- Accepting that we are '*learning within the unknowable*' Flood, 1999:129
- Connecting up feedback loops
- Putting information into systemic patterns where it has not been before working with what unfolds
- Potentially learning re systemic patterns thru feedback –

eg first attempt at a solution may well be a symptom of the problem

- Seeking control is often damaging and futile including for aspiring change agents – sensing as we go....
  - "... anyone who honestly believes that they have everything under control is seriously out of touch with what is going on." Flood, 1999:91
- Working with critical questions
- Continually questioning purposes and criteria for judging what initiatives are potentially ecologically wise and socially just





Lancaster University

By what criteria judge initiatives as potentially ecologically wise and socially just?

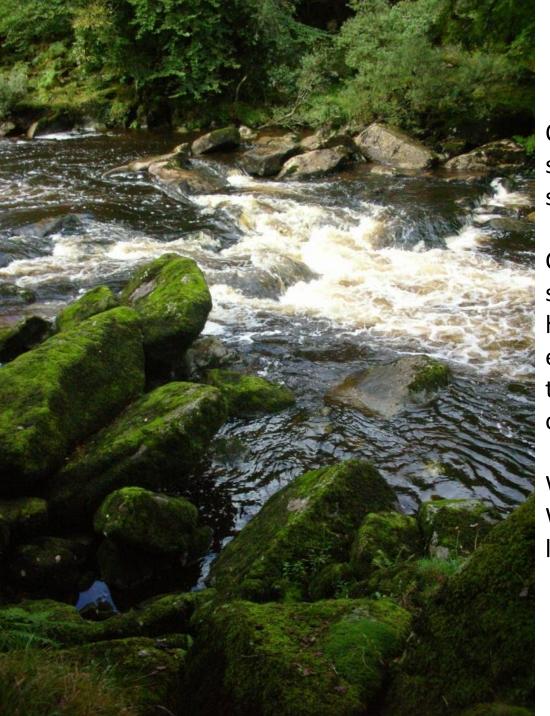
Eg Sachs, Loske, Linz et al (1998) – proposals for developing a sustainable Germany - suggest paradigms as guides:

Moderation in time and space A green market agenda From linear to cyclical production processes Well-being instead of well-having Intelligent infrastructures Regeneration of land and agriculture Towards a liveable city International equity and global solidarity

Then it will depend on how we enact them







One of the places I hold dear and seek to answer to: the River Dart & surrounding woodlands Devon UK

Clambering four-limbed over the slippery mossy boulders under low hanging tree branches at the water's edge - an embodied image of what it takes to live within the earth community

Who/what do you answer to? What are your embodied images of living 'sustainably'?



