

## Transition Conference, London, May-2009

### - Workshop write up

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**Title: Wild Economics, Wolves, Resilience and Spirit – a study in interdependence**

**Hosted by: David Fleming**

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David's workshop looked at economics from a systems and ecology viewpoint. Two main threads important in ecology and economics: **resilience** and **scale**.

#### **RESILIENCE**

***Resilience is the ability of a system to withstand shock.***

Different levels of shock have a range of possible responses:

- no shock > no change necessary, things continue as before
  - intermediate shock >
    - resistance – system resists the shock, is only slightly affected and can continue as before
    - recovery – system recovers completely – quality of repair in nature is very high
    - sacrifice & succession – although part of the system is lost, another part can take over
    - new phase – system enters new phase (eg fire forest, glaciation) before eventually returning to its original condition.
    - transformation – the current ecology changes profoundly and there is no return to the original condition
  - catastrophic shock >
    - regeneration – the ecology dies but the system remains capable of supporting life, which eventually returns in a new form. The system starts again ALMOST from scratch
    - death – system cannot come back to life
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## What resilience needs:

- Modularity
  - weak interdependence – the whole is made up of smaller units/individuals (holons), which have a combination of independence and interdependence. A degree of independence is essential for the system to remain healthy
  - local competence – units/individuals must have a reasonable level of competence
  - firewalls – if one part goes down, another can step in to take its place (eg French Resistance cells during WW II)
- Diversity
  - Local potential is fulfilled, with solutions being developed in response to specific local circumstances
  - Evolution – some responses to shock work, some don't, system evolves with creative trial & error – learning from the errors and selecting the best.
  - Stability over the whole system
- Slack – an important concept, we come to it later
- Links
  - Clustering – holons (smaller units/individuals) are clustered in groups
  - Overarching framework eg Transition Network for Transition Initiatives. Paradox and tragedy – there are many examples of overarching frameworks throughout history and very often it is this framework itself that destroys the whole system
- Feedback
  - Observation vs ideology – importance of accepting feedback from observation & abandoning ideology if observation indicates it doesn't work
  - Timing – good timing needed in responses (do we wait or rush ahead? Let circumstances dictate)
  - Which system are you in? – clarity needed – eg tomato growers in Cornwall may suffer because we're growing our own in Buxton & not buying theirs; but we're in the Buxton system so that's how it works!

## SCALE

Small units have a higher ratio of edge to area (or surface area to volume in 3D) than larger units. This gives smaller units an advantage in many respects eg. elephant at a disadvantage when it comes to getting rid of excess heat because of its low surface area to volume. (That's why it needs big ears to help.) Therefore for systems to work they need to comprise of many small units within a larger unit, many of these in turn within still larger, etc. (Holon structure)

But the disadvantage for lots of smaller units within one larger = competition for space. Because the globalised economy does not have this holonic structure AND is too large for the available space AND is growth dependent, it can't last.

**The system-scale rule: Large-scale tasks do not need a large-scale system. They need small-scale systems working within a large-scale framework.**

This leads to harmonic order.

Going back to **SLACK...** Slack is a complex concept, easier to define by its contexts:

**In the context of ecology** slack is found in **redundancy** and **eco-setting** and in **growth prevention**:

- **Redundancy** – eg. oak tree produces 1000s of acorns just in order to replace itself. All but one are redundant. Redundancy is a necessary feature of procreation. The slack (redundant acorns) is taken up by those acorns being eaten by squirrels/falling on infertile ground/developing but being eaten as saplings/getting too wet and rotting/ etc
- **Eco-setting** – every organism needs a wide hinterland in which to function – not just the area it directly occupies. Food, water, mates, etc, can be derived from the hinterland. A snail needs the whole garden even though it only consumes a very small part. (In fact the snail needs the whole of Gaia.)
- **Growth prevention** – natural systems recognise that no part can overgrow and employ capital culling (eg population crashes, acorns being eaten) to keep the parts in a good balance with each other. (Growth capital – eg wealth, people, labour – if left uncultured, will produce excess growth. In human societies, growth capital may be culled by wasting or sacrifice. Cathedrals & carnivals – good examples of absorbing waste energy, labour, material productivity. Foundation capital is the absolute necessary basis of the system, eg soil fertility.)

**In the context of economics:** slack = eg unused labour (ie unemployment), excess production

Market economies don't work in conditions of slack – eg if we have mountains of apples, apples can't command a price so the market fails. Only when the goods are in relatively short supply does a taut pricing structure develop, necessary for the market to work. In terms of labour, markets tolerate only low levels of slack ie unemployment. So **tautness**, not slack is the essential part of a market economy.

So – **resilience relies on slack, but markets rely on tautness.** Therefore market economies are not resilient systems and are doomed to failure.

When a market economy crashes, enormous slack (unemployment) is created as a result of the collapse of the intermediate economy (stuff that's there to support what

we really need – eg trucking companies to get food to us, advertising, packaging etc etc).

In the current and coming difficulties of our global economy, the failing infrastructures will release so much labour onto the market that the scale of it will prove too much to reabsorb (even given need for far more labour on the land, new energy technologies needing labour, etc.)

### **The deep imbalance**

All stable economies could produce more than they actually consume. Therefore ways are needed to prevent this overproduction (eg short working weeks, lots of leisure) or to use it (deliberate culling of products –making things for sacrifice - carnivals and cathedrals (see above)).

Prices can correct the imbalances in supply and demand that occur in a robust market economy, but in the profoundly slack economy of the kind that lies ahead, they cannot do so. In theory they could “correct” the problem by reducing the size of the labour force (by increasing the death rate), but this would not be widely recognised as a solution, and even that drastic outcome would not correct the deep imbalance of an economy in which short term potential to produce more would lead to the mid-term destruction of the ecological and social systems on which it depends.

### **In the context of the mind:**

What might an enduring economy look like? Prices don't work in a slack economy – the alternative is a system of DIRECT reciprocities and co-operation. That will need a strong, well-developed culture... and a strong culture depends on emotional intelligence.

Which leads us on to **WOLVES...**

**DETACHMENT and good intentions** - illustrated by a story about the treatment of wolves in the forests of the USA in late 19<sup>th</sup>/early 20<sup>th</sup> century – key players – C. Hart Merriam and Gifford Pinchot. Intention – to preserve deer; action – get rid of wolves; result – disaster for the ecosystem, which then became overrun with deer. This type of clean-up policy, committed to sweeping away corruption and moving on from a sleepy agrarian economy to a dynamic industrial one was known as **Progressivism** and is the result of detached thinking.

The “new ecology” is another example – reduction of any ecosystem to an understanding of the flow of energy in and out, production and consumption. (This was ecologists trying to emulate physics).

## ATTACHMENT

Necessary for the development of a society that will work.

Examples of thinkers/ecologist/writers etc who demonstrate attachment:

Stephan Harding, Aldo Leopold, H J Massingham, Rebecca Hosking

**SPIRIT** – necessary, but conspicuous by its absence .

Disconnection from spirit shows up in detachment – a psychological condition – brain is able to observe events but unable to interpret; no emotional response.

- Events have no meaning
- Detached person unable to make decisions
- Has difficulty in finding their place in the community

Some causes of detachment in individuals:

- Brain injury
- Absence of play, culture, sense of place, conversation as a child
- Living under authoritarian rule

Examples of absence of Spirit:

- Phineas Gage is famous example of brain injury – lost part of brain in accident, later although retained most functions, could no longer make judgments.
- Unreal smile: 2 sets of muscles necessary for real smile – around mouth and around eyes. Only possible to control the mouth muscles voluntarily – not the eyes. As emotions are not under conscious control, full, real smile not possible if no emotions happening. All behaviour is driven, at least in part, by the emotions and emotions are not under our conscious control

Market economics are economics suffering from detachment. They display

- Ideology (the abstract growth/competitiveness model)
- Indecision (leave the decision-making to prices)
- Dislocation (transport-dependence between hubs, leading to globalisation)

Therefore we need to apply emotional attachment to our economics >

## **WILD ECONOMICS**

Economics without ideology and without money, but with attachment and spirit. We need to be able to employ:

- Instead of ideology - radical judgment - ie ability to make judgments in extremely difficult circumstance, sometimes between two evils, eg sacrificing an individual for sake of community vs saving the individual
- Instead of indecision - persistence – it would be possible with persistence to build

a policy for an economy without prices

- Instead of dislocation - locatedness – choosing an economic model that works in specific terms, and does not deal in abstractions.

We need to listen to wolves in developing our wild economics. They;

- Play: we need to incorporate plenty of play in any workable economic model
- Are very territorial/have strong sense of community: cf. Resilience of Russian villages during 19th c. reign of the Tzars
- Have music!

## QUESTIONS AND ANSWERS

Q A Canadian activist has formed a “Work Less” party – does David think this sort of approach offers a viable solution?

A basically yes, but needs a certain sort of thinking – what makes sense for the individual or for the community – sometimes need for radical judgments between individuals’ and society’s needs.

Q Is there any place for the structures of social hierarchies? There can be conflict between true emotions and hierarchical structures – eg soldiers can’t show fear in battle, employees must sometimes bottle emotions. Therefore difficulty sometimes in making sense of feelings.

A A system needs to allow individual autonomy within a structure of some authority. So there is a tension between authority and what is actually done. Needs to be strong element of trust that what’s needed will happen

Q What is the role of currencies here?

A On a large scale, eg between nations, we will need currencies. But on a small scale, everyday life can (and often does) work without currency. Reciprocity. Eg families looking after each other. Children don’t pay their parents!

Q Re detachment – growing up in a pioneer community, is this a reason for detachment?

A (from the audience) – loss of what someone’s come from could be v traumatic and lead to detachment. Also, detachment can be an appropriate response to difficult circumstances.

A (David) There are some very dark areas of thought and emotion to explore re detachment. For instance, when we go to the USA, we ride on the back of some very horrible activities re destruction of Amerindian culture. It’s very easy to stay detached from that. Being attached could make it too unpleasant. Would it have been possible to have and enjoy modern American culture alongside traditional native culture?

Q What is the difference between sustainability and resilience? Is resilience more appropriate?

A In a market economy sustainability is a nonsense. It depends on growth, which cannot be sustainable. Also, advances in productivity, if not followed by growth, would lead to slack, which automatically would cause the collapse of the system.

Q We rationalise our historical skeletons (eg treatment of Native Americans, slavery) and bury our awareness. Do we need to?

A We need to stay aware. Tendency of accepting new developments that promise solutions – eg nanotechnology. Problem – experts know a lot and non-experts therefore aren't in a position to criticise. Need to employ radical judgment and recognise when developments need stopping.

Q Please talk more about scale, hinterland, small systems within larger systems

A All systems have sub-systems. First principle of Systems Theory – that there is a hierarchy of parts, with no limits. All parts (holons) are substantially responsible for looking after themselves AND for supporting the system they belong to. Danger – as systems get more connected the holons can start joining up and lose their independence. They then need to subdivide again. That's Transition. Trouble is, you need lots of hinterland needed to make it work. When parts start merging, crossing each others' borders, hinterland is lost.

Q Why do large systems evolve (as a result of small systems joining up) if we need small systems for resilience?

A Because once started on the intermediate economy, it's a rollercoaster of expansion. We might need more cups for our cider > dig more clay > build more trucks to move the clay > need more roads > make more tarmac > drill more oil > > employ thousands of people just because we wanted a few more cups!

Many thanks to Cath Johnstone for scribing!