

# Processing change

Frank Boons

*Professor of Innovation and Sustainability*

Sustainable Consumption Institute

University of Manchester

**frank.boons@manchester.ac.uk**

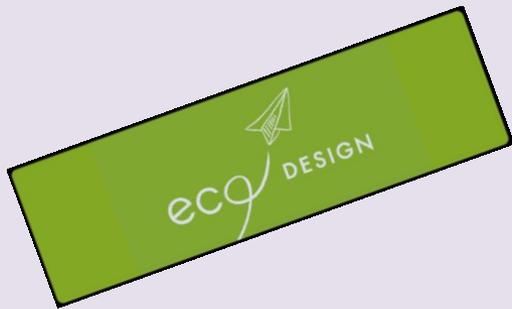
Pecha Kucha talk given at the CfSD 'State of the Art' Sustainable Innovation & Design' conference, 9-10 November 2015, Epsom. All text and drawings © Frank Boons; pictures selected from public & open sources



Living our life, we all experience fundamental change. Looking at old pictures, we remember how, and who, we were. Very quickly, we associate spaces, persons, and events to these pictures, which then become 'the past', as opposed to 'the present'.



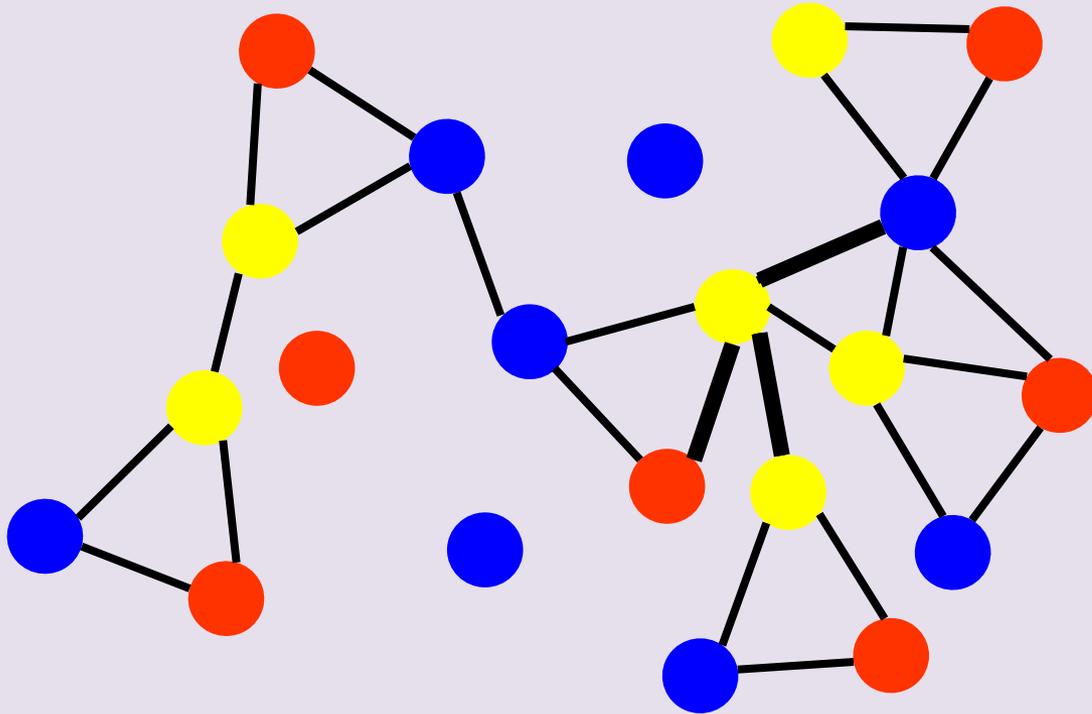
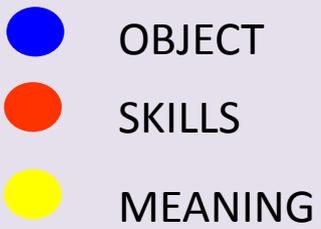
We look at change in a way that solidifies the inherent processual nature of things.  
Rather than looking at this waterfall as it continually flows, we FREEZE it.



I am not suggesting that we are ignoring processes of change. In sustainable innovation practice as well as research, we focus very much on on them. Labels such as the above convey messages about how the change process should be shaped

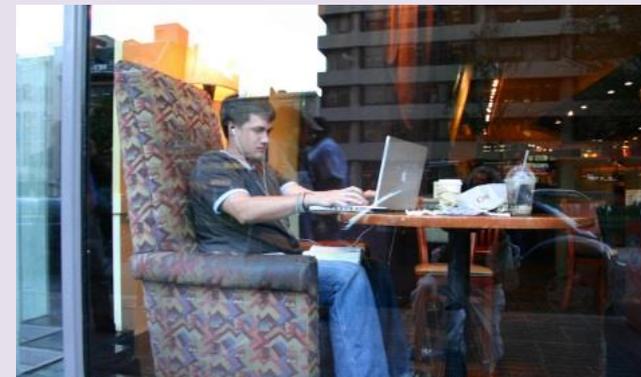
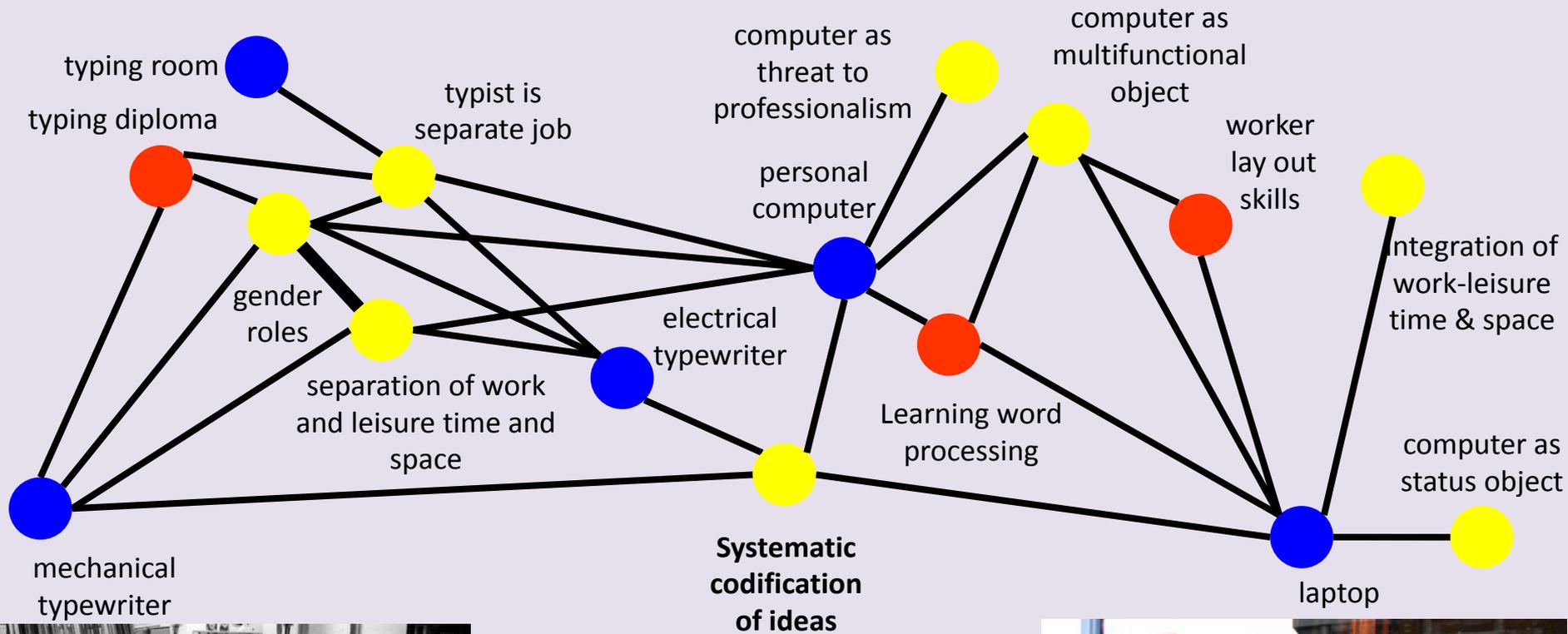


However, I feel our thinking about processes of change can easily mislead us: we tend to think about eco-innovation, or sustainable design, as transition between static states of affairs: from the unsustainable present to the sustainable future. Using the word 'system' (energy system, transport system, product service system), despite its merits, strengthens this perception.



Working with people who use practice theory as a conceptual perspective, I find this enables a closer look at systems in their day to day operation. They turn out to be continuously evolving networks of objects, skills, and meanings.

*[imagine the above as an animated network, first growing, then dissolving]*



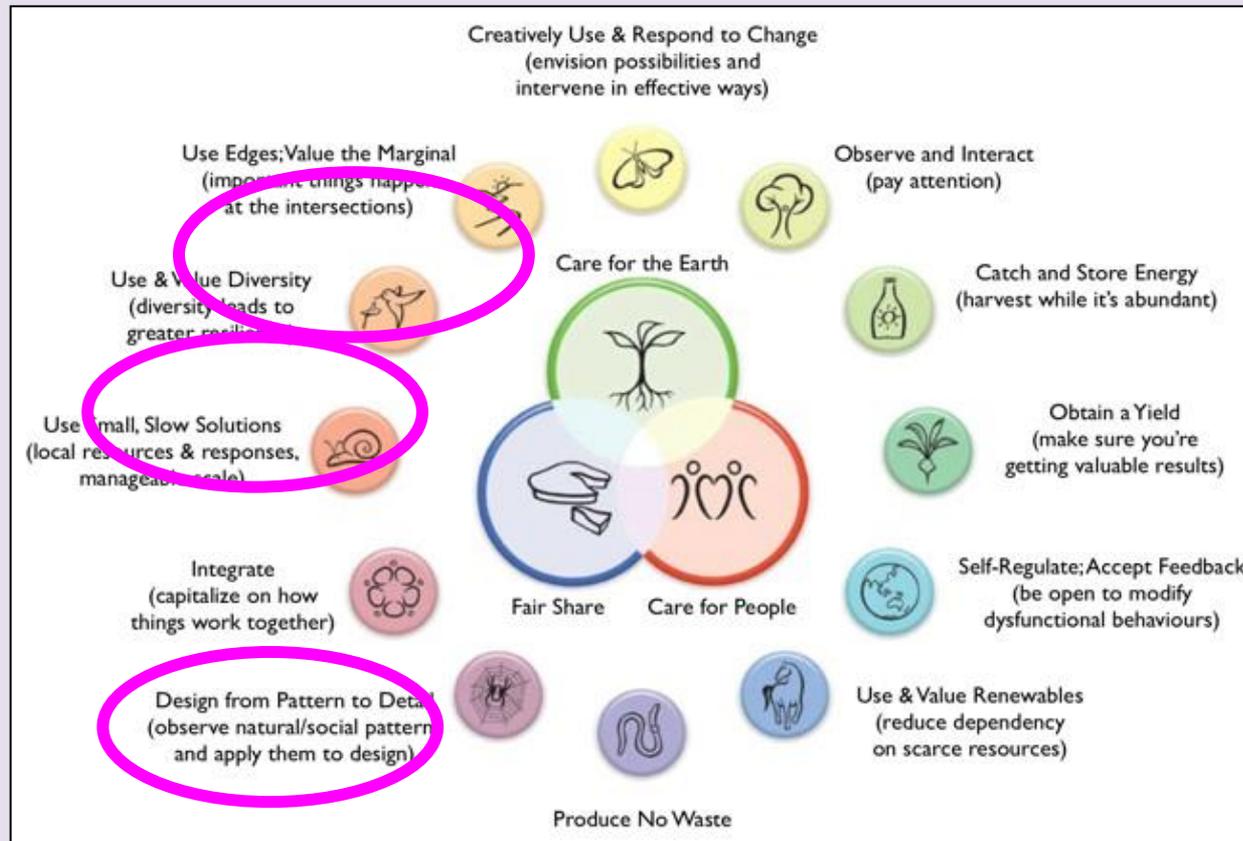
Here the pictures indicate two very different system states, around the mechanical typewriter and the laptop. Tracing the evolving network of objects, skills, and meanings, we see how gradual this change from one state to the other really is, and how this gradual change eventually looks to us as a TRANSFORMATIVE change in not only technology, but also work-life balance and gender equality.



A similar analysis could be made about the mobile phone: if we look back we see how fundamentally different the society was in which the 'wall-connected' telephone was dominant; yet those changes have appeared gradually, and at no point was anyone aiming at the transition of life style and everyday practices it eventually became.

A processual perspective on change reveals how it is made up by emerging (and dissolving) connections among not only people, but also objects, meanings, and skills. What are the implications for those of us who seek to bring about change towards sustainability?

# Generating connectivity: principles from permaculture



I suggest that this is about inducing connectivity. Not only as part of a process of change; we are doing that already with open innovation and other approaches. Instead, whatever we design or envision itself needs to generate connections. For principles to guide us, I find those advocated under the label of permaculture intriguing; it highlights connectivity in almost any of its core statements

# 3 dangers of connectivity

multiplying connections are AMORAL

extreme MARKET POWER

from loose to TIGHT COUPLING

As with most things, connectivity is not only good. I see three main dangers of seeking connectivity. 1: connectivity as I use it here reflects the wisdom of the crowd, and as such is amoral. So it can be used for good or for bad, and we will need to understand much better how the values of sustainability can be part of the network of meanings, objects and skills. 2: as we can see with the firms like Google and Apple: connectivity can breed huge market power. 3: we know that systems can come to display tight coupling, leading to dysfunctions, inertia, and sudden system collapse.

# UNFREEZE !



With those caveats in mind, I invite you to think about sustainable innovation in terms of inducing connectivity. Let's unfreeze the waterfall!!