

# Systems thinking Regenerative design

MUO-E8029 & SPT-1050 Mikko Jalas, Aalto University, Department of Design 12.11.2020

### **Agenda**

13.20-13.35 Intro to regenerative design; What kind of a practitioner and academic discussion is Regenerative Design?

13.35-14.05 Katri Einola: Partnering with Nature - In search of regenerative approaches in urban environments;

14.05-14.30 Discussion / Breakout room discussion;

14.30-14.44 Break

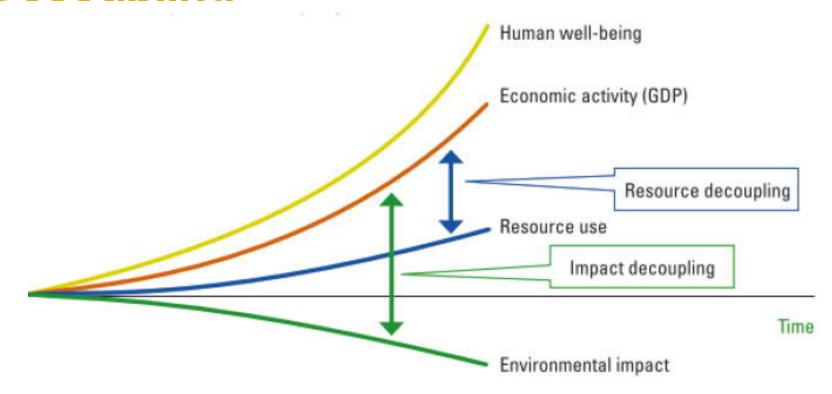
14.45-15.15 Abigail Garbett (on video): Regenerative design and childrens' connection to nature

15.15-15.40 Discussion /Breakout room discussion

15.40-15.45 Orientation for next session

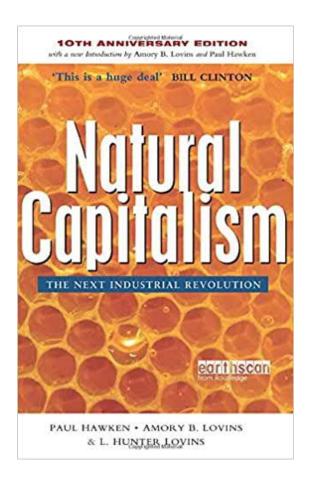


### **Decoupling**



UNEP 2012 / www.materialflows.net



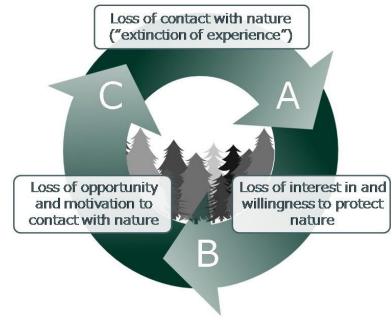


Natural Capitalism is a critique of traditional "Industrial Capitalism", saying that the traditional system of capitalism "does not fully conform to its own accounting principles. It liquidates its capital and calls it income. It neglects to assign any value to the largest stocks of capital it employs – the natural resources and living systems, as well as the social and cultural systems that are the basis of human capital."

wikipedia.org

# Accelerating, positive feedback Loss of contact with nature

'Extinction of experience'



Source: Soga 2016, see also. Soga, M., & Gaston, K. J. (2016). Extinction of experience: the loss of human–nature interactions. *Frontiers in Ecology and the Environment*, *14*(2), 94-101.

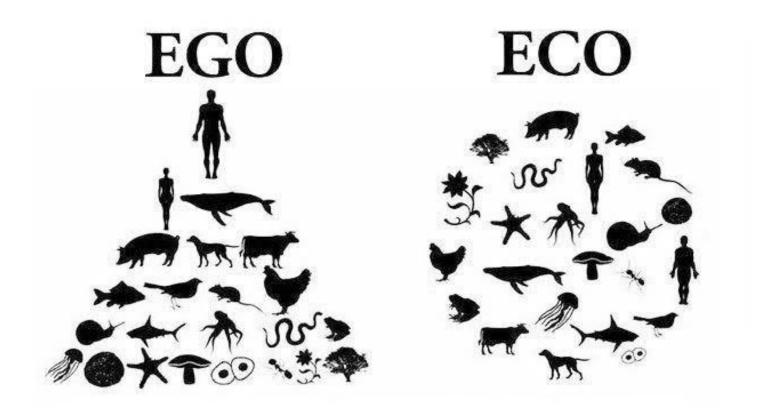
# Accelerating, positive feedback

'Learning to learn'

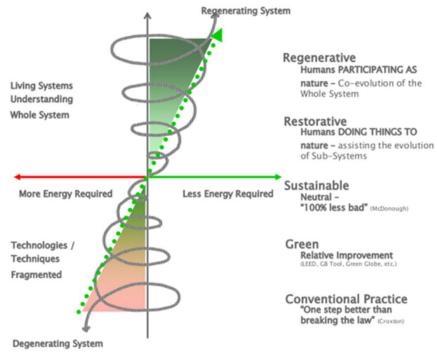


http://www.ungei.org/index\_5987.html





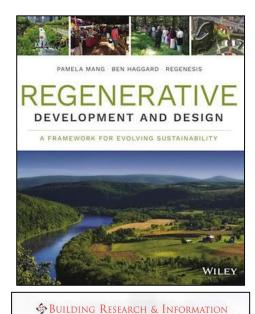
### Regenerative design discourse



Trajectory of Environmentally Responsible Design

O All rights reserved. Regenesis 2000-2014 - Contact Bill Reed, bill@regenesisgroup.com for permission to use

Reed, 2007



International Research, Development, Demonstration & Innovation

SPECIAL ISSUE

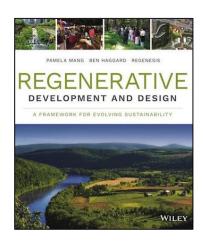
Net-zero and net-positive design



### Regenerative design

### **Progressive:**

'A problem-solving orientation causes us to look backward while the world evolves forward' (Mang et al 2016, 114)



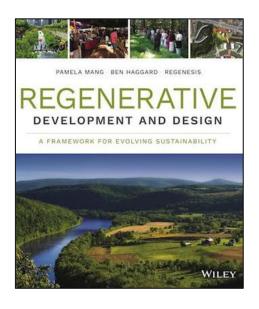
#### **Romantic:**

'Places have essences, identities, characters and purposes' (Mang et al 2016).

'[A] community must discover the unique contribution called from it by the world if it is to endure the rigors of development without losing its soul' (Mang et al 2016, 124)

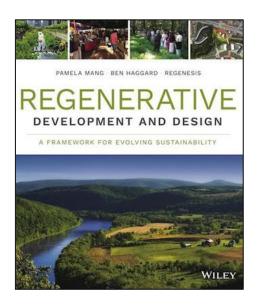
Mang, P., & Haggard, B. Regenesis. 2016. Regenerative Development and Design: A Framework for Evolving Sustainability.





CH2? Principles

How did the Las Vegas case reflect the principles?



#### CH2:

Co-evolution among humans and natural systems can only be undertaken in specific places, using approaches that are precisely fitted to them.

Place is more than material reality; for many people it is also the holder of deep emotional attachment.

What is 'here': how big is it; how does it work; how do people experience and express 'here'?

## Philosophy of technology - Verbeek (2005)

A critique of Karl Jaspers' and Martin Heidegger's highly pessimistic view of technology as a self-reigning force alienating humans from their lifeworld.

Denounces the classical phenomenological position of encountering the world as unmediated and untheorized, 'things as such'.

'Human beings never encounter a world in itself, but only and always a world for them' (p. 107).

Humans and the world are not only intertwined but co-constituted.

Verbeek, P-P. (2005). What do things do Ihde, D. (1990). Technology and the lifeworld. https://www.futurelearn.com/courses/philosophy-of-technology/0/steps/26324



### **Embodiment relations**



(human - technology) —> world.

Language, narrating, storytelling and remembering techniques

Ihde, D. (1990). Technology and the lifeworld. Verbeek, P-P. (2005). What do things do

### Hermeneutic relations



human —> (technology - world)

Lenses, devices (and theories ) which detect and make the world observable

Flickr: Ayeshamus Ihde, D. (1990). Technology and the lifeworld.

Verbeek, P-P. (2005). What do things do



## **Alterity relations**

human —> technology (world)

'Operating a machine'



Flickr: Christopher Porter

Ihde, D. (1990). Technology and the lifeworld. Verbeek, P-P. (2005). What do things do



### **Background relations**

human (technology/world)

Technologies are a context for human existence, rather than being experienced themselves. Human made technoenvironments e.g. air-conditioning



Ihde, D. (1990). Technology and the lifeworld. Verbeek, P-P. (2005). What do things do

Flickr: Billie



### Care for places and for other species

Care is a prominent theme in RD literature (Reed 2007, Mang et al 2016).

'Places are alive, and always in the process of becoming'

RD would seem to benefit from thinking about interspecies care ... as opposed to co-evolution in which species have 'right to evolve and flourish'



Sari Kivimäki

## New species and matters of care in Otaniemi



Oscar Nissin

'to engage properly with the becoming of a thing, we need to count all the concerns related to it, all those who care for it (de la Bellacasa 2011,90)

de la Bellacasa, M. P. (2011). Matters of care in technoscience: Assembling neglected things. Social studies of science, 41(1), 85-106.



### **Concluding thoughts**

- Do places have essences?
   Rather histories?
- If not, how do places get made?
- What is the role of the natural environment?
- What happens when we shift the perspective from coevolution to care?



PAMELA MANG - BEN HAGGARD - REGENESIS

## REGENERATIVE DEVELOPMENT AND DESIGN

A FRAMEWORK FOR EVOLVING SUSTAINABILITY



