Escaping from the old ideas

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The anthropologist and systems thinker, Gregory Bateson said that the **world** partly becomes - comes to be - how it is imagined.

Gregory Bateson, 1980

We have a crisis of imagination
Part I Why imagine?

we have a crisis concerning climate change and natural resources

we have a crisis concerning human resources
Unsustainable ....

We need to understand the need to live within different limits

Tonnes of Carbon Dioxide / Person

\[
\begin{align*}
10 & \quad 2 \\
\text{2000} & \quad \text{2050} & \quad + \\
\text{£} & \quad \text{£££££} & \quad + \\
\end{align*}
\]

= Factor 5

+ = Factor 40+

e.g. a massive leap in current levels of resource productivity
The familiar picture of sustainability
The reality ...
New paradigms emerge only when old ways of thinking and acting consistently fail to produce satisfaction or solve significant problems. **One never designs a new paradigm. But one may stop and seek new ways of thinking about the world at hand.**

John Ehrenfeld
We find it hard to imagine the abstract; to imagine things beyond our own lifetimes and localities; things that our actions impact on.
The horizon of influence

Different limits are ecological ones and not economic ones.

The landscape is physical and temporal.

Individuals and organisations have a long reaching 'horizon of influence'.

In this context what does sustainable design mean?
A new and unfamiliar landscape

resilience . long-term . flourishing . survival

Understanding ecological boundaries are true boundaries

New ways of navigating this landscape

Building capacity to see different horizons

CREATING SUSTAINABILITY

John Ehrenfeld, 2008
Part II How to imagine?

How do we re-imagine human capacity?

How do we re-imagine design?
“The difficulty lies not in the new ideas, but in escaping from the old ones …”
[John Maynard Keynes]

“We can’t be creative if we refuse to be confused. Change always starts with confusion.”
[Orr, 2004: 36]

Do we have sufficient security to take risks?

We need new rules in order to break the existing rules we bring to the table [our values, habits, behaviours]
[Tim Brown, IDEO]
The importance of context

Sustainability [seen as 'an issue'] added onto design [as usual]

Design [as one of many connected parts] sits within Sustainability [the ecological system]
Places to intervene in a system

1. The mindset or paradigm out of which the goals, rules, feedback structure arise.
2. The goals of the system.
3. The power of self-organization.
4. The rules of the system (incentives, punishment, constraints).
5. Information flows.
6. Driving positive feedback loops.
7. Regulating negative feedback loops.
8. Material stocks and flows.

BIOSPHERICAL LIMITS

- metabolisms, resources & flows
- social, ecological & trade values
- culture, infrastructures & governance

Monteiro de Barros & Dewberry, Design Dialogues EPSRC 2005-2008
44 ways to think about Sustainability

Margarida Monteiro de Barros PhD research findings
EPSRC Design Dialogues [2005-2008]
Flourishing human ecologies

Develop eco-intelligence for complex & uncertain contexts

Collectively create wonderful things, spaces & ideas

Evolve ecological material cultures

Grow awareness to empower & to challenge growth

Meet biodiversity needs in diverse ways
Part III  What to imagine?

In escaping the old ideas …

We need to locate different starting points, multiple contexts and interesting questions

Designing for the real world challenges the social norms and questions our collective ‘blindness’ to activities and outcomes that have become familiar but that are not sustainable. New design responses are not always comfortable and readily acceptable but they are vital in creating equity and social and ecological justice in the world.

Design education needs to harness the capabilities of designers to critically and holistically review, question and disrupt the way things are. The nature of such a transformation represents a shift in the game rules of design to reflect ecological and social objectives and to promote strategic potential that challenges an existing preoccupation with finding the ‘right solution’.
PIG 05049 contributed to 185 food and non-food products: from familiar pork products to less expected ones such as an aluminium mould, a train brake, a bullet (part of the pig is used to help disperse the gunpowder), a bone china cup, a heart valve and extra calcium yogurt.
Micro Living

Tumbleweed Tiny House company
http://www.tumbleweedhouses.com
Visible Energy

Disappearing-Pattern Tiles

STATIC! INCREASING ENERGY AWARENESS
http://www.tii.se/static/
Urban Mobility

EN-V Concept from General Motors & Sedway

- One third size and five times as energy efficient as average family car
- Demonstrates a much-reduced physical and ecological footprint for a ‘car’
- Helps create a vision for future urban mobility needs and suggests ways in which these can be met.
Global City Lights  Image by Craig Mayhew and Robert Simmon, NASA GSFC
Lunar Resonant Lighting

Civil Twilight Collective, San Francisco www.civiltwilightcollective.com

Lunar-resonant streetlights respond to ambient moonlight, dimming and brightening each month as the moon cycles through its phases.

80% energy savings from lunar resonance and light diffusion.
Object Orange

Detroit, USA

Derelict houses painted in Disney’s Tiggerific orange paint
Interruptions

Stefan Sagmeister: Yes, design can make you happy
or comments…

Any questions?

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