

Dynamic Whole Systems Design

How can we weave ecosystems of collaboration?



Daniel Christian Wahl, PhD

Tomorrow's Land International Conference

Small actions can make a big difference

22nd of November 2018, Liverpool, UK

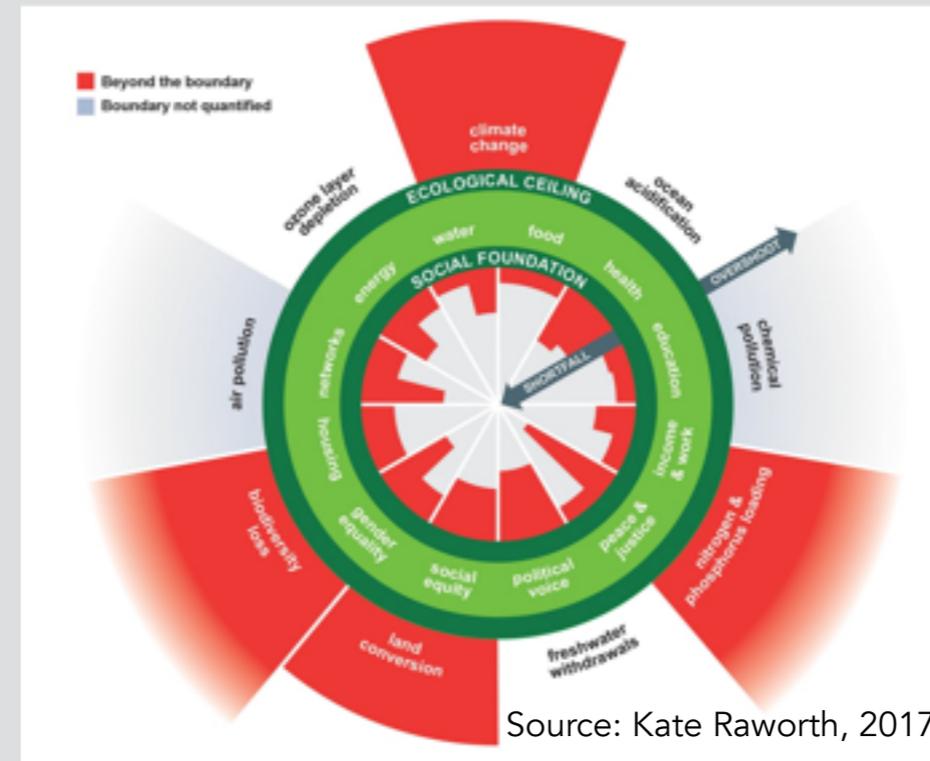
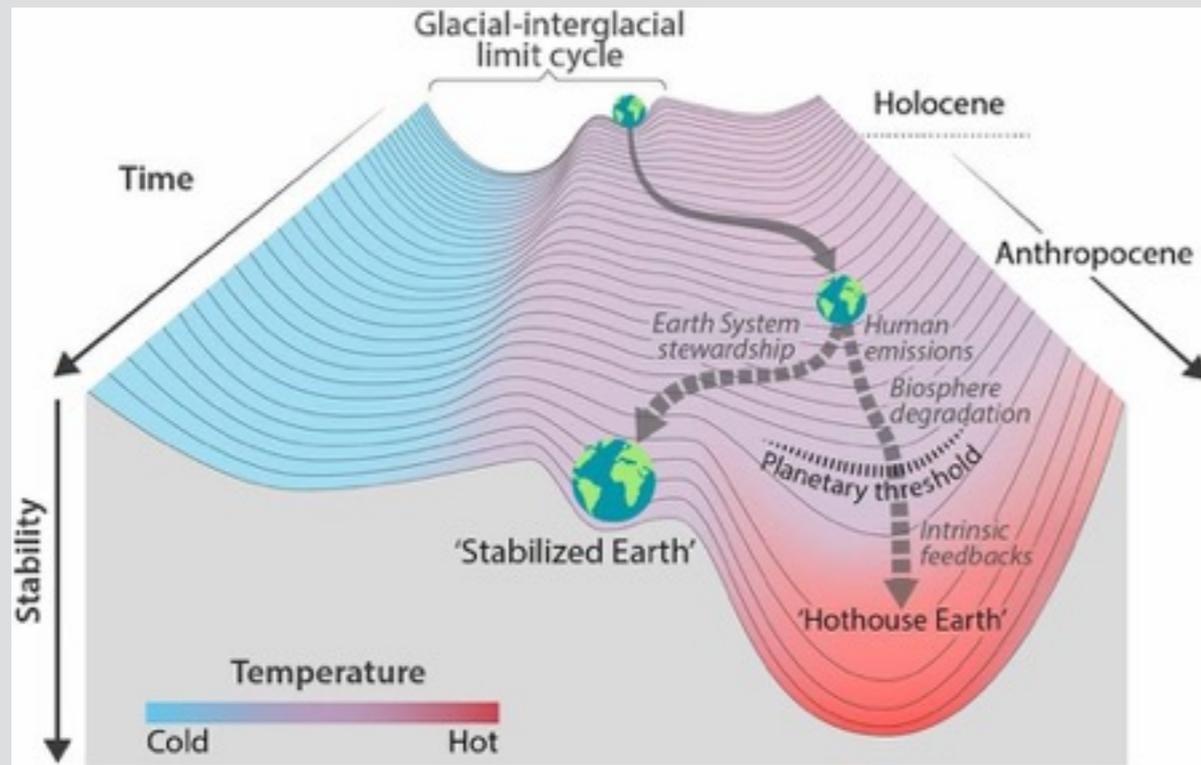
Globalization...



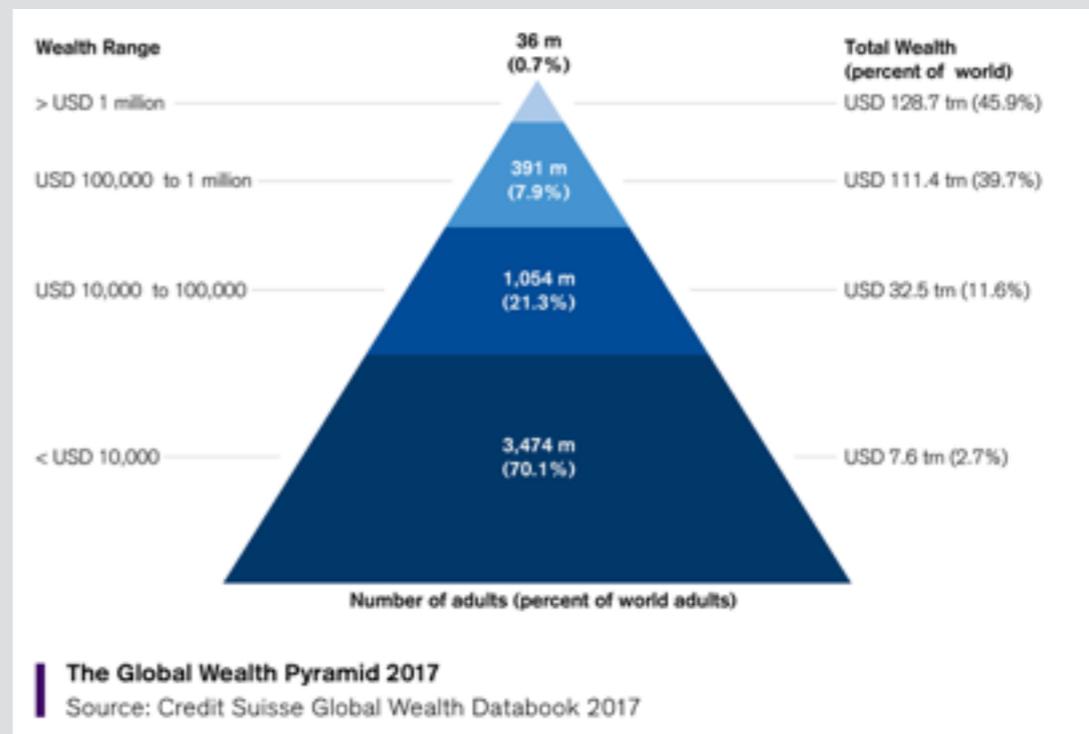
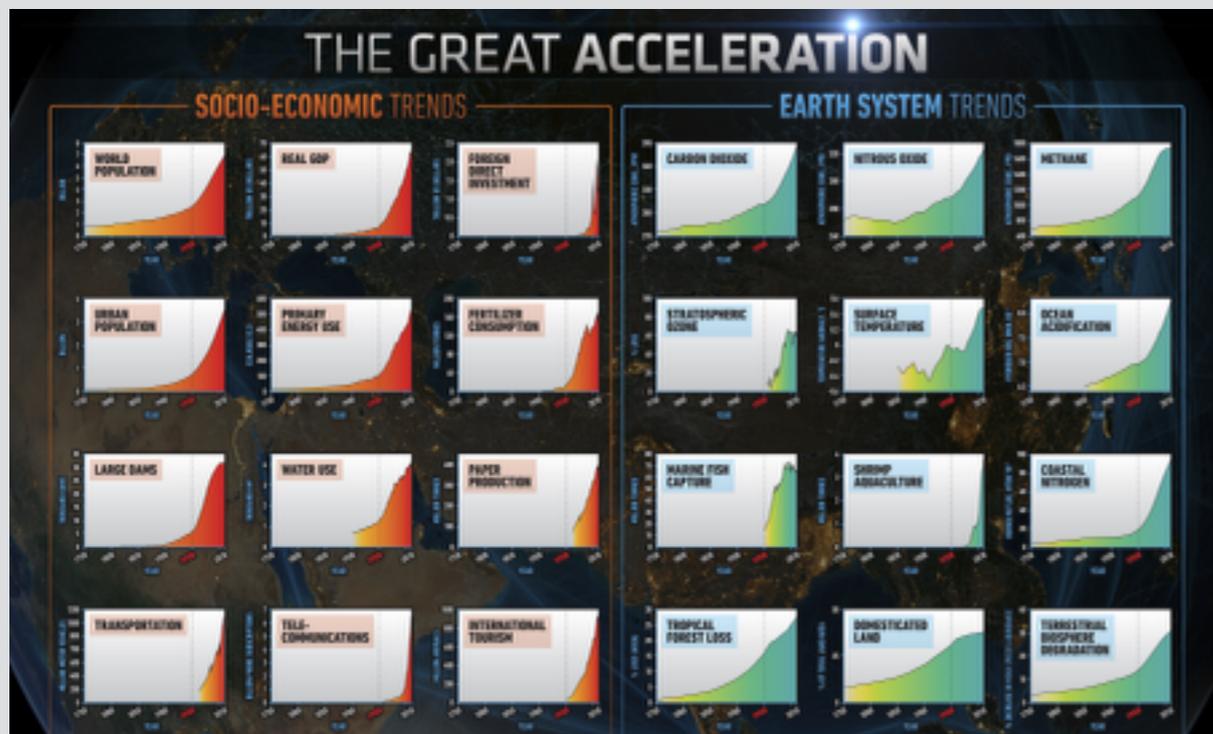
...complexity

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Business-As-Usual is no longer an option!



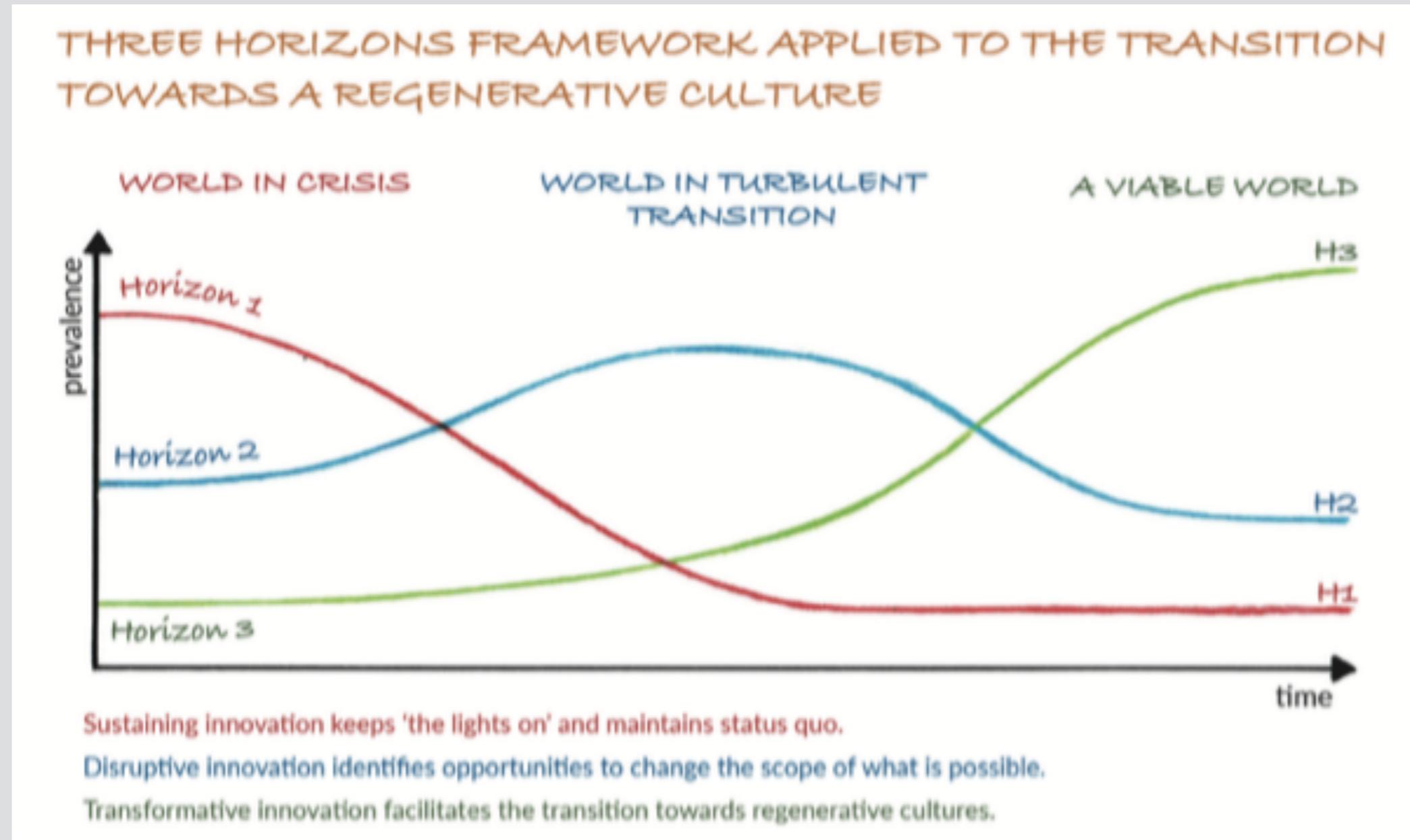
Source: Kate Raworth, 2017



Converging crises require a transformative response. **The future will be glocal!**
We need to redesign the human impact & presence on Earth within our life times!

Sustaining, Disruptive & Transformative Innovation

Redesigning the human impact on Earth one place at a time

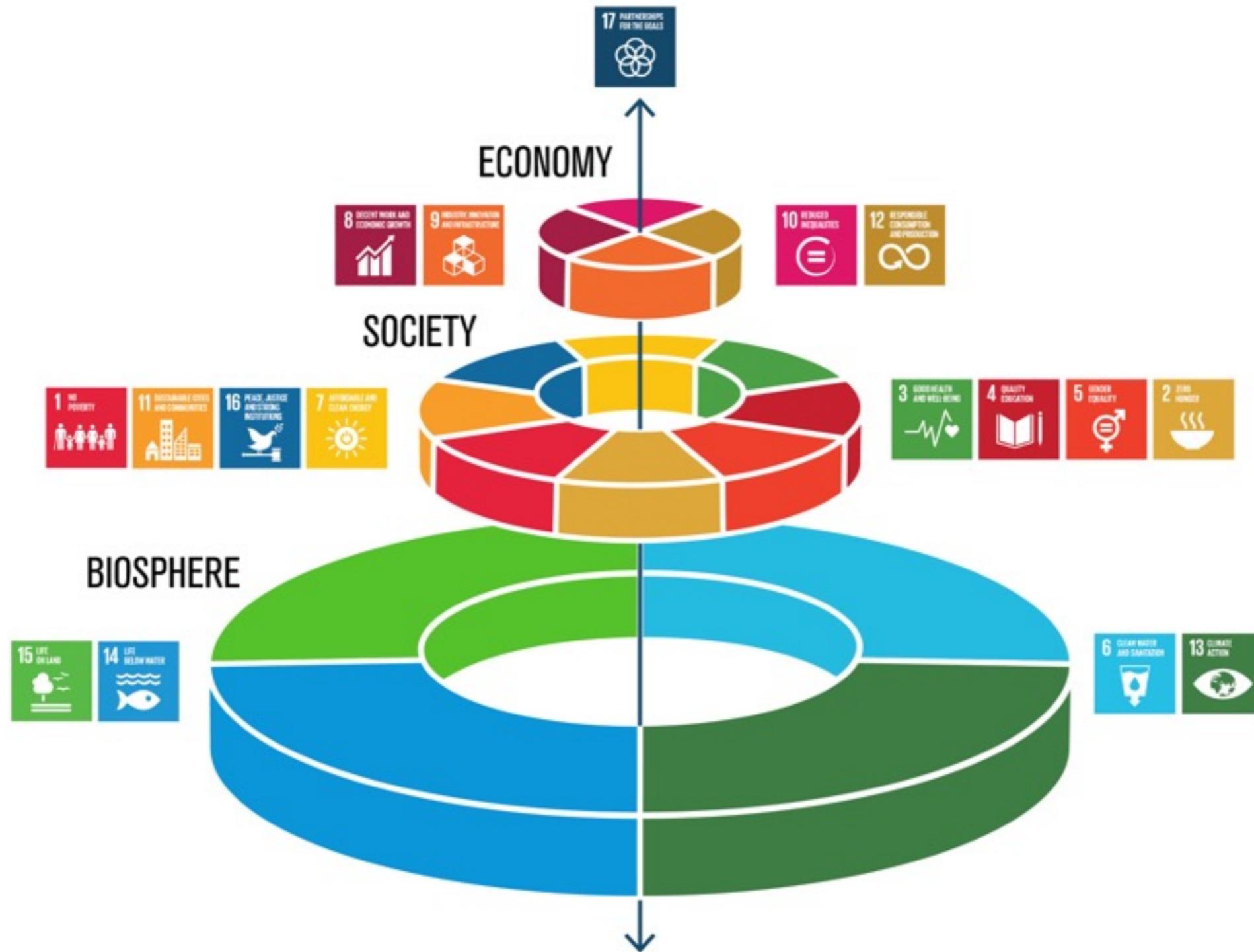


“The essence of Three Horizons practice is to develop both an individual and a shared awareness of all three horizons, seeing them as perspectives that must all come into the discussion, and to work flexibly with the contributions that each one makes to the continuing process of renewal on which we all depend. We step out of our individual mindset into a shared space of creative possibility.”

—Bill Sharpe

The U.N. 'Sustainable Development Goals'

17 Challenges inviting a systemic glocal response



Graphics by Jerker Lokrantz/ikzone

Capacity Building for Glocal Change Agents

Gaia Education's Whole Systems Design Courses



To apply whole systems design to regeneration and sustainability means turning interconnected problems into interconnected solutions!

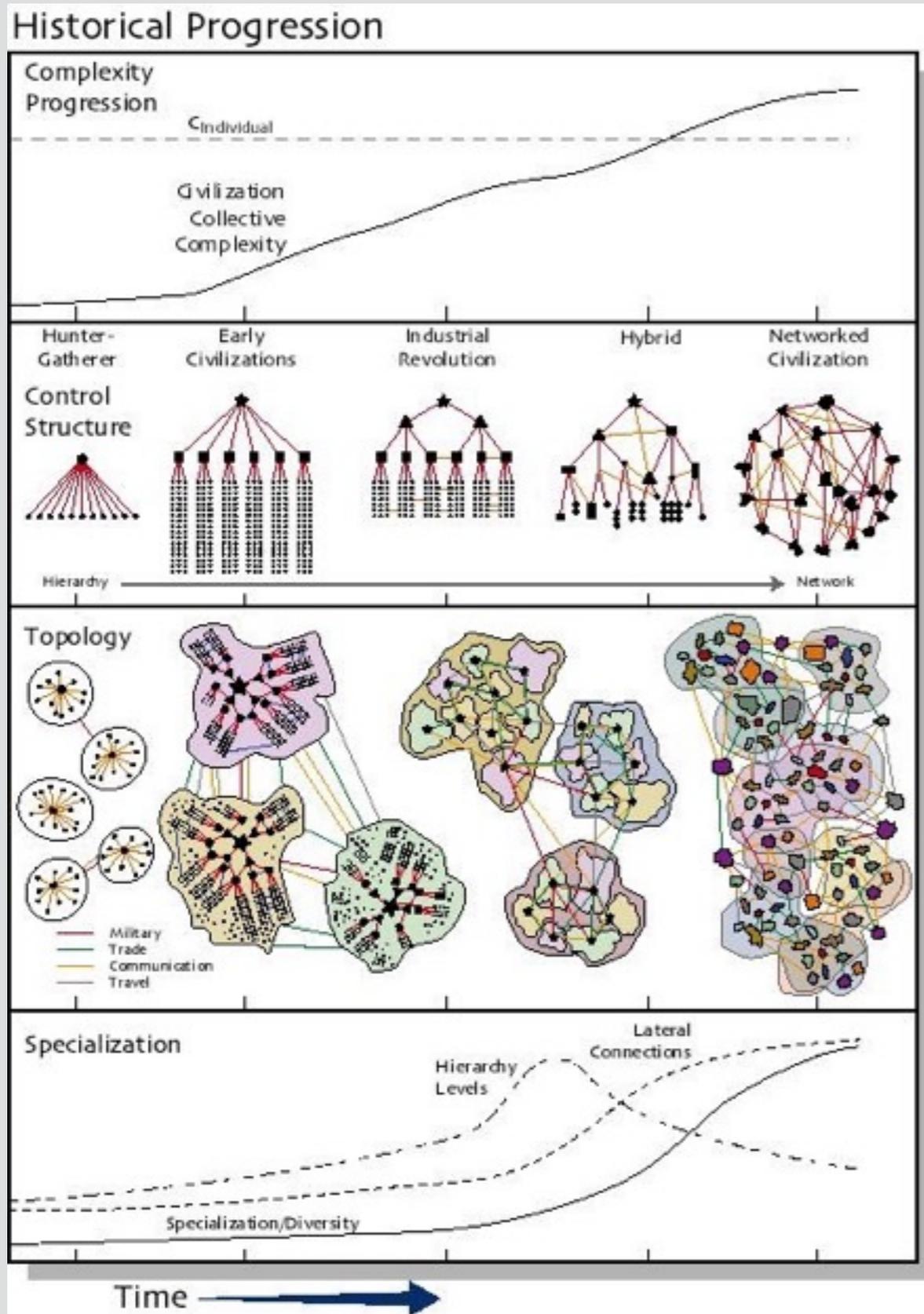
125 hour face-to-face course in 'Ecovillage Design Education' (sustainable community design)

400 hour online course in 'Design for Sustainability'

1-week Training of Trainers (face-to-face)

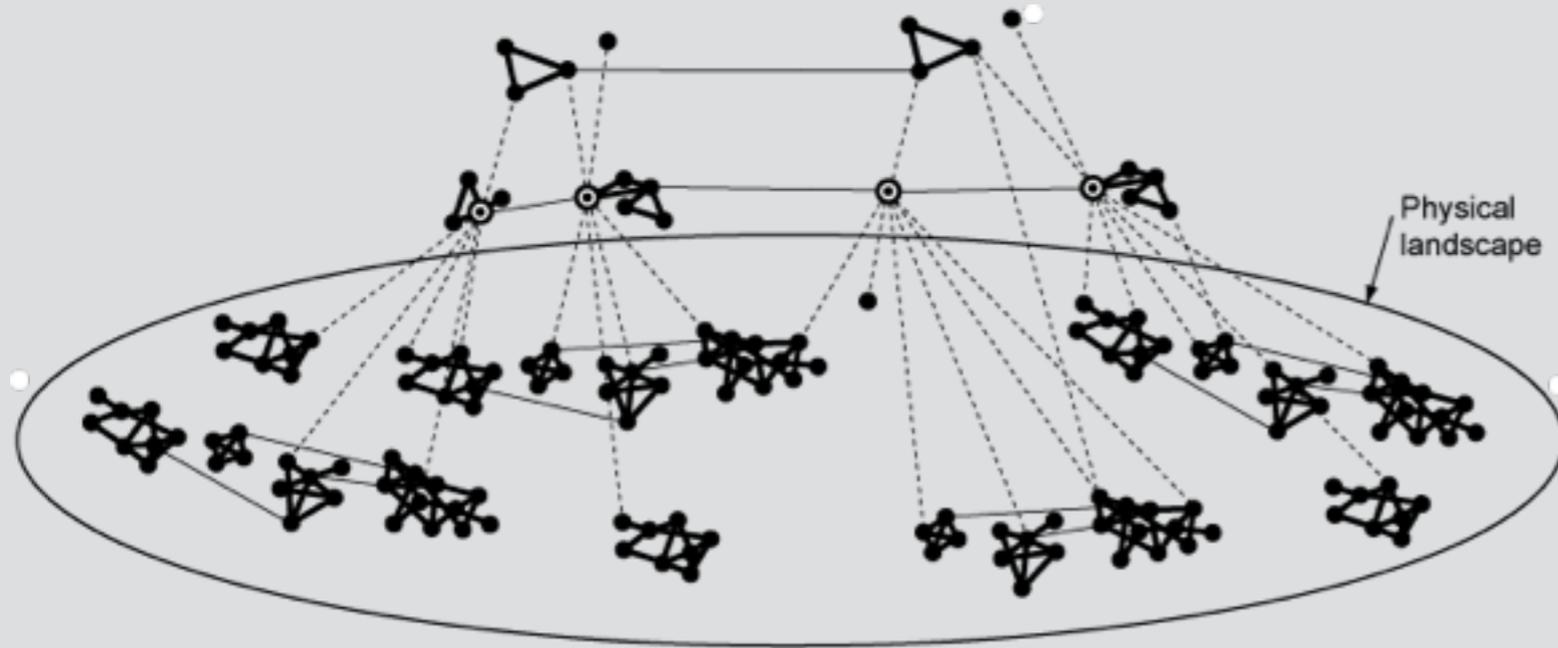
Project Based Learning Programmes around the world

Navigating Complexity & Embracing Uncertainty: Designing for emergence or the paradox of 'culture design'

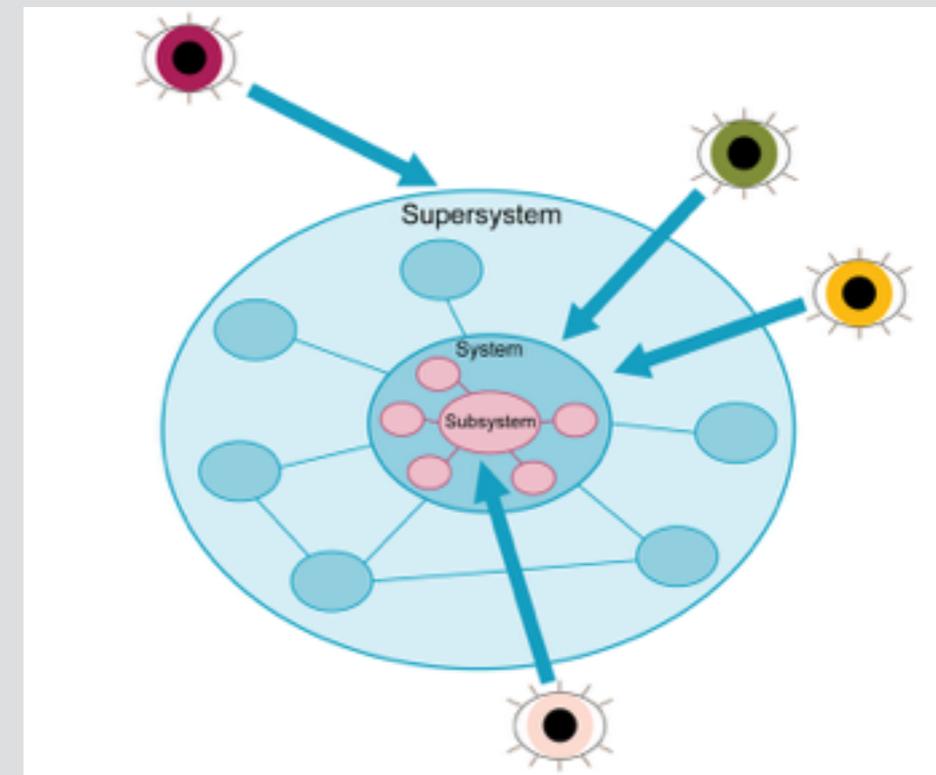
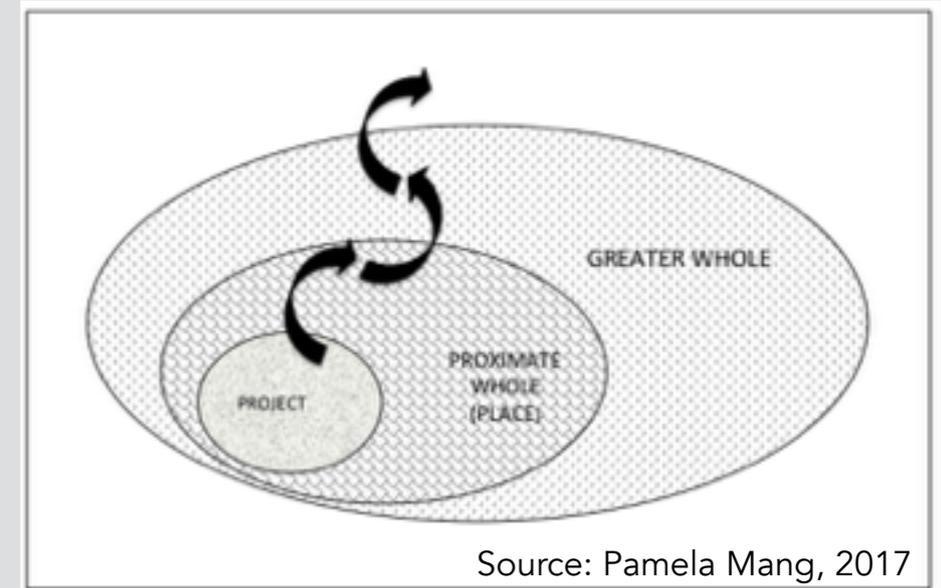
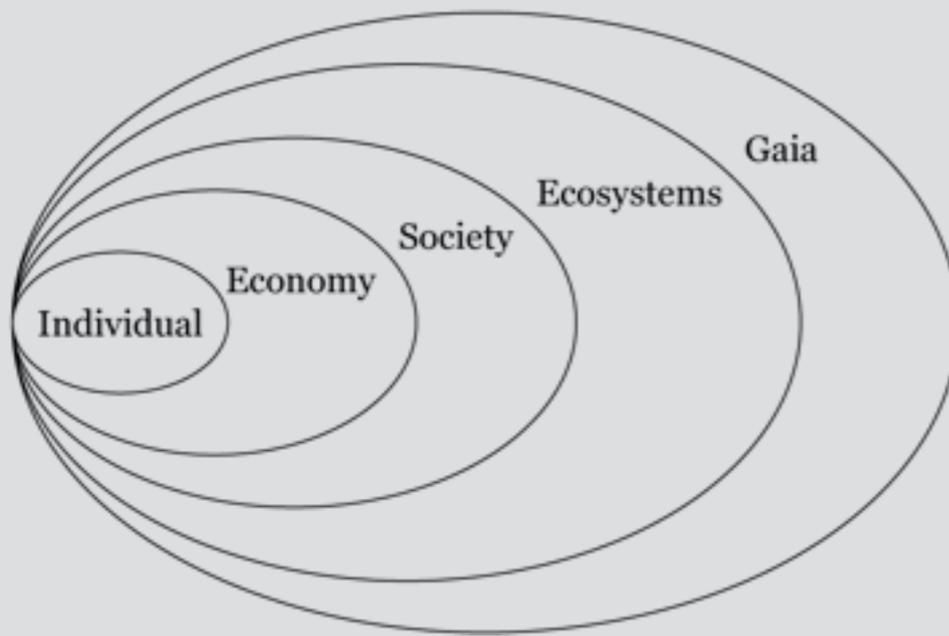


- ▶ **“Emergence** is the arising of novel and coherent structures, patterns or properties during the process of self-organization in complex systems.”
—Jeffrey Goldstein, 1999
- ▶ **“Design** is human intention expressed through interactions and relationships.”
— D.C. Wahl, 2006

Working glocally means working with nested systems



— Strong social tie ⊙ Scale-crossing broker (a network position)
- Weak social tie ····· Scale-crossing link (weak tie)



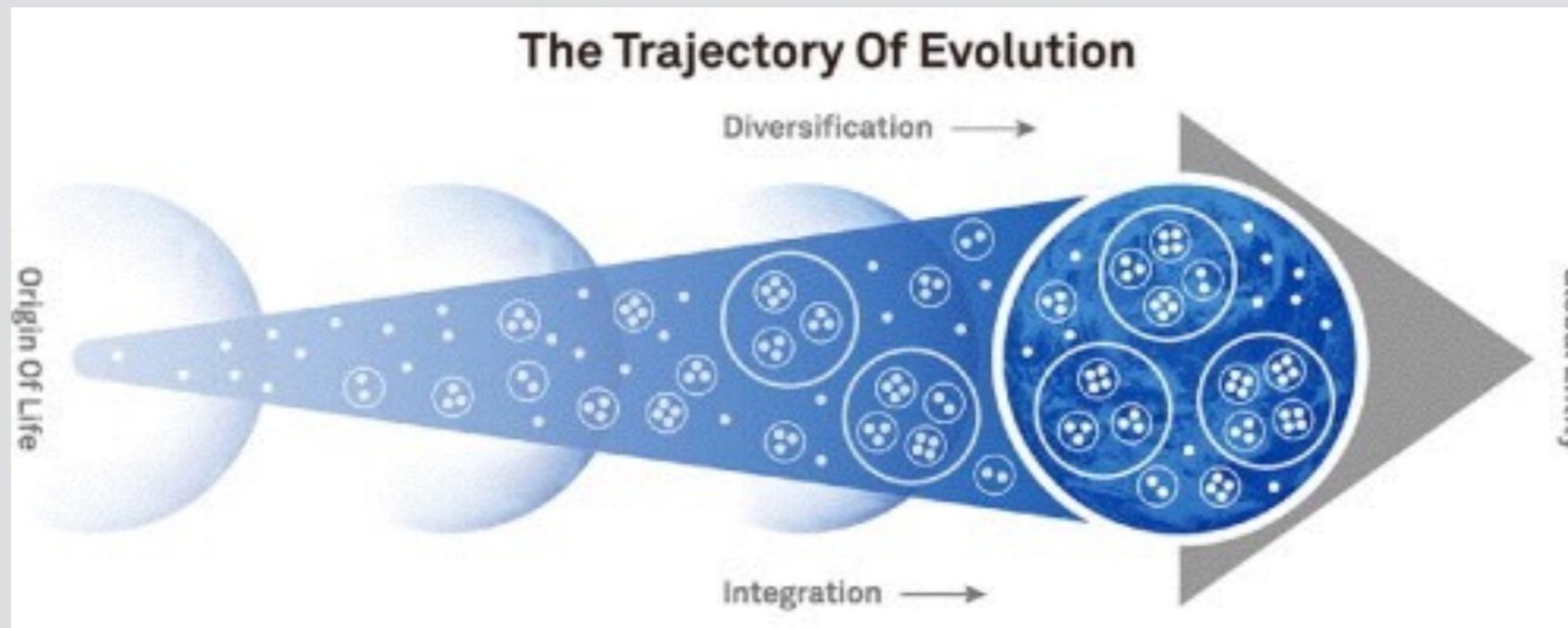
"Everything is an intervention!" - Prof. Gerald Midgley

"Appropriate participation is the goal!" - Prof. Brian Goodwin

Questions that help us dance with complexity

- ▶ **Have we defined our goals correctly?**
- ▶ **Are we trying to maximize isolated parameters or to optimize the whole system?**
- ▶ **Have we attempted a joined-up systems analysis by paying attention to dynamics rather than getting lost in static data?**
- ▶ **Are we avoiding the trap of irreversible emphasis?**
- ▶ **Are we paying enough attention to the potential side effects of our actions?**
- ▶ **Are we carefully avoiding to over-steer or over-react?**
- ▶ **Are we avoiding to act in an authoritarian way?**
- ▶ **How can we act with humility and future consciousness, applying foresight and transformative innovation in the face of the unpredictability and uncontrollability of complex dynamic systems?**

Collaboration as Evolutionary Advantage!



Source: <https://www.sciencedirect.com/science/article/pii/S030326471400080X>

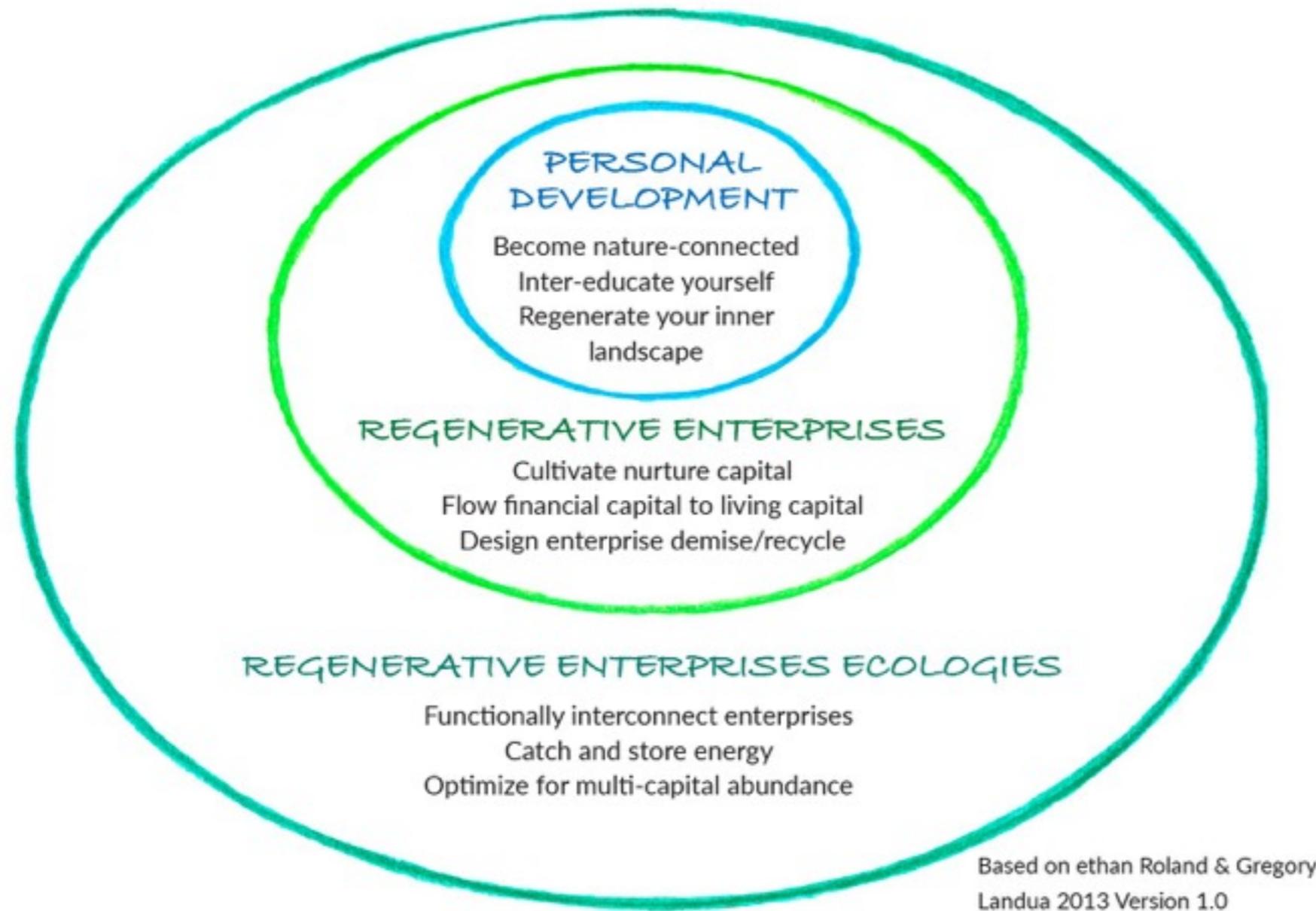
Evolution proceeds by a process of diversification and subsequent integration of diversity at higher levels of complexity - predominantly through novel forms of collaboration.

Regenerative development is about co-creating community driven solutions that are elegant expressions of the bio-cultural uniqueness of place.

Co-creating regenerative enterprise ecologies

Glocal multi-stakeholder collaboration

PRINCIPLES FOR REGENERATIVE ENTERPRISE



Regenerative Enterprise

Optimizing for Multi-Capital Abundance

Version 1.0

Ethan Roland & Gregory Landua

“In summary, a regenerative enterprise aims to reverse the degenerative trends of our current (financial growth obsessed) economy by supporting a healthy pool of *nurture capitals* (social, cultural, spiritual and living capital) at local and regional scale.” — **D.C. Wahl, 2006**

Designing Regenerative Cultures

Living the questions together

Designing Regenerative Cultures



Daniel Christian Wahl

"An extraordinary intellectual and analytical resource, providing as good a picture of contemporary holistic, systems-based thinking as you're likely to find."

- Jonathon Porritt

"One of the most intellectually exciting and soul stirring books I've read in years. I had the sense of drinking it, with pleasure and surprise, not having known what I'd so thirsted for."

- Joanna Macy

"... a valuable contribution to the important discussion of the worldview and value system we need to redesign our businesses, economies, and technologies — in fact, our entire culture — so as to make them regenerative rather than destructive."

- Fritjof Capra

<https://www.triarchypress.net/drc.html>

Some questions to start culturally creative conversations and social innovation in your community



Since people themselves are the real wealth of our communities, how can we invite them to contribute their skills, knowledge and passion to meeting community needs?

How can we value work differently so that we acknowledge the importance of what people do to raise families, look after others, maintain community health and cohesion, and to promote social justice and good governance?



How can we promote reciprocity and generosity ('giftivism')—giving and receiving—as pathways to deeper trust and mutual respect between people?

Since our physical and mental wellbeing depends on strong, enduring relationships, how can we build effective social networks and foster community?



Redefining Activism

What do I activate with the power of my attention & intention?

Small actions can make a big difference!



artwork: banksy / david boyle

“If success or failure of this planet and of human beings depended on how I am and what I do [...] HOW WOULD I BE? WHAT WOULD I DO?.”

— R. Buckminster Fuller

Thank you!



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THERE ARE OVER 300 ARTICLES on my blog on Medium: <https://medium.com/@designforsustainability>