CHANGING THE SYSTEM FROM WITHIN

Intrinsic Competencies for Transformation towards Sustainability

Guest Lecture 28th May 2019, UNU-MERIT

Alex Baker-Shelley, CEO, Founder, PhD(c)

MY BACKGROUND

- Environmental Science BSc, ’09; Manchester, UK.

-> Mentored and volunteered in local Green groups whilst tending bars

e.g. Manchester Climate Monthly

Financial Crisis and Austerity made it vey hard to find relevant work. I left UK in 2010 to France, then Italy.

- Sustainable Development MSc, ’13; Uppsala, Sweden.

-> Looked into Nordic Mining Sector’s Sustainability, Thesis + Internship

- ‘13: PhD project at ICIS and Green Office, Maastricht, Netherlands

-> ‘Navigating Organisational Transformation for Sustainability in Universities’

-> Collaborated with Social Enterprises and Startup community to understand transformation for sustainability

- ’18: Started ‘Ozymandias Intelligence Solutions’ – Sustainability Research and Advisory Startup

-> Currently working with clients like Gemeente Maastricht on zero-waste, and Mondiaal on SDG education and engagement with community.

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STRUCTURE

- Establishing the imperative for positive transformation for sustainability/thrivability
  - → Sustainability Problems
  - → Transformation
  - → Navigating Transformation for Sustainability
  - → Human perspective: Social and emotional intelligence

  BREAK

  DISCUSSION
- The Systems View
  - → Innovation for Sustainability
  - → Intrapreneurship & Social Entrepreneurship
- **Examples** of organisations innovating **solutions to complex sustainability** challenges.
  - → Tools and Methods for navigating transformation and building intrinsic competencies for systemic change
- **Systems Entrepreneurship** & Organisational Psychology
  - → Focus on long-term psychological development of our species, to heal and regenerate damage to ourselves and ecosystems
  - → Intrinsic competencies for transformation

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- SCIENCE
- TECHNOLOGY
- INNOVATION
- POLICY

- TRANSITION..
- TRANSFORMATION…
- SUSTAINABILITY……!!!

These are all big, loaded words

So is sustainability

Is this what we all want?

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SUSTAINABILITY:
A BIG WORD THAT HAS LOST ITS MEANING?

What are your definitions?

Imagine you could redefine the language of sustainability…

What is its essence?

- My, personal, view of sustainability
- ***Sustainability*** *is concerned with the* ***transformation*** *of the* ***consciousness of the human species,*** *away from fragmentation, chaos, crisis and conspicuous consumption*

  Towards ***living in symbiosis*** *or syntony with itself and its* ***environment***

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SUSTAINABILITY: WHAT DOES IT MEAN TO YOU?

- As Science and Praxis
- Ways of Life to Promote Human and Ecological Flourishing
- Pluralistic & Holistic: Embracing and Integrating Diverse Perspectives
- Creativity & Therapy
- Non-absolute: Sustainability is ourselves in the journey of Positive Transformation

What are your concerns about the world around you?

Are there systemic practices that are ethically wrong, or pragmatically ineffective?

Do you consider the market and government to be equipped to remedy these?

How can change-agents and entrepreneurs contribute?

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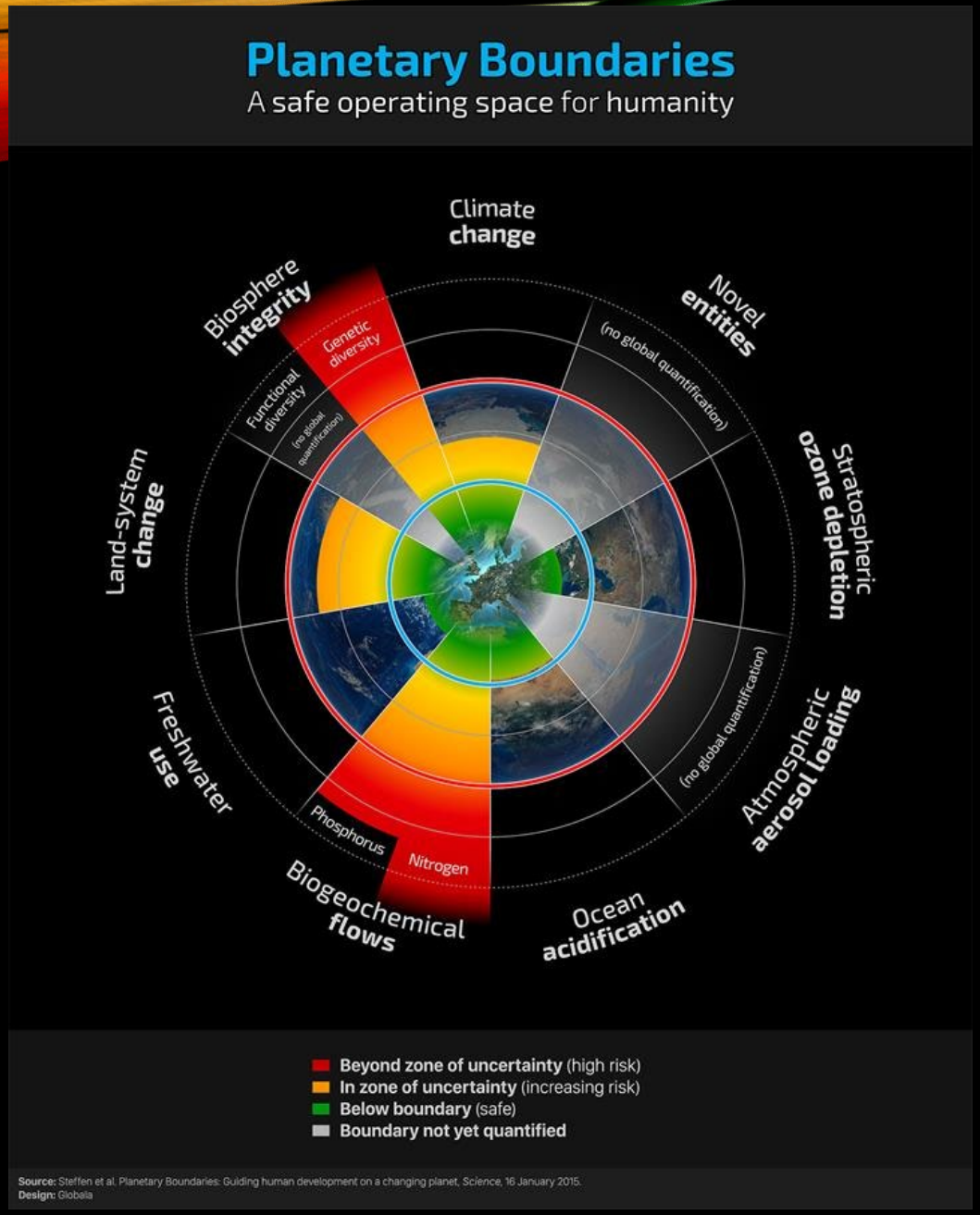
WE HAVE INFRINGED PLANETARY BOUNDARIES



Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., ... & Folke, C. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, *347*(6223), 1259855.

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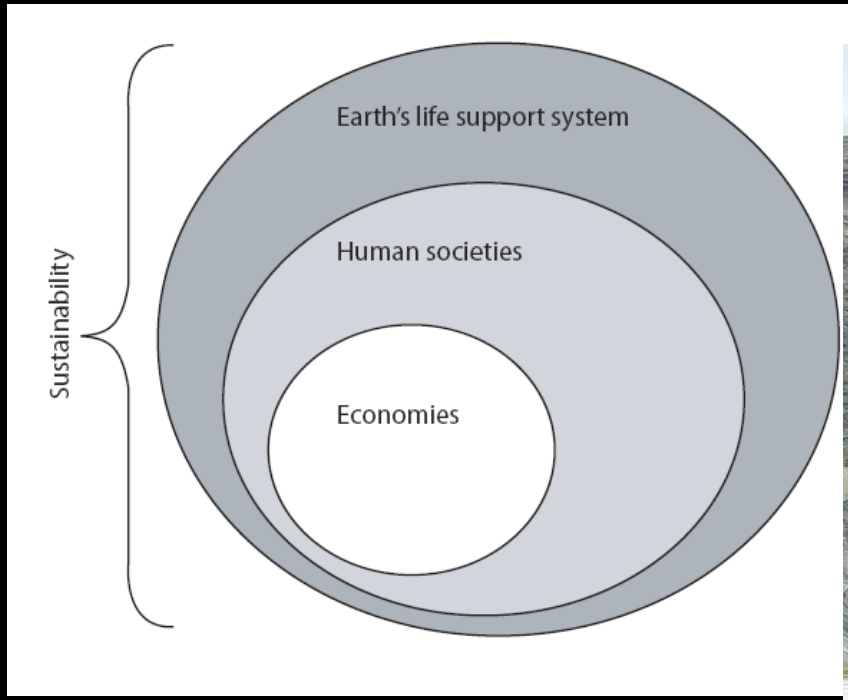
WE TREAT THE ENVIRONMENT LIKE A 'WHOLLY OWNED SUBSIDIARY OF THE ECONOMY'



More on the Devastating Impact of Mining: https://www.smithsonianmag.com/science-nature/environmental-disaster-gold-industry-180949762/

"The economy is a wholly-owned subsidiary of the environment,

Not the reverse." Herman Daly

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THE GREAT ACCELERATION

1950-20XX (?)

http://www.igbp.net/globalchange/greatacceleration.4.1b8ae20512db692f2a680001630.html; https://www.youtube.com/watch?v=VWsHLNIobdI

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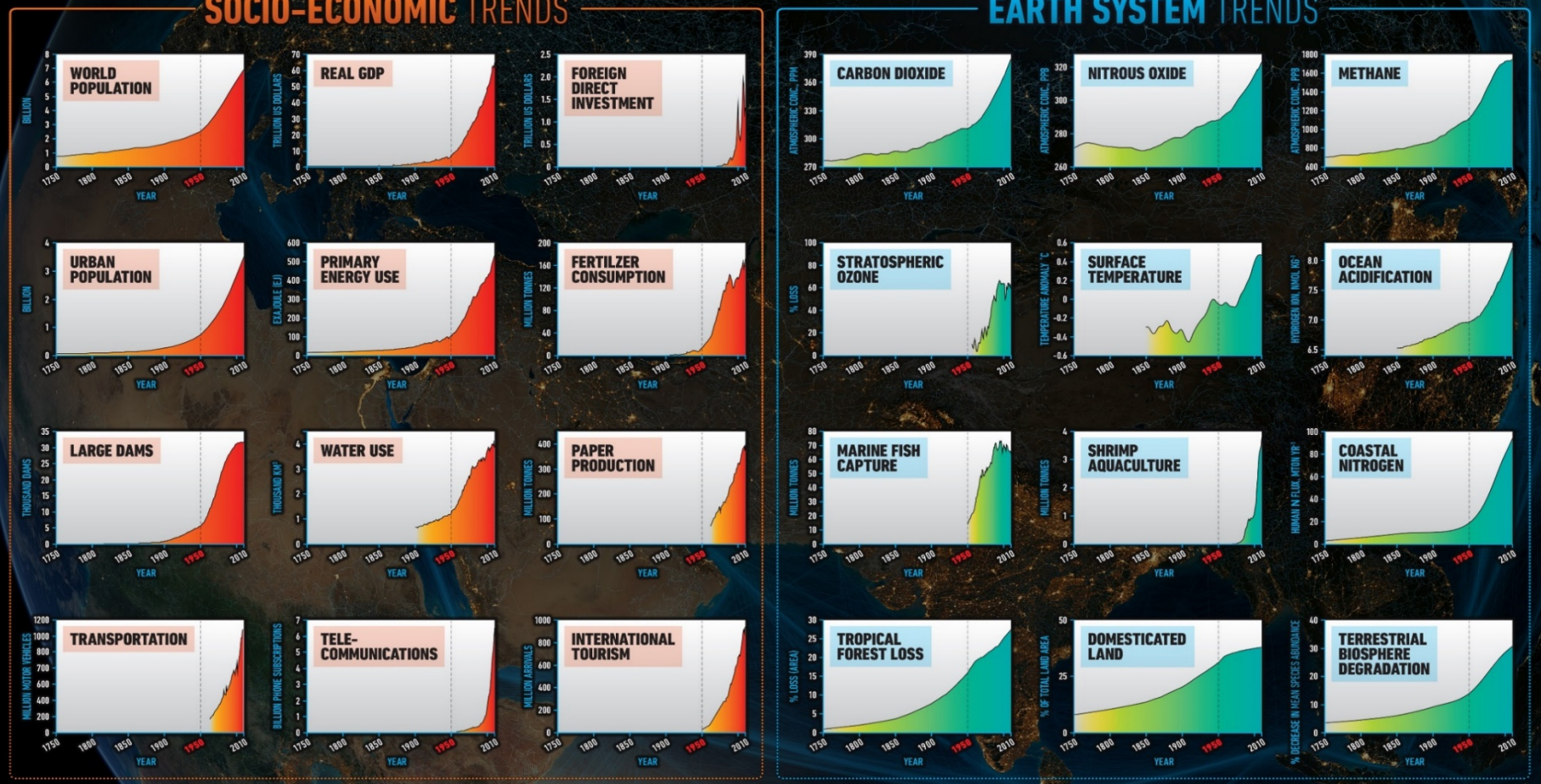
GLOBAL IGBP CHANGE International Geosphere-Biosphere Programme

THE GREAT ACCELERATION



Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: the great acceleration. *The Anthropocene Review*, *2*(1), 81-98.

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EFFORTS TO GUIDE POSITIVE TRANSFORMATION

Alex Baker-Shelley; Guest Talk, UNU-MERIT. 28.05.19

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THE GREAT ACCELERATION

COMPLEX & INTERCONNECTED SUSTAINABILITY CHALLENGES

1) Public **Policy** & **Climate Change**

2) **Collaborating** for Sustainability

3) Respecting **Aboriginal Rights**

4) **Measuring & Reporting** Sustainability

5) **Sustaining** Sustainability **Programs**

6) **Educating** Consumers

7) Creating a **Long-term Orientation**

https://nbs.net/p/top-7-business-sustainability-challenges-in-2016-91aa5d6a-5efb-4e14-ba51-fc65666b906c

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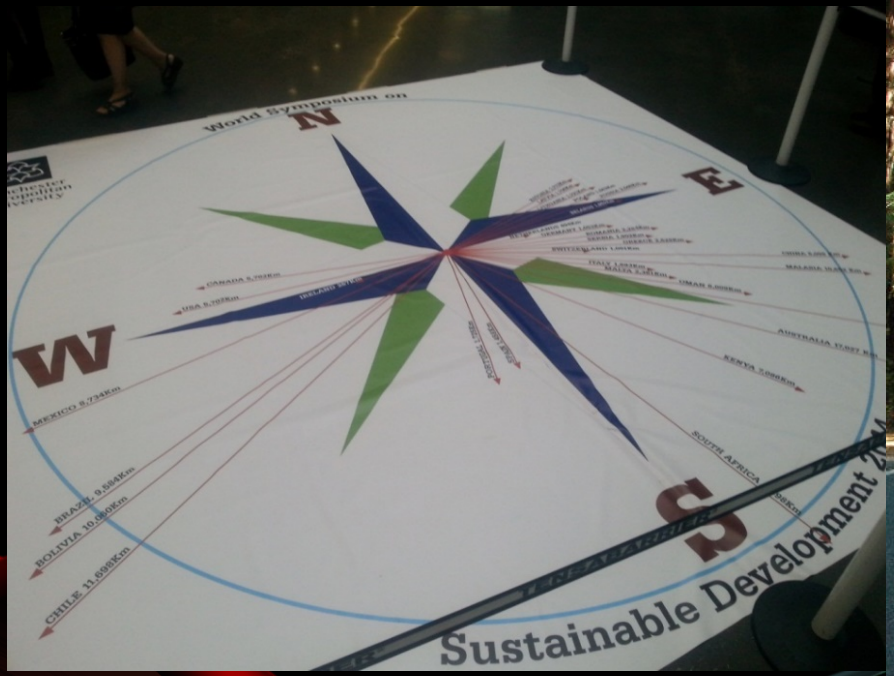
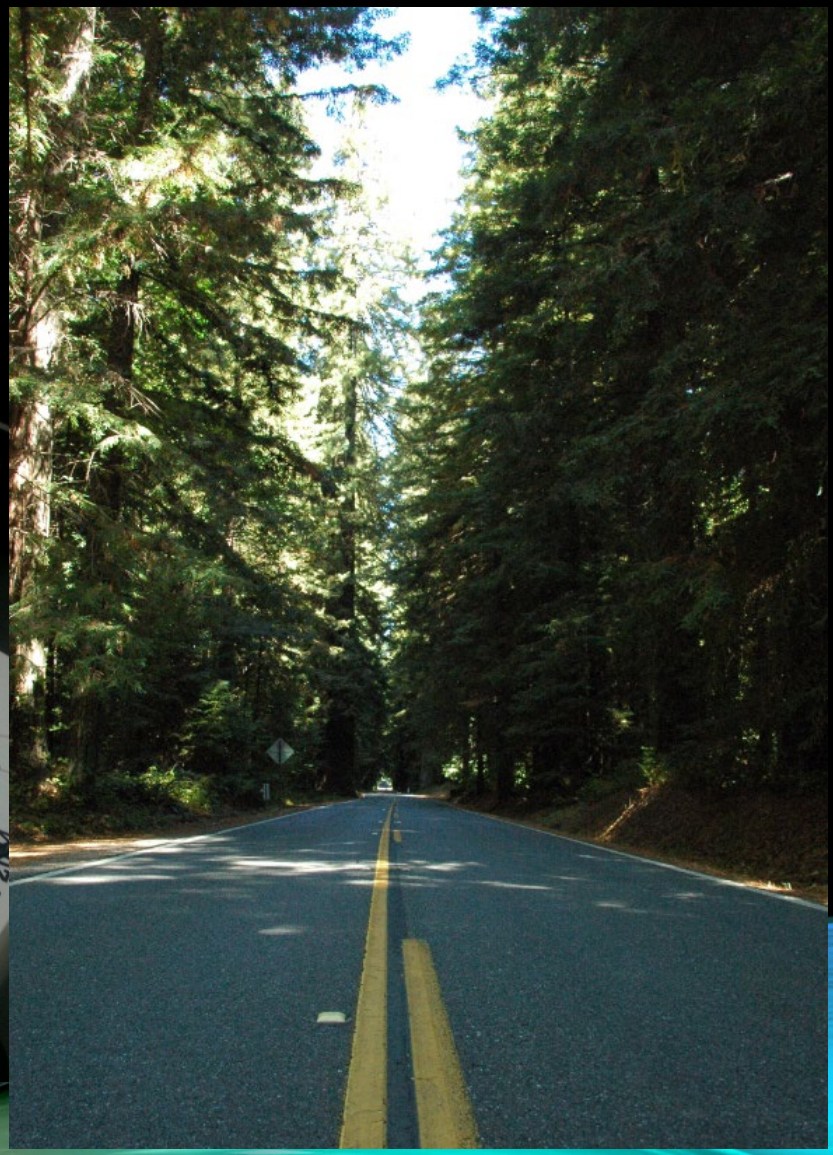
HOW DO WE NAVIGATE THE BARRIERS WE FACE?





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NEW NARRATIVES: ONE PLANET, ONE PEOPLE, ONE PURPOSE

What do you really care about?

What gets you out of bed in the morning?

What makes you angry about the world?

What is your place in it?

What do you see as your role and purpose?

What do you really want?

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TRANSFORMATIVE LEADERSHIP

A COLLECTIVE SHARED VISION
WHERE AND WHAT TO NAVIGATE TOWARDS?

*"Building a **shared vision** is important early on because it fosters a **long-term orientation** & an imperative for **learning** . . .*

*Crafting a **larger story** is one of the oldest domains of leadership. . . leaders may start by pursuing their own vision, but as **they learn to listen carefully to others** they begin to see that their own personal vision **is part of something larger**. This does not diminish any leader's sense of responsibility for the vision – if anything it **deepens** it."*

Peter Senge (1992) *The Fifth Discipline,* London, Century Business

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TRANSFORMATION
FROM WITHIN

- The force for positive transformation and **regeneration** of the **living systems we depend on** comes from within
- A **paradigmatic shift** needs to occur

It is already bubbling up – but there are many pathways before us

- Due to the **Great Acceleration**, a **Great Transformation** must now take place

We have to learn **moderation** and **temperance** of the **power our species has attained** and leveraged over the planet.

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TRANSFORMATION
FROM WITHIN

- A fundamental **change in Mind-set**
- Change in **Worldview** or **Paradigm**
- The **Ability** to see **Things** from **Many Perspectives**
- **Dissatisfaction** with the **Status Quo**
- Experiencing **external social**, **environmental** or **economic shocks; building resilience** from them.
- Internal **Shift of Power**, **Generating** or **Co-designing** a new shared vision

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THE REAL BOTTOM LINE

We have a choice

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THE REAL BOTTOM LINE

- We face a Great Transformation on many fronts.
- One way or another, the way we live is going to transform, completely.

"It is hard to find words to capture the fact that humans are facing the most important question in their history – whether organised human life will survive in anything ***like the form we know*** *– and are answering it by accelerating the race to disaster."* Noam Chomsky

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THE REAL BOTTOM LINE:
WE HAVE TO TRANSFORM ORGANISED HUMAN LIFE

The Imperative for Change, is Stark and Simply put, and is grounded in earth, climate and social science:

Radical human transformation of the ecosphere ***both necessitates*** *and* ***threatens*** *an* ***equally radical*** *transformation of organised human life*

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TRANSFORMING SYSTEMS

- Nothing less than a transformation of our **social**, **organisational** and **economic** systems is needed for humanity to attain a fundamentally more **resilient, interdependent** and **harmonious** way of being, amongst its diverse communities, as well as its **environment.**

Ways we can spur this along:

- **Active long-term learning**, not just in the classroom, but in your lives.
- **Experimentation**: Apply the scientific method to coming up with solutions to our biggest problems, and make sure you have room to create and fail
- **Innovation**: Challenge the status-quo with pragmatism and idealism, build on experiments, creativity and a shared collective vision

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INQUIRY INTO CHANGE FROM WITHIN

How can universities (and actors within them!) navigate organisational transformations for sustainability?

How can we as individuals and groups navigate transformation for sustainability?

(whether inside another organisation, or in our own)

What structures, agency and processes are best suited for organisations to tackle global complex challenges of the 21st century?

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ORGANISATIONAL TRANSFORMATION

1) A set of behavioural science theories, values, strategies, and techniques,

2) Aimed at the planned change of organisational vision and work settings,

3) With the intention of generating **cognitive change** in individual organisational members, leading to behavioural change

4) Promotes **paradigmatic change** that helps the organisation better fit or **create desirable future environments**

(Porras and Silvers, 1991)

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ORGANISATIONAL TRANSFORMATION
DIGGING UP THE PARADIGM

Paradigm:
a prevailing worldview or collective belief system. The fundamental set of beliefs or organizing principles which are unquestioned and unexamined assumptions about the nature of reality
(Adams 1984:278) in Porras and Silvers (1991)

→The essential building block of organisations and institutions are **people**, on an individual level. They maintain systemic resilience through "**function, self-organisation, learning and adaptation"** (Clifton, 2010).

→ Individual behaviour affects an organisations' shift in awareness, whilst **organisational culture** and **social norms** act as determinants of individual behaviour (Ajzen, 1991; Lo et al., 2012).

→ Continuous Process of **Self-Diagnosis, Reflection, Anticipation** and **Planned Change**

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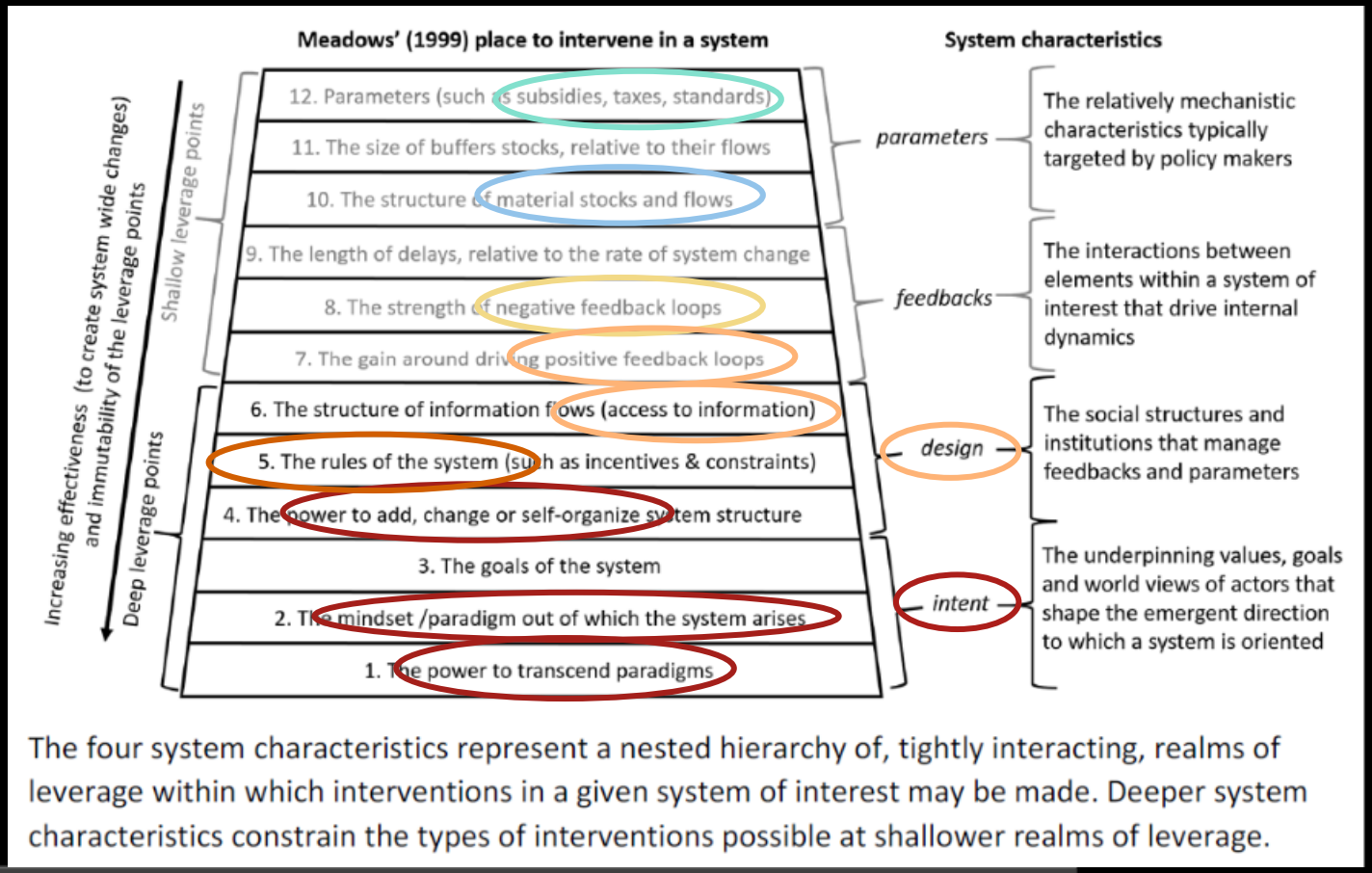
LEVERAGE POINTS
TO EFFECT CHANGE IN SYSTEMS



The four system characteristics represent a nested hierarchy of, tightly interacting, realms of leverage within which interventions in a given system of interest may be made. Deeper system characteristics constrain the types of interventions possible at shallower realms of leverage.

- What is the mindset/paradigm from which the system we want to change arises?
- How do we transcend paradigms?

Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., ... & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, *46*(1), 30-39.

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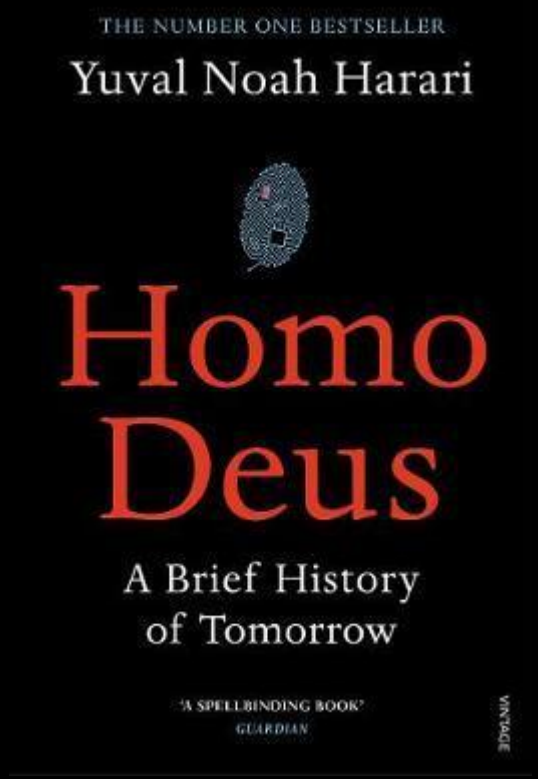
WAKING UP FROM THE PARADIGM OF HUMANISM



What is the greatest achievement of our species?

What are we best at?

- Our intelligence?
- Our physical edifices?
- Our language?
- Our science and technology?

Put another way, what is the one thing that separates us from other species?

- Our Social Organisation!!!

WE NEED A COLLECTIVE SHIFT IN CONSCIOUSNESS

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SOCIAL & EMOTIONAL INTELLIGENCE

Our **social organisational system** can be compared in its complexity to our brains.

This has a nice synergy to it, at scale.

It is **immensely complex**.

Our brains developed *as a result of* and *in order to* function these **social organisations**, this **social intelligence**.

Our increased pre-frontal cortex is evidence of this evolutionary transition.

- **Yet**: in the modern world, we **almost completely overlook** the areas of **social, intuitive, collective and emotional** intelligence in how we cocreate **scientific, policy and technological know-how**

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SOCIAL & EMOTIONAL INTELLIGENCE

How society views intelligence is like only being able to see one colour.

- Even our approach to inculcating creativity is leaning towards intellect and productivity.
- Our society tends to mostly value the material and the financial. Innovation is also framed as such.
- Financial, technological, digital innovation. Etc.
  - Where is the talk about artistic innovation, about psychological innovation?
  - When did innovation become incremental?
- Or have I completely misunderstood…

These are genuine questions, I am seriously asking you :D

What does innovation mean? Help me out!

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BREAK!

12 Innovative Ways to Innovate Your Innovation

THE COOPER REVIEW

Funny because it's true

1. Hire a Chief Innovation Officer

2. Attend an innovation conference

Attend an innovation conference that's named a fun portmanteau of the word "innovate," such as Finnovate, Technovate, or Diginnovate. Take a lot of notes and hand out business cards. Forget everything as soon as you

4. Start an Innovation Lab

Convert a corner office into an Innovation Lab (or Innovation Institute, or Innovation Incubator). Staff your Innovation Lab with current engineers who will continue working on their existing projects but will dr whiteboards so it looks like they're innovating.

5. Run a sprint

Run a 3-day Innovation sprint where you lock everyone in a conference room and tell them to be creative. Put multi-colored post-it notes up on the walls. At the end of the sprint announce to the company how many great ideas came out of the sprint, then do none of them.

7. Just say the word "innovation" over and over again

12. Steal something from Apple

Stealing something from Apple is the most innovative way to be seen as an innovative, digital-first company.

www.thecooperreview.com/12-innovative-ways-innovate-your-innovation/

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Discussion in Groups

BREAKAWAY

1. What are the most important Sustainability Problems?
2. Which ones would you address if you had the time, money and power? (i.e. if you founded a start-up)
3. What do you think are the biggest forces working against sustainability in our social, political and economic systems?
4. How do these forces affect our ability to implement innovation for sustainability?

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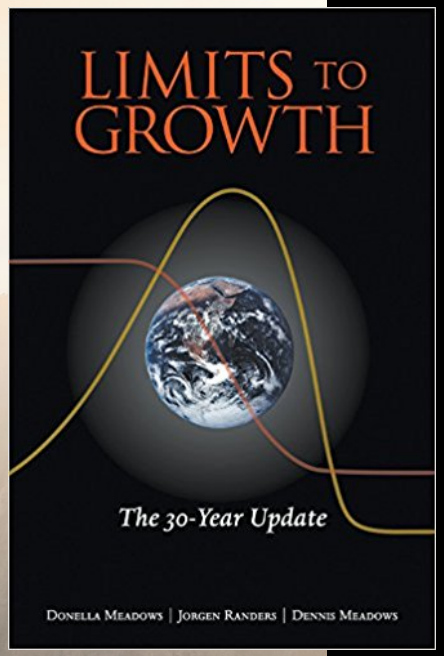
THE SYSTEMS VIEW

The world is a complex, interconnected, finite, ecological-social-psychological-economic system. We treat it as if it were not, as if it were divisible, separable, simple, and infinite. Our persistent, intractable global problems arise directly from this mismatch.

Donella Meadows

Donella Meadows; 1941-2001



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THE SYSTEMS VIEW

- Our organisational environment, is **fundamentally** a living system;

- Living systems are defined by three principles:

  - **-self-renewal,**
  - **-self-maintenance**
  - **-self-transcendence**

- Organisations are Living Systems too!

The core of how to innovate solutions to climate change and other systemic problem is to treat organisations as organisms, designing, leading and navigating them according to these three principles.

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THE SYSTEMS VIEW

This means we have to do some intrinsic work on ourselves, holistically:

Shift from seeing the world as objects, to seeing the world as:

→Inter-subjective

→Interconnected: self-organisation

→Interdependent

- Link the capacity of **self-transcendence** in living organisational systems to the **principle of creativity in ourselves.**

- Enhance competencies of **navigation** through periods of organisational **development and transformation**.

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INNOVATION *FOR* SUSTAINABILITY?

KATERVA

"the creation of new market space, products and services or processes *driven by* ***social, environmental*** *or* ***sustainability*** *issues."* Little (2004)

"Sustainable innovation is a process where ***sustainability considerations*** *(environmental, social, financial) are integrated into company systems from* ***idea generation*** *through to* ***research and development*** *(R&D) and commercialization. This applies to products, services and technologies, as well as* ***new business and organization models****."*

Sustainability Outcomes:

"A sustainability problem was reduced, eliminated or deflected by applying a research-based, practical solution."

GCSO, ASU Rob Melnick 2015

GCSO GLOBAL CONSORTIUM FOR SUSTAINABILITY OUTCOMES

https://sustainabilityoutcomes.org/

http://www.katerva.net/about/sustainable-innovation

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INTRAPRENEURSHIP

- **Intrapreneurs** take responsibility and risk for developing an idea
- Ideally intrapreneurship initiatives are **nurtured** by an existing organization

(Pinchot and Pellman,1999):

- Intrapreneurship refers to "**emergent behavioural intentions … that are related to departures from the customary ways of doing business in existing organisations.**"
- "Entrepreneurship [with]in existing organisations."

(Antoncic & Hisrich, 2003)

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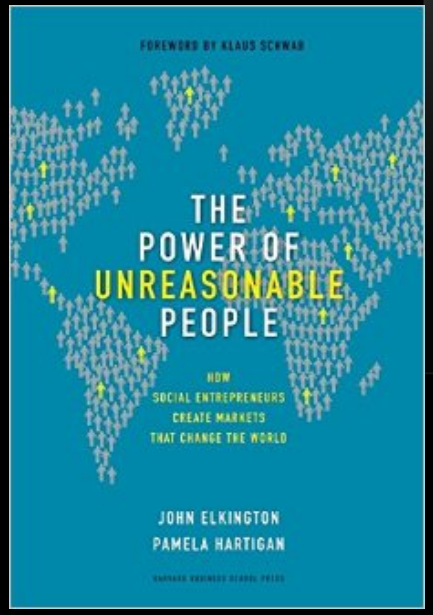
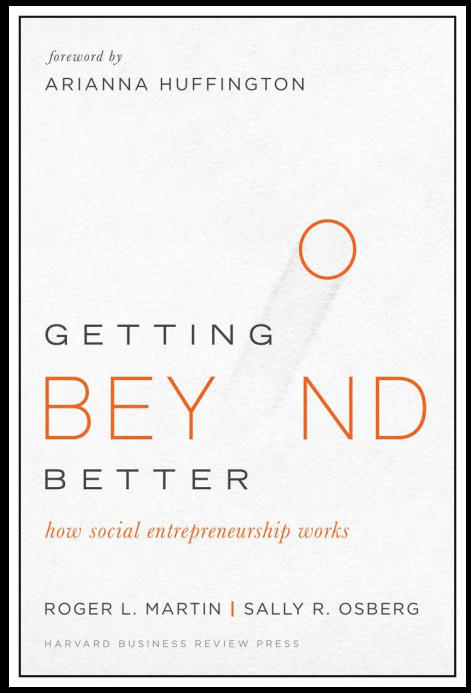
SOCIAL ENTREPRENEURSHIP



Social entrepreneurs seek to **shift a stable but sub-optimal equilibrium** in a way that is **neither** entirely **mandated nor** entirely **market-driven.** They create new approaches to old and pernicious problems. And they work **directly** to tip society to a **new** and **better** state.

(Martin & Osberg, 2015, *Getting Beyond Better: How Social entrepreneurship works)*



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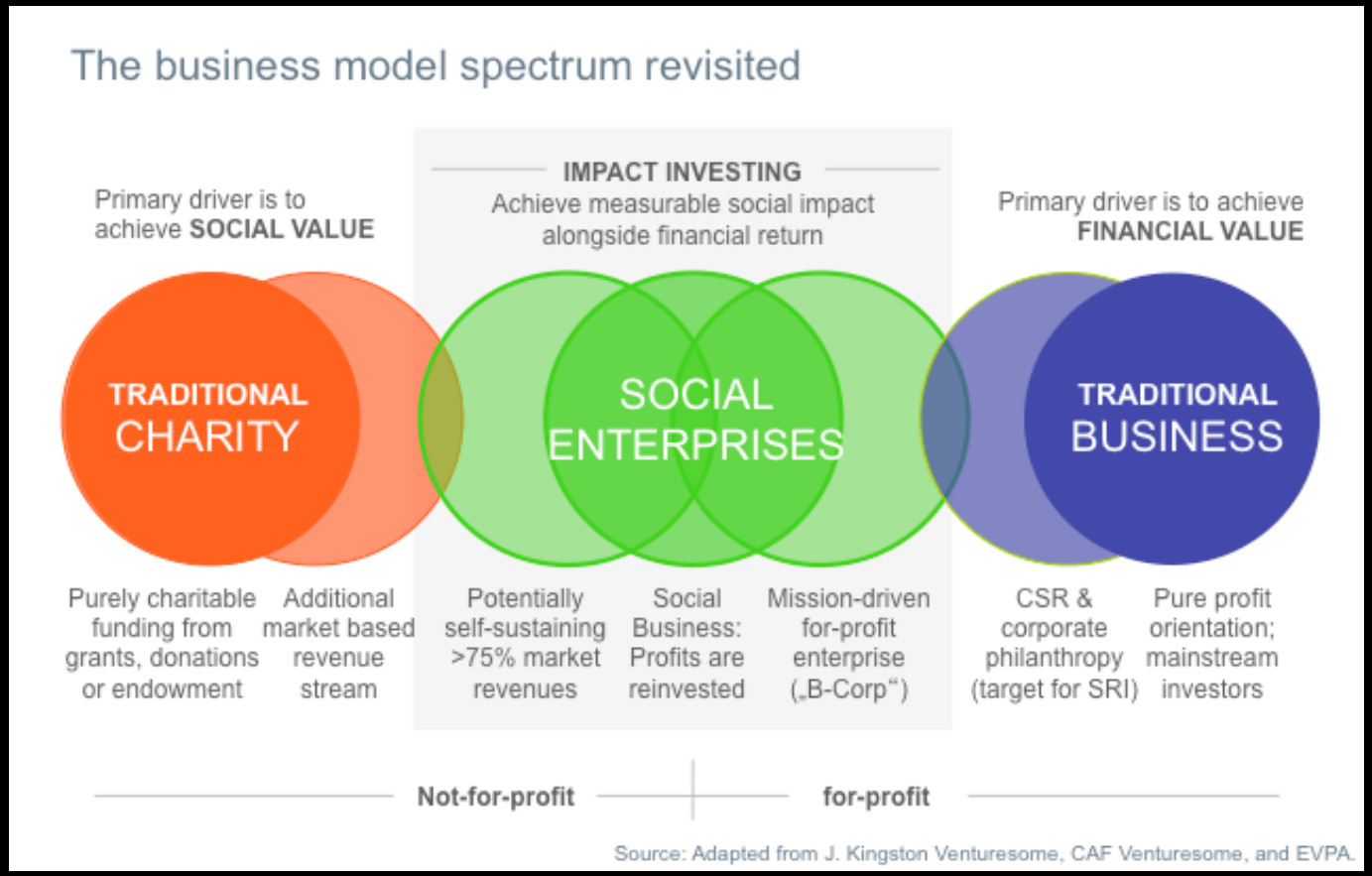
SOCIAL ENTREPRENEURSHIP



https://www.sosense.org/the-finance-paradoxon-for-social-enterprises/

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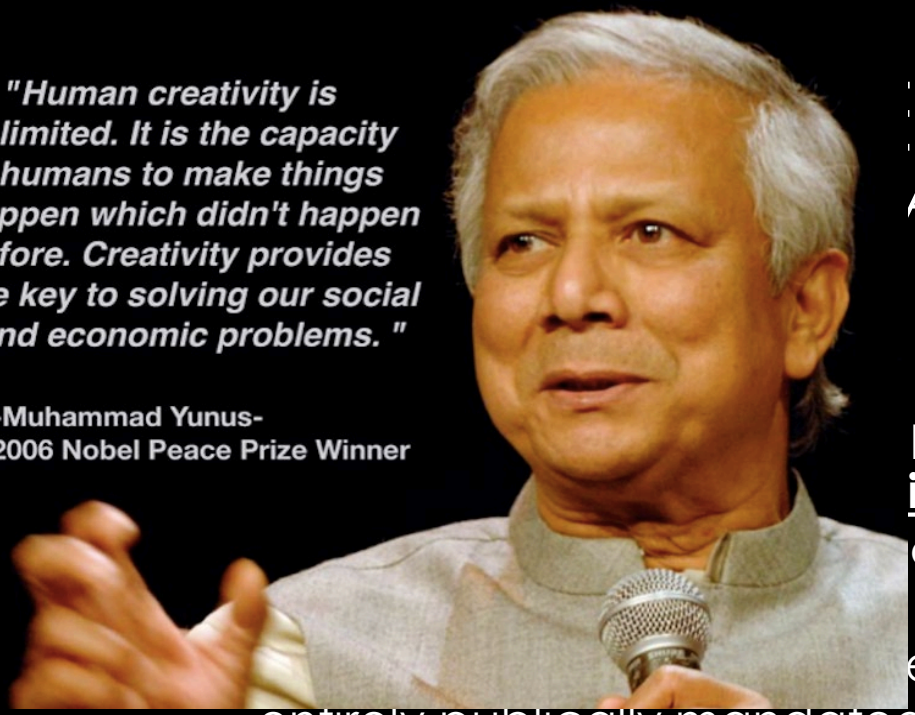


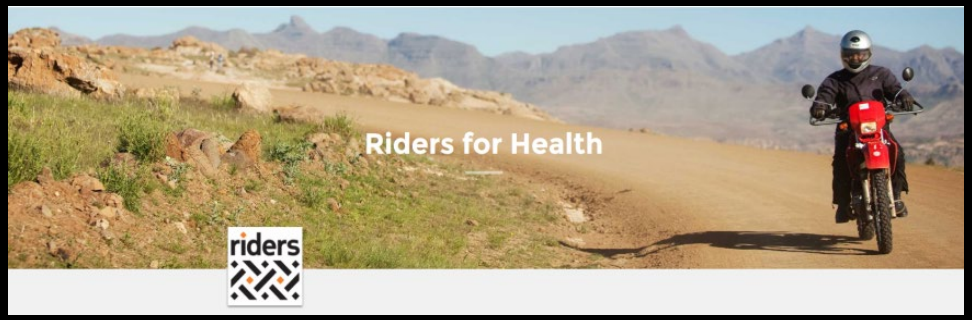
:NTREPRENEURS

ANCE, SELF-AWARENESS, CREATIVITY

private or non-profit can or is **<u>inability problems</u>** quickly or ough.

eering 'hybrid' type, <u>neither entirely publically mandated, nor market-driven</u>.

→ They do what social norms and consensus dictates cannot be done.



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EXAMPLES OF ORGANISATIONS NAVIGATING TRANSFORMATION

EARTHwise centre

The EARTHwise Centre:

- *"As a Centre and Global Community for Planetary Wisdom in Action, our commitment is the co-creation of a Thrivable World, from Our Future."*
- *"Our Future is the creative dimension of our greatest possibility, it is from here that we birth new worlds by weaving new experiences into being through the wholeness patterns of thrivability, abundance, and prosperity."*
- *"As a consciousness growing community, we manifest and share the wisdom codes, processes, and practices for co-creating thrivable, evolutionary, and regenerative business, governance, and educational systems that actualize Our Future."*

https://www.earthwisecentre.org

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HEALING AND REGENERATING OUR-SELVES AND OUR SYSTEMS

EARTHwise centre

EARTHwise Projects:

- **Thrivability Education:** courses & projects are for people from all generations, and in particular Youth, to learn how to become Custodians for a Thrivable world and future
  - **Indigenous Global Movements:** Together with **Four Worlds International Institute** (FWII), SINE, and other partners EARTHWISE applies **the Sixteen Indigenous Guiding Principles for Developing a Sustainable, Harmonious and Prosperous World**.
- **Climate Change Advocacy:** catalyze concrete actions based on Planetary Health Indigenous Wisdom principles and facilitation of the underlying consciousness shift.
  - **A Feminine Perspective on Climate Change**
  - **The Wisdom Economy**

https://www.earthwisecentre.org/our-projects/

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EXAMPLES OF ORGANISATIONS NAVIGATING TRANSFORMATION

fedobe
ecommerce engineered

OPEN INNOVATORS
a fedobe initiative

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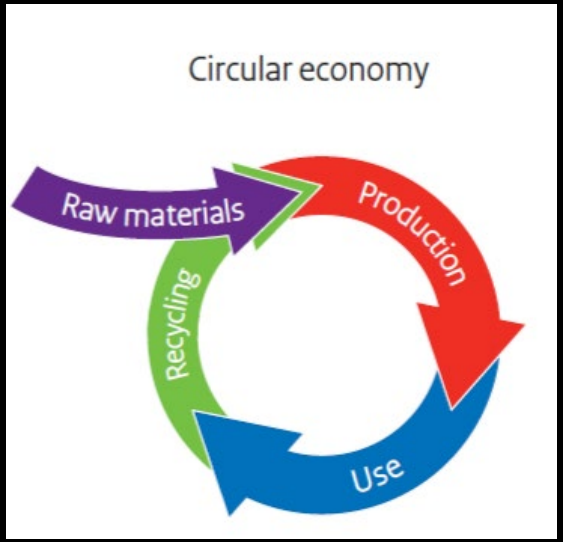
SUBSIDISING E-COMMERCE AND DIGITAL MARKETING FOR SUSTAINABILITY START-UPS

OPEN INNOVATORS
a fedobe initiative

Open Innovators (https://open-innovators.org/#about)

- Testing 1st example of **circularity** in digital economy
- Only work with organisations who are substantively committed to the 2030 Agenda (SDG's, Paris Agreement 2015).
- You have to apply and are vetted for entry into services
- A (rare?) example of how the private sector is ready to contribute to sustainability transformation in a bold way.
- Open-source
- Gaining attention



https://www.government.nl/binaries/government/documents/policy-notes/2016/09/14/a-circular-economy-in-the-netherlands-by-2050/17037+Circulaire+Economie_EN.PDF

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EXAMPLES OF ORGANISATIONS NAVIGATING TRANSFORMATION

The Sustainability Accelerator Network (formerly Atkisson Group):

→**Professional network** of firms, foundations, individual experts, and university centres of expertise. We offer advisory, training, research and communications services.

→Tools, Methods and Leadership facilitation for Sustainability Transformation

→Founder Alan AtKisson had his last workshop and event as Founder and Director here in Maastricht last year.

→ His new role, as Assistant Director-General and Director, Department of Partnership and Innovation, SIDA (Swedish International Development Cooperation Agency)

http://atkisson.com/

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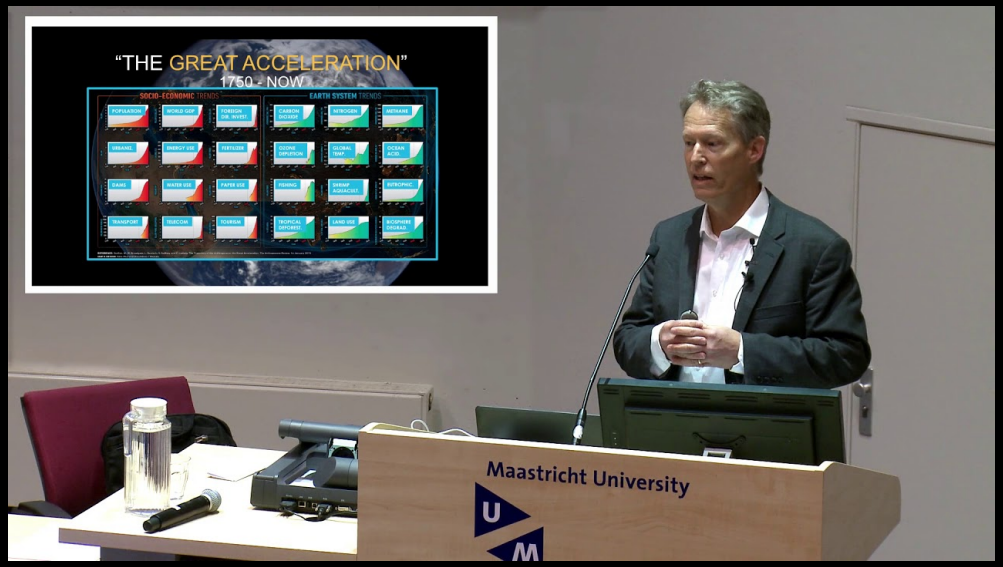
THE ROLE OF SCIENCE IN NAVIGATING TRANSFORMATION



His Talk from our Green Office Symposium last year: https://youtu.be/5x3mA8WIARg

*"Ideas start by **people sitting around**, chatting in an **informal** context, often tied to their research",*

*"Universities are, can, must be, a **fountain** of **innovation** and **transformation for sustainable development**. Far more than they are now."*

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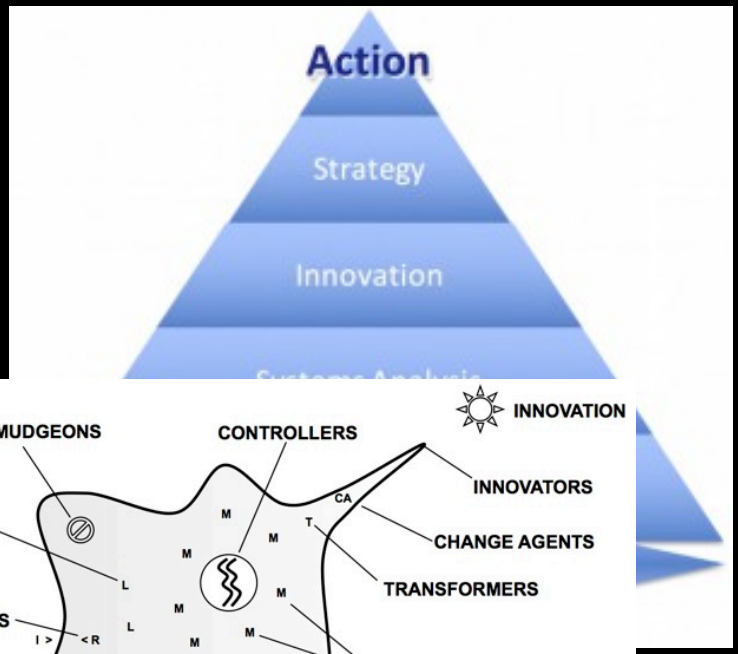
TOOLS FOR NAVIGATING TRANSFORMATION

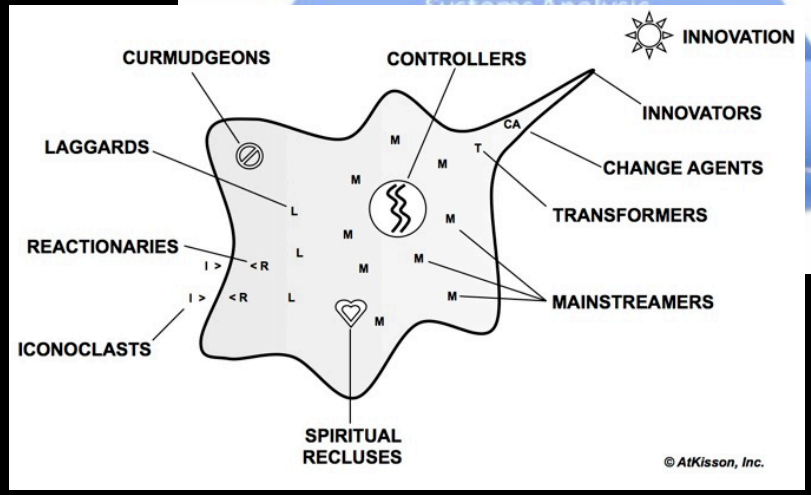
SYSTEMS THINKING TOOLS

- The Sustainability Compass
- Frameworks to allow for action planning
- Giving people a sense of what sustainability means
- Methodology to think about how to do sustainability – VISIS
- The VISIS "Pyramid Workshop"
- Amoeba, Training Change Agents to Accelerate Transformation
- Sustainability Innovations
- Evert Rogers, Innovation Diffusion Theory

http://atkisson.com/tools/

http://atkisson.com/visis/





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SYSTEMS ENTREPRENEURSHIP
ORGANISATIONAL PSYCHOLOGY

How can we characterise the environment we are in now?

- A high degree of **environmental turbulence** - **change**, **chaos**, **complexity**, **uncertainty** & even **contradiction**
- High levels of **competition**
- **Fast-changing** markets
- Importance of **information & knowledge (countermand mis/dis-information)**
- Importance of **cognitive skills** of **creativity** & **innovation**

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SYSTEMS ENTREPRENEURSHIP & DEVELOPMENTAL PSYCHOLOGY

In this sense, we can view **Entrepreneurship and innovation** as a:

***co-evolution of individuals* and *their environments*.**

Appreciation of the holistic, interdependent reality of organisations

Gabor Maté, Physician, Developmental Psychologist, Author

in line with psychology:

"In any community of beings living in close contact with each other , the behaviour of individuals can be understood only in the context of their relationship to the group as a whole."

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SYSTEMS ENTREPRENEURSHIP

INNOVATION FOR SUSTAINABILITY

- Remedying areas of social and economic life where both the **market** and **government have failed**
- Finding the '**pain points**' in constituents
- Seeking to understand the **complexities** of a problem situation **before** seeking to change it
- **Co-generating** the Solutions with Stakeholders
- Truly **understand** how they see the world
- **Experiment** collectively & learn from this

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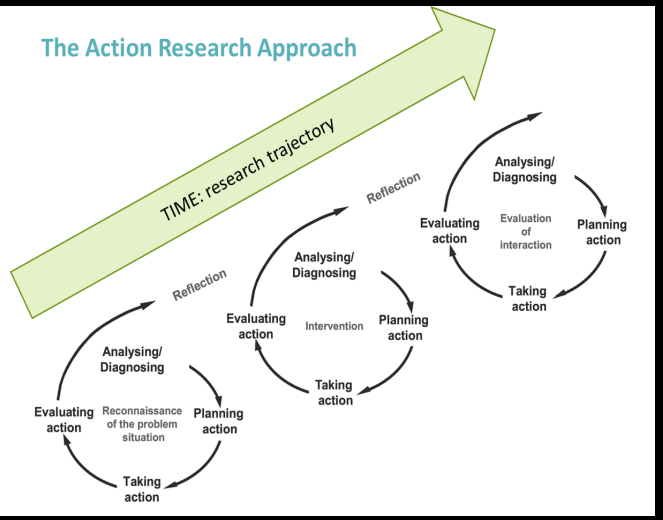
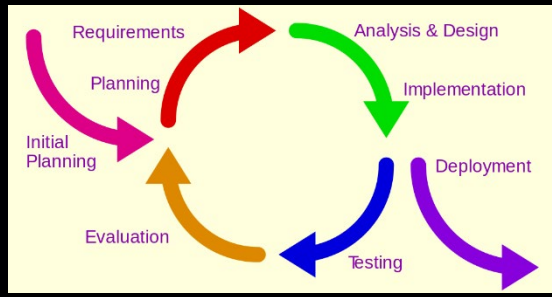
INTRINSIC COMPETENCIES FOR TRANSFORMATION

Intrinsic Qualities, Attributes, and Behaviours for Transformation/Systemic Change:



https://cris.maastrichtuniversity.nl/portal/files/14221044/ICIS_e_book_24.pdf

- Iterative Design
- Action Research
- Validating assumptions
- Self-reflexivity & Self-awareness
- Empathy; of oneself and others
- Emotional & Social intelligence
- Developing a Learning Mind-set
- Thinking in systems
- Thinking Laterally (outside the box)
- Action Learning (journaling work and life, then reflect)
- Knowing when to listen
- Knowing when to share intelligence; Be cunning but kind.
- Knowing that there are many forms of intelligence! (e.g. emotional, social as well as intellectual)



https://commons.wikimedia.org/wiki/File:Iterative_development_model_V2.jpg

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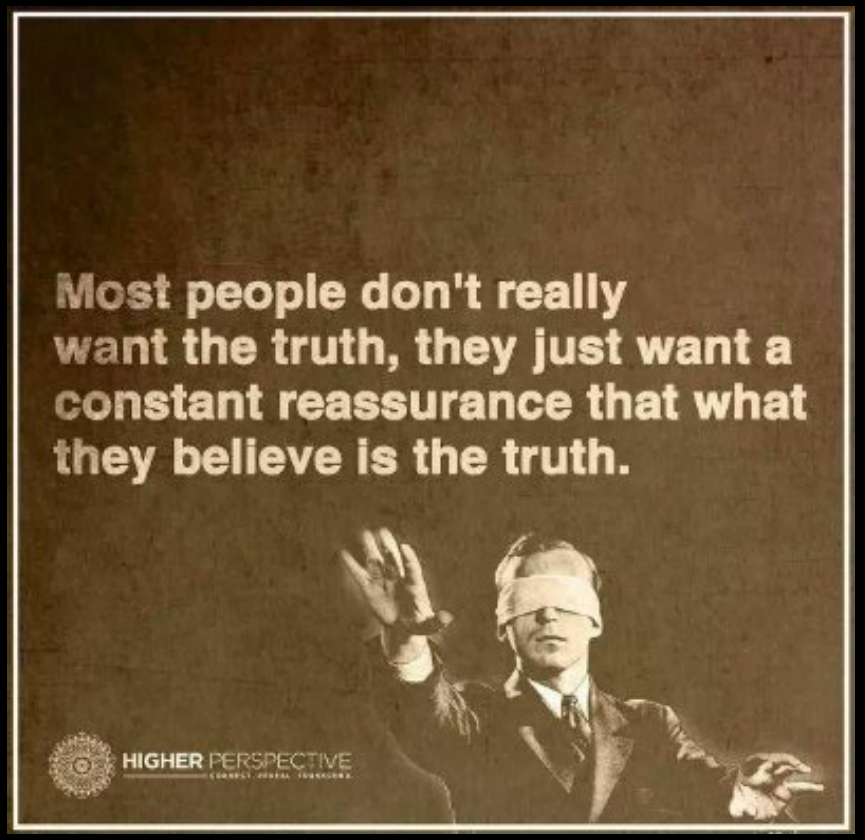
THANK YOU FOR YOUR ENERGY!

#ASKWHY

"On the surface , there was always an impeccably realistic world, but underneath, behind the backdrop's cracked canvas, lurked something different, something mysterious or abstract…"

"On the surface an unintelligible lie; Underneath, the unintelligible truth."

Sabina in Milan Kundera's *The Unbearable Lightness of Being*



TOM WAITS, American Musician

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IN CASE YOU'RE CURIOUS

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