



Sustainability transitions research *combining thinking and doing for positive futures*

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Dutch Research Institute For Transitions

Institute of Erasmus University Rotterdam, the Netherlands

Academic education, research, consultancy and action research

40 employees

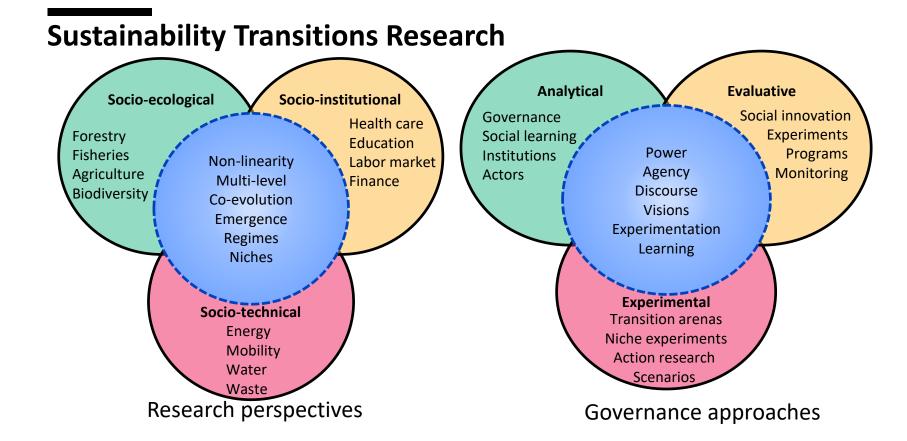
Founded in 2004

mission

Guiding and accelerating sustainability transitions

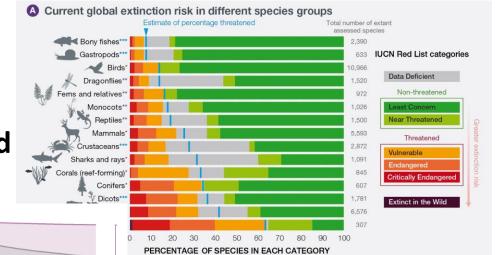


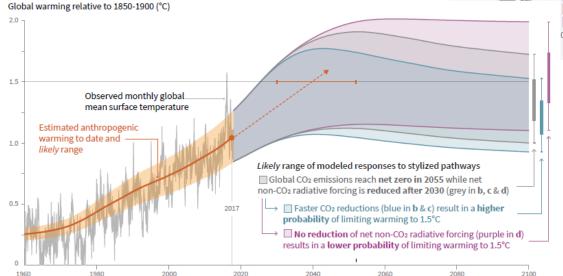






Persistent unsustainability: Transformative change needed







Transitions

Patchwork of regimes Niches (novelty)

Niches (novelty)

Time

Stabilization

Stabilization

Stabilization

Stabilization

Fredevelopment Acceleration Take off System breakdown

A process of structural, non-linear systemic change in dominant *cultures*, *structures and practices* (regime) that takes place over a period of decades (Rotmans et al, 2001, Grin et al, 2010)

cultures: shared values, paradigms,

worldviews, discourses

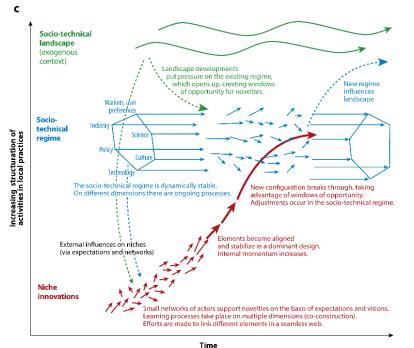
structures: institutions, economic

structures,

physical infrastructures

practices: routines, behavior, action,

lifestyles





Historic transitions



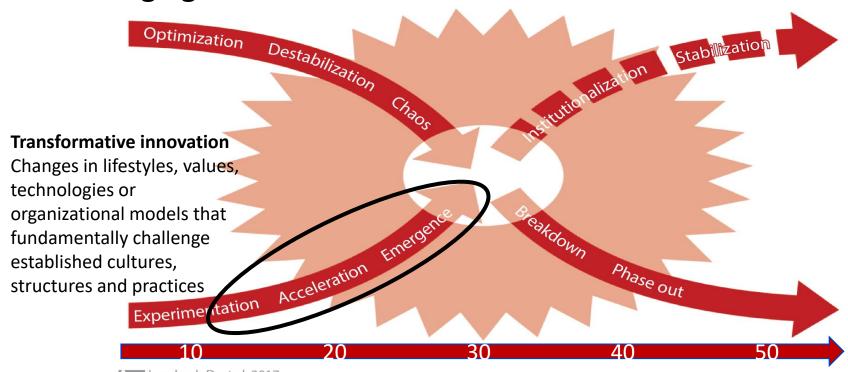








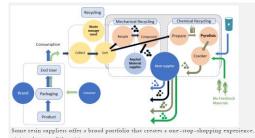
Emerging transformative innovations



R Loorbach D, et al. 2017. Annu. Rev. Environ. Resour. 42:599–626



Changing the game?

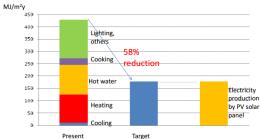




Target for Zero Energy Building in case of residential building

Averaged values of Japanese detached houses Floor area: 138m²

PV Solar panel of 5kW is installed.









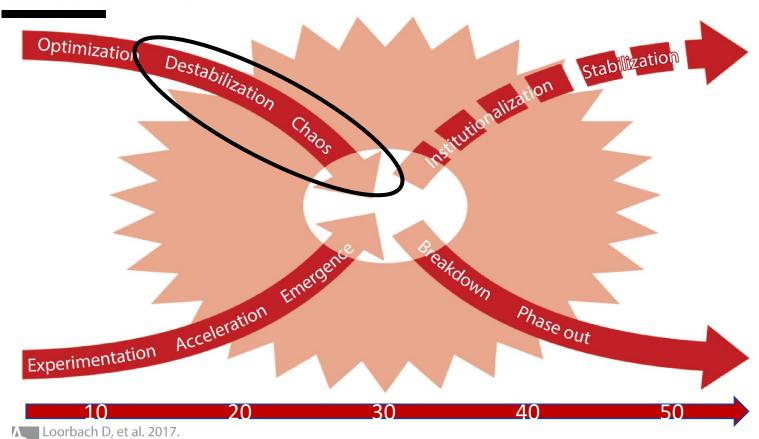










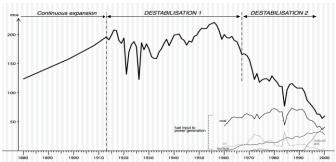


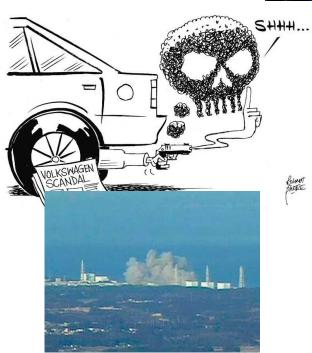
Annu. Rev. Environ. Resour. 42:599–626



From destabilisation into transition















Proactive or transformative incumbents?





CIRCULAR IKEA















Shell challenges power giants



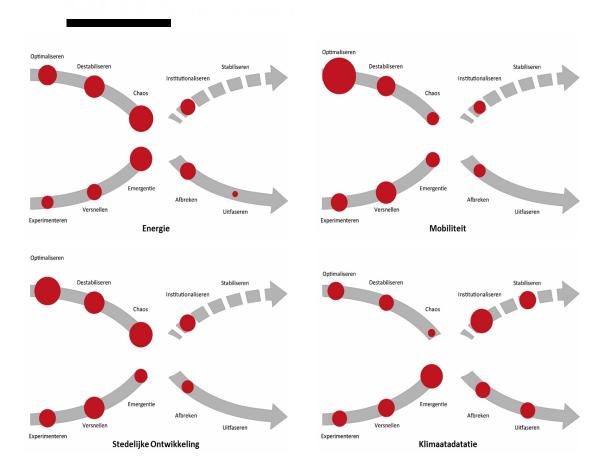
Royal Dutch Shell is making a strategic push into the electricity sector and expects to be supplying power to industrial customers next year: ANDREW MILLIGAN/PA

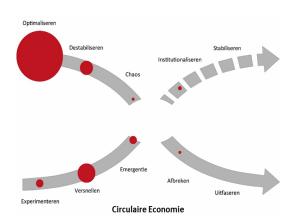






No transitions yet







(un)desired transitions?









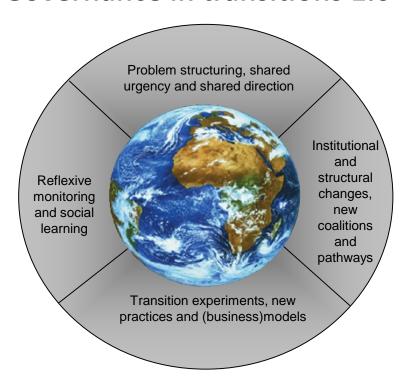
Transition governance: principles for transformative entrepreneurship

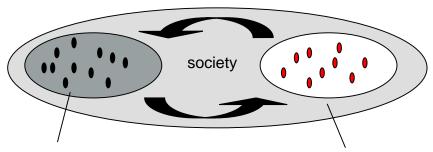
Radical on the long-term, diplomatic on the short-term

- **Systemic:** develop systemic understanding of persistency and transition dynamics
- Selective: focus on change agents, frontrunners and exploring desired patterns
- **Back-casting:** *envisioning and scenarios as instruments for change*
- Adaptive: experimenting towards multiple goals and transition pathways
- Learning-by-doing and doing-by-learning: ensure monitoring, reflexivity and critical mindset



Governance in transitions 1.0





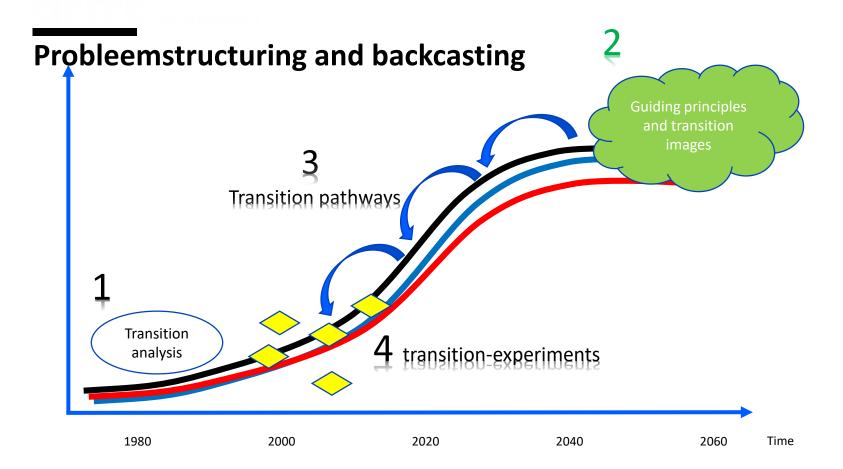
Business as usual

- Short term
- Incremental improvements
- Goals and targets
- Standardisation

Transition arena

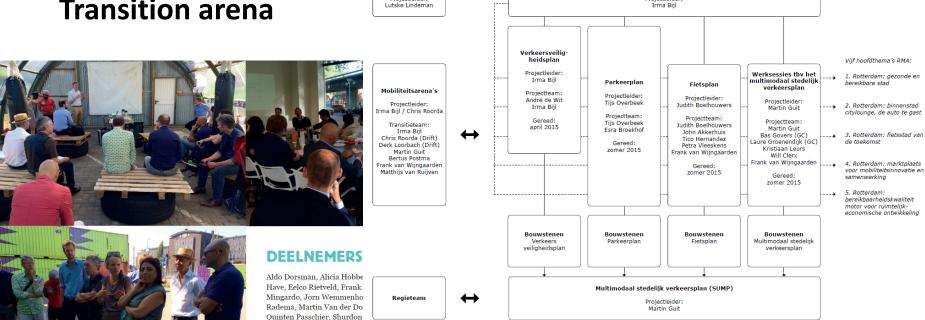
- Long term
- Transformative change
- Directionality and pathways
- Experimentation and learning







Transition arena



Rotterdamse Mobiliteitsagenda (RMA)

Projectleider:

Schoon rijden

Projectleider:

Somsen, Vincent Luyendijk, Diko Gyono, Chilo Rooman, Derk Loorbach, Irma Bijl-Rodenburg, Martin Guit, Bertus Postma, Marjolein van Doorn en Melissa Groen in 't Wout







Social mobility











Kinderfietsenplan Grootschalig inzamelenvan kinderfietsen; beschikbaar stellen & laten pimpendoor kinderen op Zuid (ism ANWB)



Fietsvriendelijke scholen Scholenprogramma voor veilige schoolomgeving & opbouw fietscultuur (ism BMX fietsschool en PothPiek architecten)







Connecting public space







Park [ing] day.

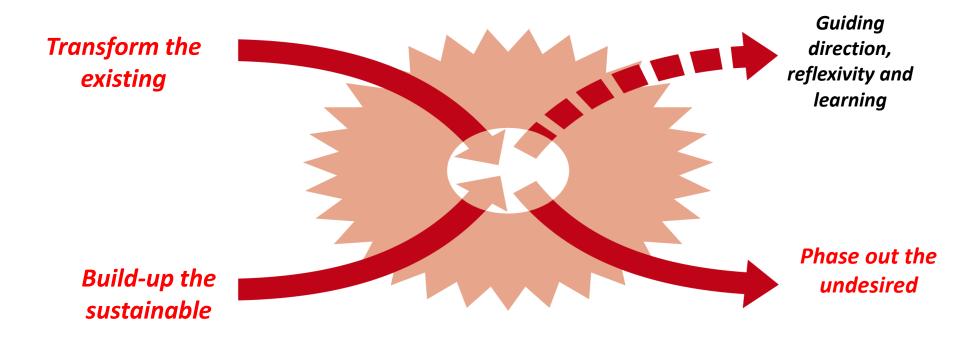


Accelerating and guiding?



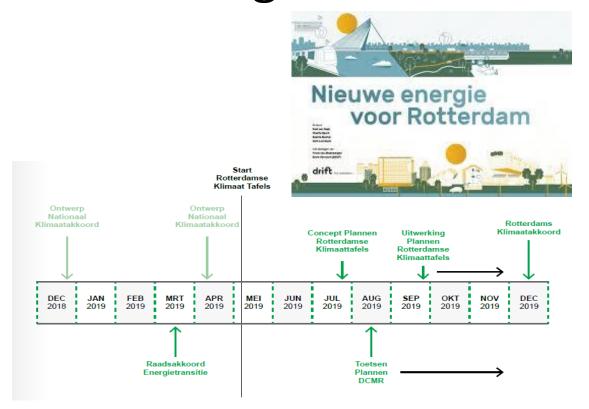


Governance mix for later stage transitions





Climate agreement



Mobility transition Rotterdam: 100% zero emission in 2030

A direction for societal change rather than a policy goal

100% zero emission within city limits
affordable, accessible and fun for all
60% reduction of cars, 80% reduction of space use for cars
inner city and neighborhoods: slow traffic has priority
healthy mobility (walking cycling) pays, motorized mobility costs

Focus on short term structural experimentation bringing existing niches to scale



Governance: (urban) acupuncture for structural change

Create breakthrough interventions to explore how the alternative could work to accelerate *positive transitions*

Embrace the radical direction but reduce it to a manageable and accountable short-term intervention

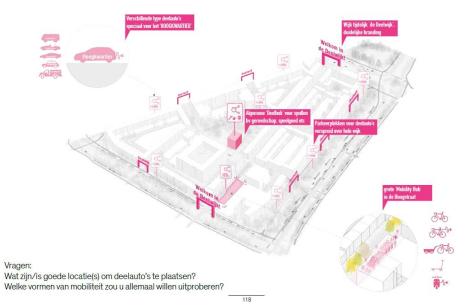
Aim to make existing alterantives attractive, available and accesible to all to help shift the norm

Start **close but at scale** in neighborhoods, streets communicties and in organisations and areas

Facilitate **translocal diffusion** by enabling people to see, experience and share alternatives



Car-free neighborhoods















mogelijkheden opzichte van voor sport, spel drukken wegen. Verbeteren en wandelen in Tevens voor







Blaakpark









Transitions need action research(ers)

 Drivers and mechanisms that cause transitions need to be identified, interpreted and discussed

 Path-dependencies, routines and vested interests that work against desired futures need to be challenged

 Emerging alternatives need to be assessed, empowered, connected and diffused

 Possible positive futures need to be guided, protected, prioritized and nurtured

