



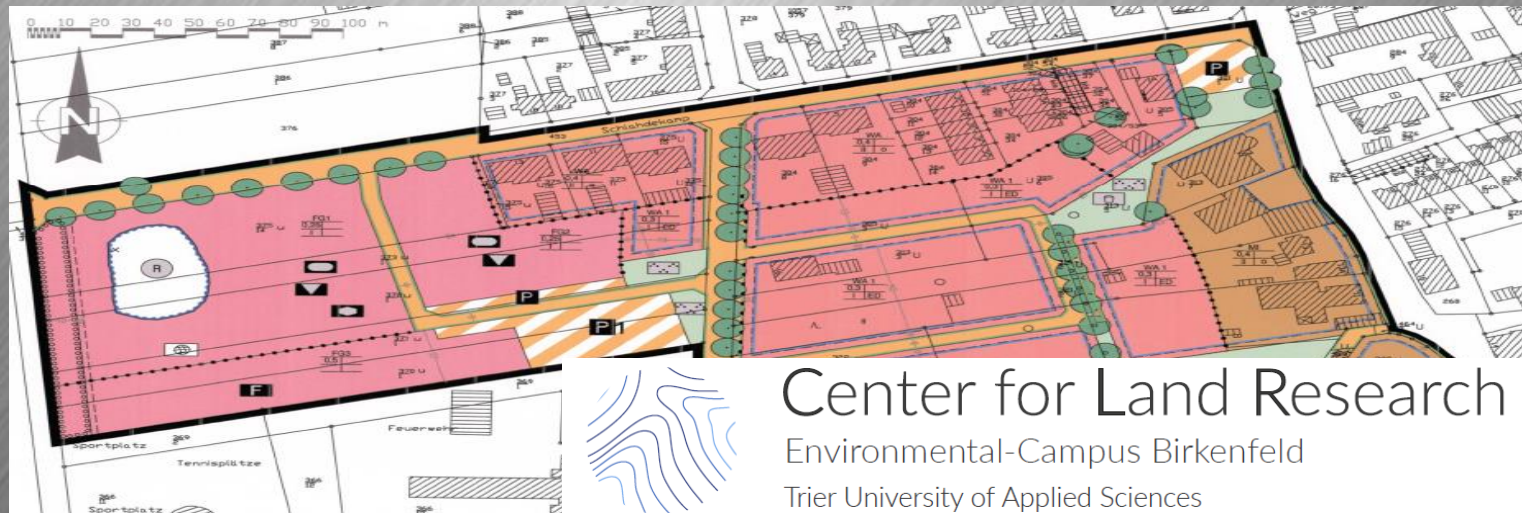
HOCHSCHULE TRIER

Umwelt-Campus Birkenfeld

Umwelt macht Karriere.

Urban and regional development: Resilience as new sustainability

Prof. Dr. Dirk Löhr



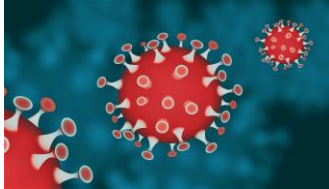
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Lessons from the shocks?

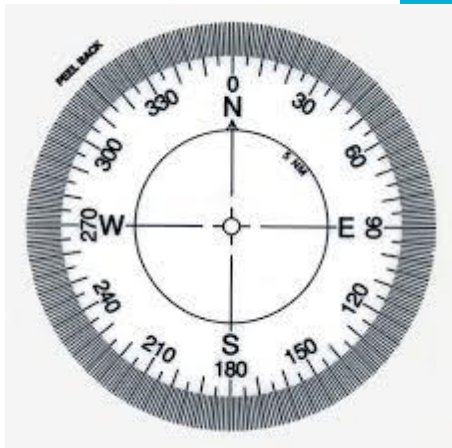
Shocks



- Few people have foreseen it ... (?)
- Corona (external shock) has exposed problems and will accelerate structural change.

Keeping prepared

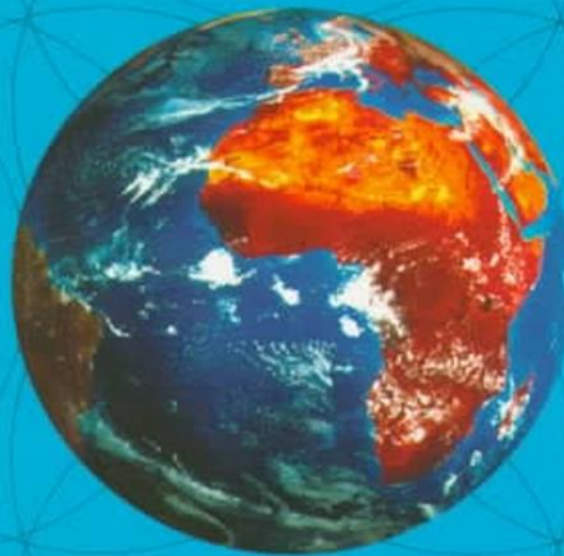
- Both resilience and sustainability are about survivability
- However, resilience is a bit more



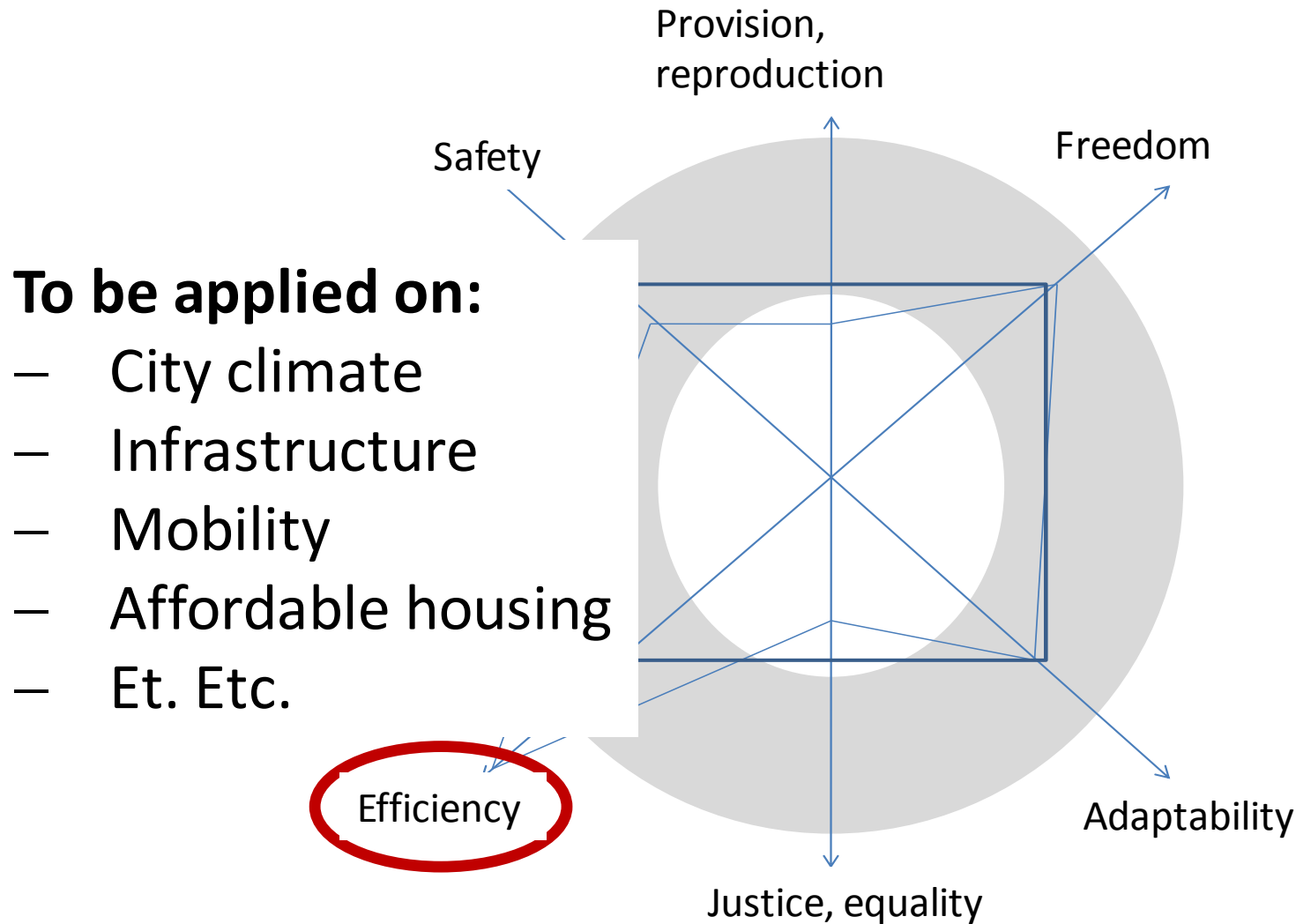
Earth at a Crossroads

Paths to a Sustainable Future

Hartmut Bossel



Guiding values in living systems (Bossel 1998)



Exceeds the classical three pillars-concept of sustainability without discarding it

Resilience as new sustainability?

Same, same, but different!

Not: Protection of business as usual!

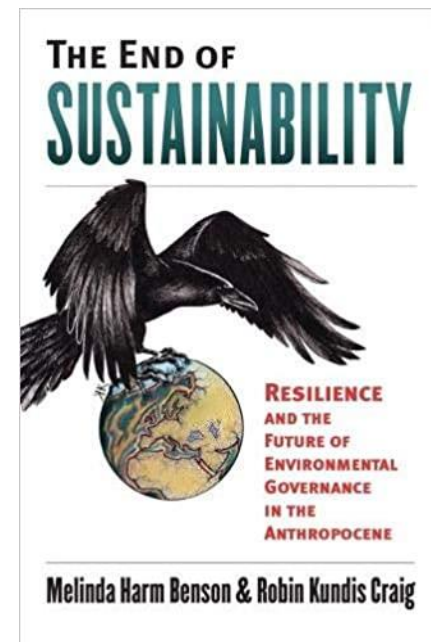
But: Anticipation & Transformation!

Resilience needs contradictions:

- Ecology, incl. planning: e.g. decentral concentration!
- Economy: e.g. “colourful specialisation”
- Social aspects: use and containment of market forces
- Financial perspective: Resilience costs money, however: stabilization of the financial base



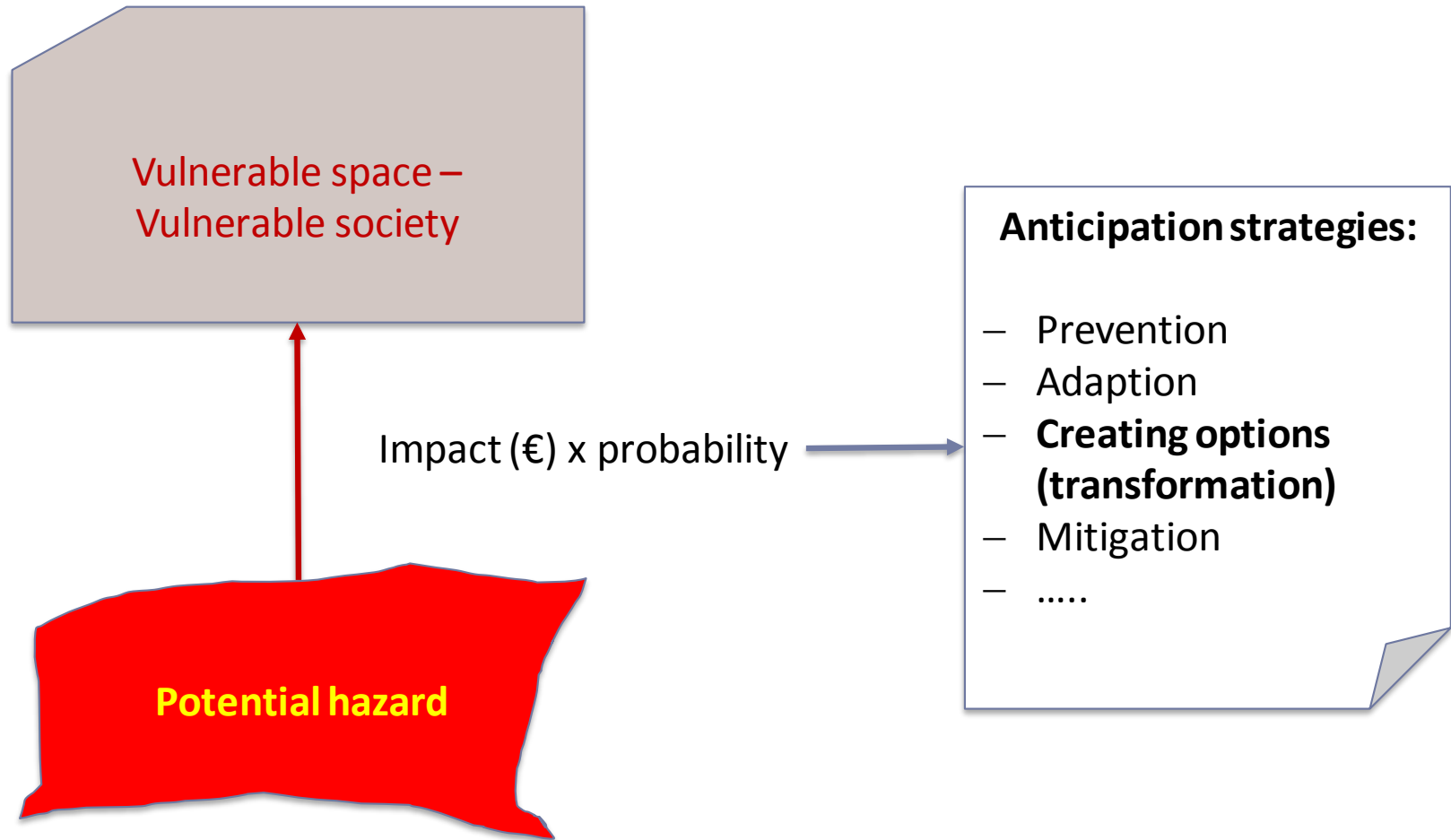
(Source: Hydropoint.com)



Same, same, but different



Resilience – more than risk management





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„Resiliente S Zukunftsstac

Im Auftrag des Mir
Wohnen, Stadtentw
des Landes Nordrh

Vergabe Az.: I.5–3

Research Note

Towards resilient and sustainable cities: A conceptual framework

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KEYWORDS

Resilience;
Sustainability;
Mashhad City;
Water resources.

Abstract. Cities are complex and dynamic meta-systems in which technological and social components interact with each other. A variety of hazards threaten cities; thus, planning for resilience in the face of urban disaster is important. We are just beginning to realize the scope and magnitude of the challenges inherent in making our cities resilient to threats from natural hazards and terrorism. To meet these challenges, a national resilient-cities initiative aims at the vision of the resilient city as the goal that covers all types

Die resiliente Stadt

Städte sind heute zunehmend Natur- und anderen Risiken ausgesetzt und benötigen daher eine hohe Widerstandsfähigkeit.

Fachleute bezeichnen diese Fähigkeit auch als Resilienz. Sie entwickeln Strategien, um Städte besser gegen Risiken zu schützen, etwa Überschwemmungen. Vor allem das Elbehochwasser von 2002 und das Oderhochwasser von 2005 haben gezeigt, wie wichtig das ist.

VON THEO KÖTTER



Stresstest Stadt –
wie resilient sind unsere Städte?



Example: Ecology, planning, institutional infrastr.

Orientation:

- “Perspectivic incrementalism”
- More error-friendliness of planning
- More adaptiveness

Program:

- On the one hand *densification*, on the other hand *loosening* (fresh air corridors), less sealing of land, ground water protection (basements?) etc.
- Using nature as “soft infrastructure”!
- Growing importance of the region as a management level: joint FNP, joint industrial parks, joint infrastructure planning and financing
↔ cooperation!

Controlling land use



(Source: Kötter 2013)

Example: Economy / business location policy

Vision: Balance between *diversity* and *specialisation* of commerce and industry

Program:

- For a long time the credo was focus on efficiency: export basis theory: basic sector (often large companies) - comparative cost advantages - cluster formation - regional branding
- External shocks are more severe if the only horse you are riding is the wrong one

Controlling land use



Example: Economy / technical infrastructure

Vision:

- Adaption of new challenges
- Reducing vulnerability (e.g. flood protection)

Program:

- Technical / grid-bound infrastructure: *Redundancies* in technical infrastructure, particularly if it is critical (e.g. maintaining water reserves)
- Mobility: New forms (charging stations, bus lines, trams) must be actively pushed
- Energy supply - local backing (supply security) - balance between decentralised and centralised supply structures



Stable foundations of the city

Example: Social infrastructure (incl. housing)

Vision: Social infrastructure (day-care centres, schools, etc.) is the key to the transformation of the world of work

Program:

- Successful cities have to attract higher earners
- But: affordable housing has to be granted
- *Diversity*: Healthy mix of neighbourhoods (by ethnicity, income, age etc.)
- Community building!

Containing the market forces



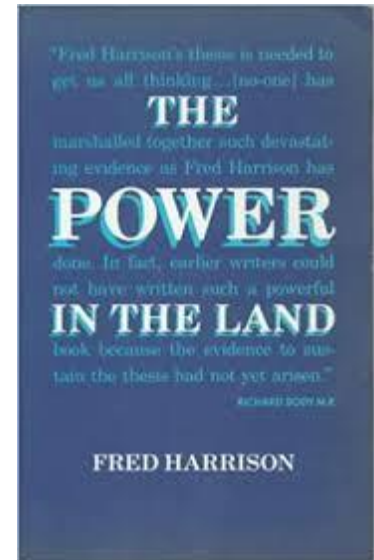
Example: Financial resilience

Vision:

- Resilience costs money (self-insurance)
- More independence

Program:

- Value capture, stronger role of property taxes!
- Reform of municipal finances is necessary, but beyond the competence of municipalities
- Different attitude of supervision authorities is necessary, different legal framework

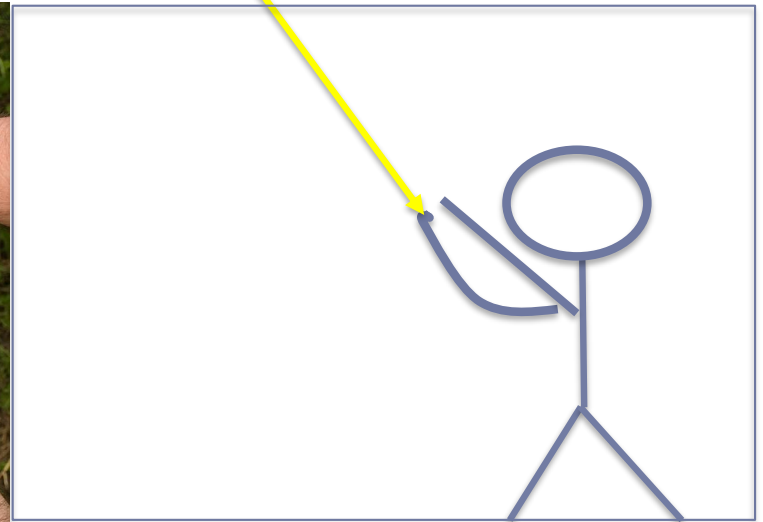


Using the financial power of land

Means:

Land as a common good!

	Wealth	Use / Abuse
Stock	Right of disposal (Ius abutendi)	Right to change (Abusus)
Flow	Right on the yields (Usus fructus)	Right to use (Usus)



Measurement?

Only what is measured can be managed!

→ Development of the balanced scorecard concept for municipalities



Conclusion: Old wine in new bottles?

- Many techniques are already developed and applied
- However: More a *philosophy* than technique (→ Bossel 1998)
- Necessary but not sufficient for application:
Control of land!
- Means reorientation:
 - Different planning approaches
 - Dilution of private property rights
 - Public land trusts
 - Concept instead of highest bid
 -



Thank you!



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