

“Advancing human security through knowledge-based approaches to reducing vulnerability and environmental risks”

United Nations University Institute for Environment and Human Security (UNU-EHS)



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Flood risk Perception and Communication in Different Cultural Contexts

—
A Comparative Case Study
of the Cities

Wuhan, China
and
Cologne, Germany

Summer Academy for Social Vulnerability

Megacities: Social vulnerability and resilience building

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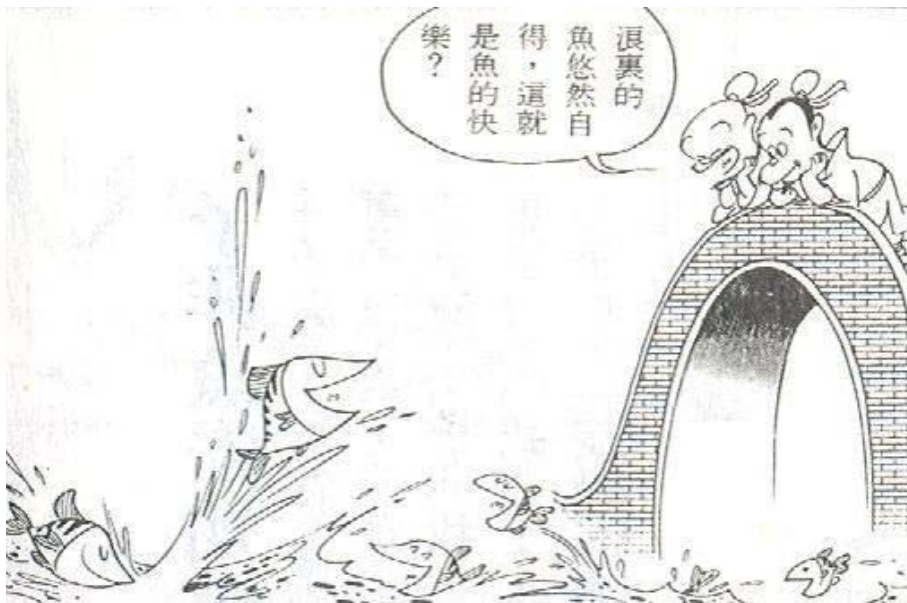
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Risk is a Social Construct



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Research Questions

- How do the different actors in flood risk management in China and Germany perceive and communicate flood risk?
- How is their perception and communication embedded in culture?

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Field Sites



Köln, 1995



Wuhan 1998

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Operationalization

Perception

- Institutional arrangement
- [Spatial planning](#)
- Decision-making
- Interests conflicts and solutions
- Perception of different stakeholders
- Human-nature relationship

Communication

- Administrative cooperation
- Flood risk information and training
- [Spatial planning](#)
- Decision-making

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Spatial Planning (Content)



Improvement of dike quality and further construction of the dike system

The dikes within the city area shall be 2 meters higher than the water gauge of 1954 (29.73 m)

Xilianghu, Dujiatai, Wuhu, Zhangduhu and Dongxihu shall remain retention areas until 2009



Construction permission application process (Planfeststellungsverfahren): dike construction and retention areas

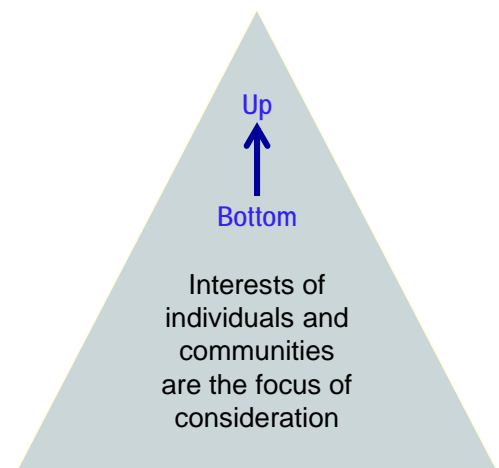
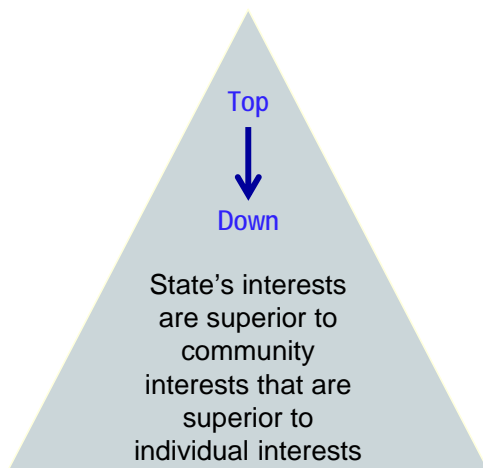
Spatial plan (Raumordnung)

Urban land use planning (Bauleitplanung)

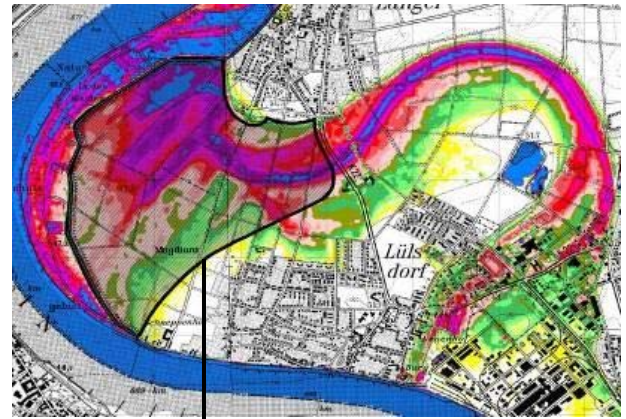
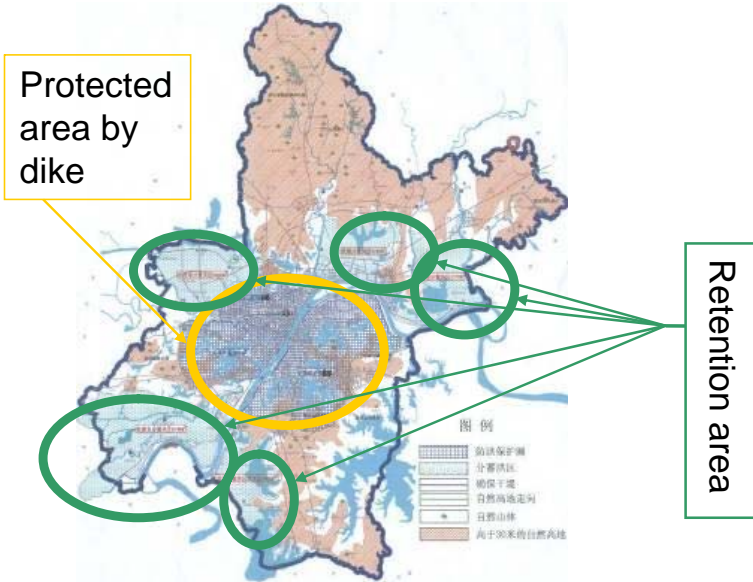
Zoning plan (Flächennutzungsplan)

Legally binding land-use plan (Bebauungsplan)

Spatial Planning (Process)



Spatial Planning (Risk Distribution)



Retention area: ca. 5 Mio. m³

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Strengthening Certain Way of Life

„Values and meanings of our society are just not there, ... rather, it is the other way around: in the spectacular performances the social meanings of a culture are only then produced/conferred” – Böhme, 2006

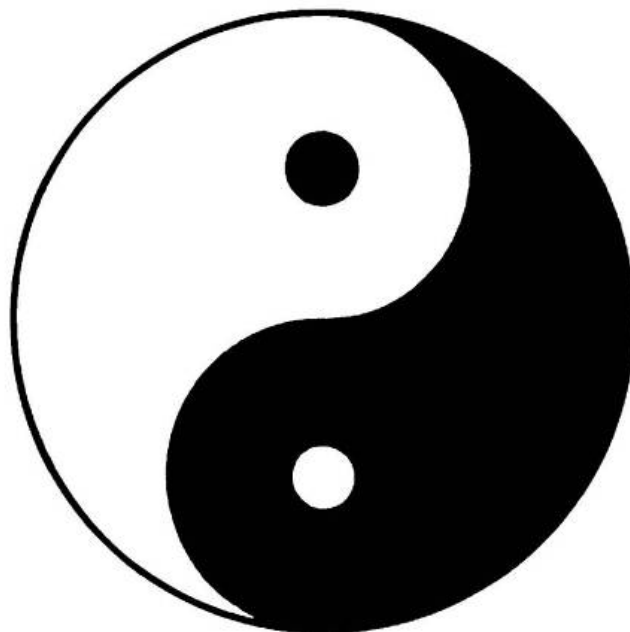


Mr. Liu, a farmer living in the retention area Mengwa flooded on 2007/07/10: *“No one in the village wants to be flooded, ... but for the interests of the upper reach region, we would rather sacrifice ourselves. Flood is a **natural hazard**, we don't have another choice, we have to sacrifice our smaller interests for the greater interests.”*

(Xinhua News)

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Vulnerability and Trade-Off of Risk and Chance



Thank you
for your
attention!