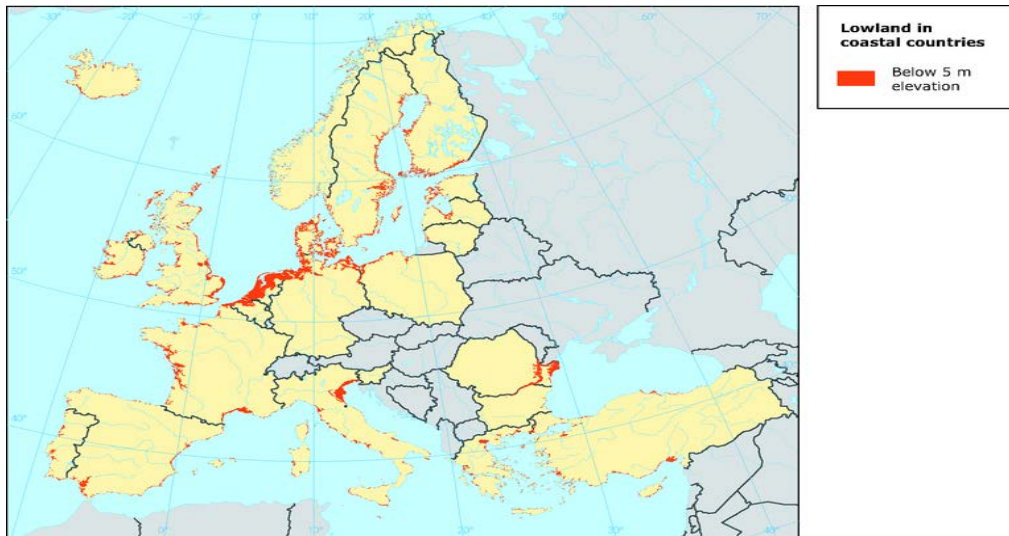


# Rethinking Risk Perception Influence on Local Preparedness in Urban Cities and Rural Communities

Ann Bojsen, Associate Professor  
Metropolitan University College in Copenhagen, Denmark

# Current natural hazards and potential risks from climate change in Denmark

Main hazard risks in Denmark are linked to the rise in sea levels, floods, heat waves, extreme rainfall, floods from rivers, landslides, droughts, water shortages and air pollution.

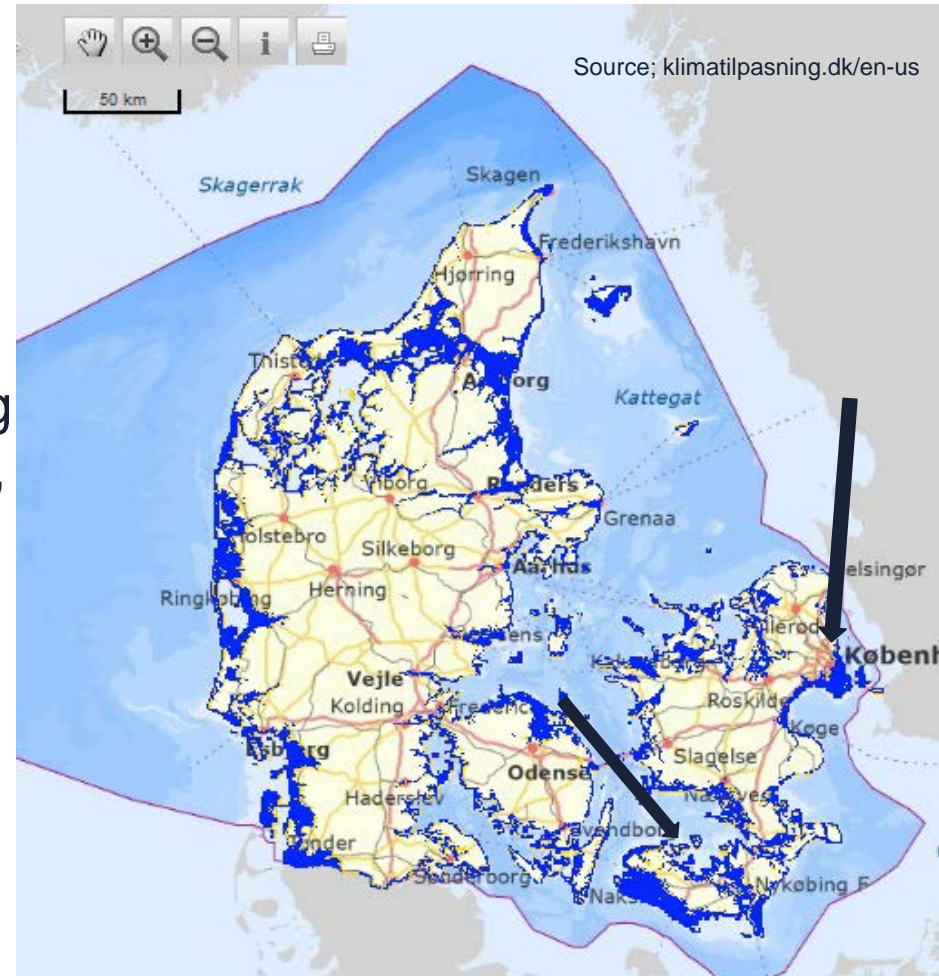


# Exposed areas in Denmark

Globally, sea levels are expected to rise 0.28 to 0.98 m by the year 2100, but with regional differences and negative consequences.

Sea level rise causes erosion, flooding and pollution of fresh water resources, and it is a significant threat to *rural coastal* areas and urban settings.

But climate does not need to be central in local risk perception



# Local preparedness and risk exposure is subject to many factors

An often applied definition of risk is a measure of the probability and severity of adverse effects which refers to the idea of a calculation of how likely an incident is to occur, and given its occurrence, how dire the consequences would be.

But what is we included the human characteristic under the assumption that risk avoidance depends upon an individual's risk perception, level of resilience and personal risk tolerance.

# Prior research and inspiration

A sociological study of climate change adaptation of private homes and the Danish diversity in homeowner responses to climate change with the main focus on the local citizens risk perception according to rural - or urban settings

## Research questions

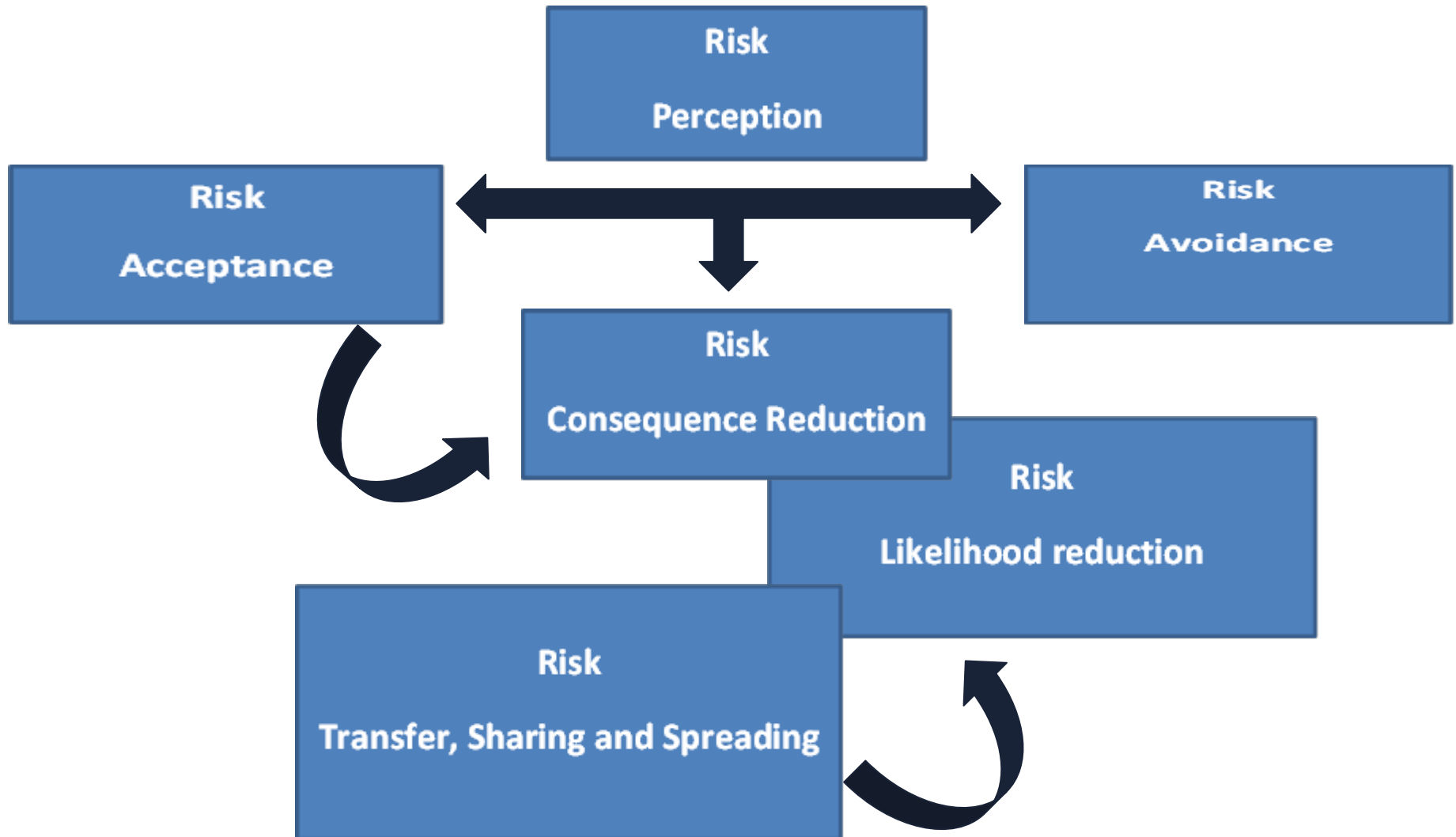
How do homeowners *perceive their own lives*, their households and their local area in relation to the effects of climate change?

What makes homeowners *adapt* their private homes to climate change?

## Research findings fall into two main categories

- Personal experiences have larger influence on actions than scientific predictions.
- Single events are understood in relation to the background of personal and collective long-term experiences.

# Theoretical inspiration according to local risk perception



# **Rethinking Risk Perception Influence on Local Resilience in Urban Cities and Rural Communities**

A pilot study to gather evidence and information about the personal risk perception among professionals with responsibility for vulnerable groups with a main goal to understanding risk and how it is perceived and practiced.

# Overall reasons for this scientific curiosity

## **In Denmark there is transparent knowledge about;**

- Data which clarifies common hazards and occurrences
- Governmental contingency plans
- Specific plans for evacuation and obligations according to vulnerable groups

## **The knowledge gap seems to be;**

- Leaders practice and rank risk in their own institutions
- Risk tolerance according to leadership experience and seniority
- Mechanisms (processes and tools) that leaders use (or lack) in practice



# Research methodology

- Semi structured qualitative interviews with leaders of nursing homes and daycare institutions in specific rural and urban settings.
- The interview guide has a focus on natural hazards, hazards in general and management risk perception according to the vulnerable group (small children and elderly) in their care.
- Main goal is to learn more about the general risk perceptions according to region, responsibility, common events and likely unexpected hazards.



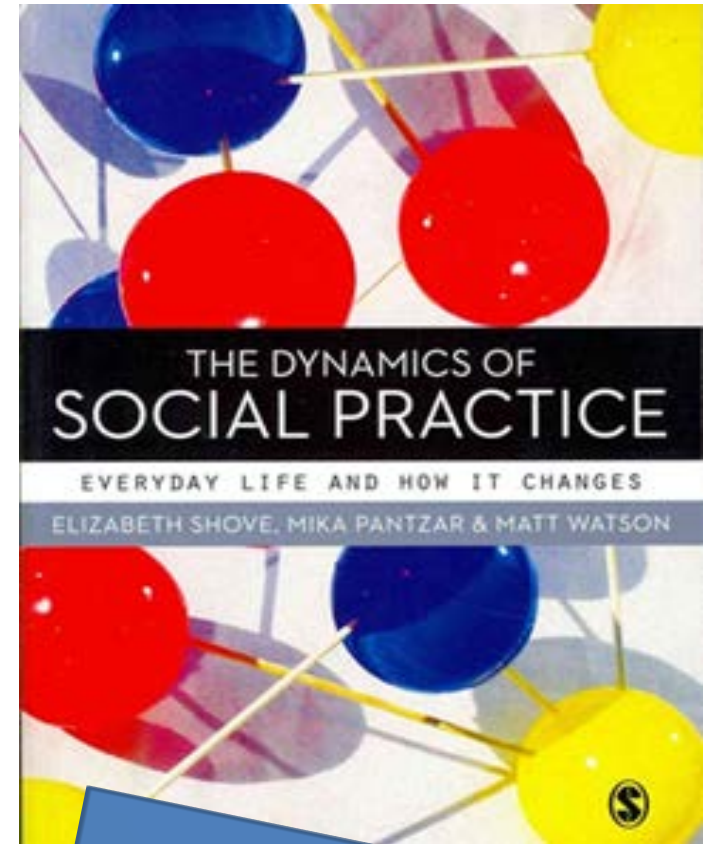
# Theoretical background

Practice theory, represented by Elizabeth Shove in order to obtain new analytical perspective on the basic assumption of understandings being;

- *practical understanding* (practical sense)
- *general understand* (how to.. procedures)

In short...

Practice theory as a theoretical approach and analytics tool towards the “*doings*” and “*sayings*” according to leaders risk perception and their practice, procedure and engagement.



**Risk**  
**Transfer, Sharing and Spreading**

# Findings/narrative example

*“What do you mean by events? We all have our contingency plans in order and here ...nothing ever happens – we **do not** have any ‘events’...”*

(2 minutes into the interview / urban setting)

*”Last year was a tough year - we found weapons in the playground area and there was gang-related shootout just outside the institution - fortunately while there was a afternoon nap for the youngest children.”*

(8 minutes into the interview / urban setting)

# Findings/narrative example

*“We are very happy about our location - we do not have any natural disasters or nothing...”*

(1 min. into the interview / rural setting)

*“Well...we were only closed for a few days and have already installed a new warning system on the ground floor...is just keep getting the signal wrong and a false alert costs about 6000 kr. (900 \$) every time, so for now...the system is turned off...”*

(4 minutes into the interview - after showing a photo of the last big flooding in the area )

# Analytics points according to practical & general understanding

- ✓ Mainly practice of top-down one-way risk communication towards staff and daily users
- ✓ Personal risk perception (tolerance) characterize the preparedness
- ✓ Lack of knowledge sharing and pronounced risk acceptance
- ✓ Distinct nervousness in relation to contingency plans and fear of a front page story / media
- ✓ No existing knowledge transfer to register personal risk perception or new / changed risk elements in existing emergency plans

# Where to go from here?

If there is no shared knowledge/experience about hazards and threats in general, then how do we then strengthen the leaders' structured knowledge sharing and implement a culture of shared overall responsibilities in relation to risk (identification)?

We need to address the need for effective sharing of knowledge, inclusion of personal risk perspective and lifelong learning among professionals with responsibility for vulnerable groups in order to maintain a resilient focus on risk and disaster preparedness in institutions (in a Danish context).

**Thank You**

**Aboj@phmetropol.dk**