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## Uncertainty – An event-based approach

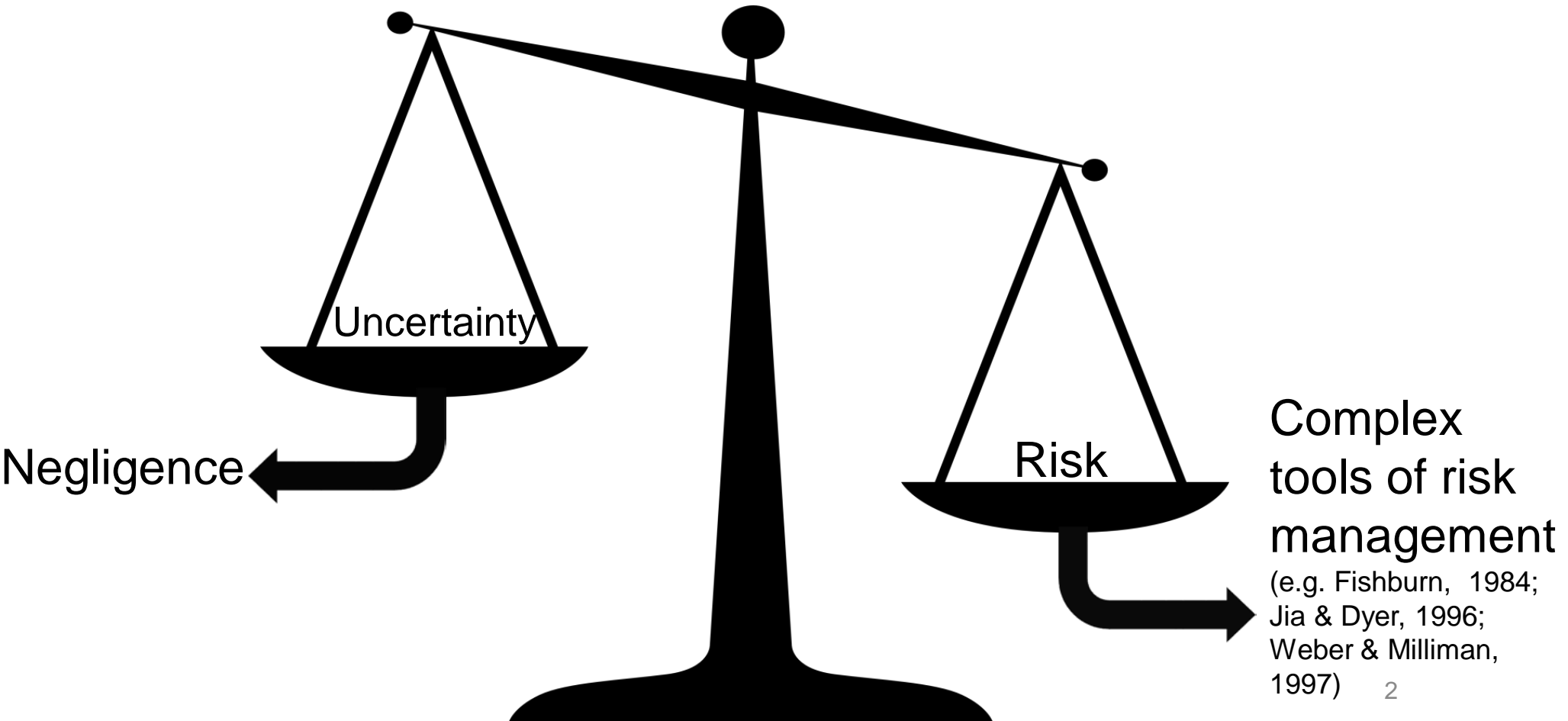
Presentation at the 5th Meeting of the Research Network “Field-Configuring Events: Time, Space and Relations“

# Uncertainty in the academic discourse

## **Knight (1921): Risk vs. Uncertainty**

→ Imbalance

→ Due to calculability: preference for risk



# Uncertainty in the academic discourse

## Conceptualizing Uncertainty

Dominant thought:

*Uncertainty as a specific “state of the world“*

(Faulkner, Feduzi & Runde, 2014)

- World as fixed phenomenon with risky and uncertain situations
- Uncertainty as informational deficits (e.g. Berger & Calabrese, 1975; Milliken, 1987)
- Decision theory: Uncertain situations → no information/probabilities for different environmental states > decision rules as managing tools

→ Static conception: uncertainty **as a given** (objective or subjective) circumstance of life

Uncertainty in the academic discourse

## **Revision needed**

Too narrow a conception, neglecting

- genesis
- processes of becoming and change
- events
- surprises

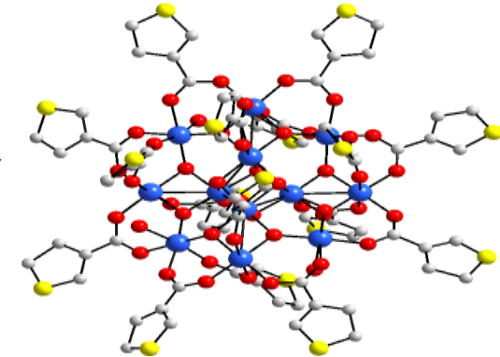
➤ **In search of a dynamic conception!**

## Reconceptualizing uncertainty dynamically

# Complexity as point of departure (Luhmann, 1995, 2009)



Reduction



- Organizations have to reduce complexity to become able to act; Reduction by selection on the basis of self-referential maps
  - Translated into a bundle of expectations
  - Consequence: Complexity differential between inside and outside
- **Collective Sensemaking as underlying process** (Weick, 1995, Maitlis & Christianson 2014)

# Reconceptualizing uncertainty dynamically

## A processual view

- Environment remains complex
- Capricious developments among connective elements
- Inevitable selectivity brings about discrepancies between expectations and real-time events (Bechky & Okhuysen, 2011; Cunha et al., 2006)
- Expectations run danger of getting disappointed (Luhmann 1995)
- Flow of unexpected events (Weick & Sutcliffe, 2007) , discontinuities and surprises
- Adaptive selection, ongoing sensemaking > new disappointments

# Reconceptualizing uncertainty dynamically

## Conclusion

- Uncertainty resulting from complexity reduction
    - Two basic implications
  - (1) Enacted uncertainty. Uncertainty no longer a given circumstance but rather a result of foregoing activities
  - (2) Dynamics: Ongoing process of sensemaking and disappointments
- Eventbased conception of uncertainty

## Reconceptualizing uncertainty dynamically

### **Coping with (event based) uncertainty**

- No final problem solving > ongoing coping practices

#### *Evidence from previous studies*

- HRO practices
  - Relying on experts / suspending hierarchy
  - Mindfulness
  - Obsession with failure
- Crisis management
  - Prioritizing
  - Drop your tools
  - Urgency routines
  - Improvisation

> Underdeveloped: organizing



Reconceptualizing uncertainty dynamically

## **Organizing > Temporary organizational patterns**

*Evidence from previous studies*

- Dynamic delegation of leadership (Klein et al., 2006)
- Fast-response teams (Faraj & Xiao, 2006)

*New perspectives (ICU study)*

- Temporary problem solving arenas
- Oscillating leadership

Reconceptualizing uncertainty dynamically

## **Organizing > Temporary organizational patterns**

- Coping practices correspond with event based uncertainty conception
- Problem solving practices focus on:
  - Immediate response patterns.
  - Primacy of Ad-hoc reactions.
  - Adaptive practices (sense-discrediting).
  - Spontaneous teaming up, etc.

## **Total adaptability?**

- Does an event based uncertainty perspective imply relentless organizational adaptation?
  - > Problem: Dissolving organizations
- A differentiated perspective is needed.
  - There is no organization without stability (borders)
  - Interplay of adaptability/learning and stability
  - Major Point: Changing or counterfactual stabilization of expectations (Schreyögg & Sydow 2010)

**Thank you!**

# Temporary problem solving arenas

- Forming around unexpected events
- Variation in size, texture, time of existence
- Fixed core and fluctuating periphery
- Formation according to “whatever works“ principle
  - Excessively playing/utilizing the hierarchy
  - Drawing on personal contacts
  - Drawing on networks
  - Cross linking (lateral) groups
- Gathering, dissolving, regathering in accordance with UE’s needs

# Oscillating leadership

- Interplay between formal leaders and informal, arena attributed leaders
- Leadership migrates between participants in accordance with attribution
- Leadership attributed according to various perceived features helpful to UE (expertise, experience, power/formal weight etc.)
- Informal leaders dependent on formality (no legal means to enforce decisions)
  - Setting decisions into action
  - Taking over responsibility
- Formal leaders also dependent on informal leaders' good will (usually no legal means to enforce participation)

# Looking for an epistemological pathway

## Uncertainty research so far

Theoretical approach to uncertainty	Research problems
Decision theory	<ul style="list-style-type: none"><li>• Uncertainty as state of the world: Unexpected events excluded by definition</li><li>• Artificial conditions</li></ul>
Psychology/neurology (experimental settings)	<ul style="list-style-type: none"><li>• Artificial conditions</li><li>• Short-term experiments</li><li>• Non-processual perspective</li></ul>
HRO research	<ul style="list-style-type: none"><li>• Phenomenon driven</li><li>• Prevention oriented</li><li>• No clear unit of analysis</li><li>• Theoretical generalizability?</li></ul>
Rare events research	<ul style="list-style-type: none"><li>• Ex post reconstruction (interpretatively overlaid)</li><li>• Exceptional events (theoretical generalizability?)</li><li>• No sensemaking in situ</li></ul>

➔ No sufficient entry for researching unexpected events

Looking for an epistemological  
pathway

## **Instead: Event based conception of uncertainty**

- Practice-based approach to uncertainty as unexpected events
- Practices as intertwinement of thinking & acting (Orlikowski, 2000, 2002) allow for studying sensemaking as it unfolds in unexpected events
- Practices as sensemaking themselves (Barnes, 2001; Orlikowski, 2002)
- Allowing for researching regular and not exceptional unexpected events



# Looking for an epistemological pathway

## Advantages of the practice perspective

Theoretical approach to uncertainty	Superiority of practice lense (problem solution)
<b>Decision theory</b>	<ul style="list-style-type: none"><li>• Patterns to deal with unexpected events (not risk)</li></ul>
<b>Psychology/neurology (experimental settings)</b>	<ul style="list-style-type: none"><li>• Processual</li><li>• Empirical, non-artificial encounter</li></ul>
<b>HRO research</b>	<ul style="list-style-type: none"><li>• Specific unit of analysis</li><li>• Reaction patterns (no prevention)</li></ul>
<b>Rare events research</b>	<ul style="list-style-type: none"><li>• In situ investigation (processual)</li><li>• Repetitive, established patterns</li></ul>

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