Georg Schreyögg, FU Berlin
Simone M. Ostermann, EUV Frankfurt (Oder)

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

Complex tools of risk management (e.g. Fishburn, 1984; Jia & Dyer, 1996; Weber & Milliman, 1997)
Conceptualizing Uncertainty

Uncertainty in the academic discourse

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

- 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.
Reconceptualizing uncertainty dynamically

**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
  o Excessively playing/utilizing the hierarchy
  o Drawing on personal contacts
  o Drawing on networks
  o 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)
  o Setting decisions into action
  o 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

<table>
<thead>
<tr>
<th>Theoretical approach to uncertainty</th>
<th>Research problems</th>
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</table>
| Decision theory                    | • Uncertainty as state of the world: Unexpected events excluded by definition  
• Artificial conditions             |
| Psychology/neurology (experimental settings) | • Artificial conditions  
• Short-term experiments  
• Non-processual perspective |
| HRO research                        | • Phenomenon driven  
• Prevention oriented  
• No clear unit of analysis  
• Theoretical generalizability?    |
| Rare events research                | • Ex post reconstruction (interpretatively overlayed)  
• Exceptional events (theoretical generalizability?)  
• No sensemaking in situ          |

⇒ No sufficient entry for researching unexpected events
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
Looking for an epistemological pathway

Advantages of the practice perspective

<table>
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<tr>
<th>Theoretical approach to uncertainty</th>
<th>Superiority of practice lense (problem solution)</th>
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<tbody>
<tr>
<td>Decision theory</td>
<td>• Patterns to deal with unexpected events (not risk)</td>
</tr>
</tbody>
</table>
| Psychology/neurology (experimental settings) | • Processual  
• Empirical, non-artificial encounter |
| HRO research                        | • Specific unit of analysis  
• Reaction patterns (no prevention) |
| Rare events research                | • In situ investigation (processual)  
• Repetitive, established patterns |
References

References