Cross-Level Process Theory

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Professional Development Workshop AOM '06
On Process Research Methods

Why Cross-Level Theory?

- Many social processes operate at different levels. Multi-level Theory/General Systems Theory
  - Innovation
  - Learning
  - Response to threat
- Other processes move across levels.
  - Agency-structure
  - Power relations
- Many cross-level variance theories can be recast as cross-level process theories.

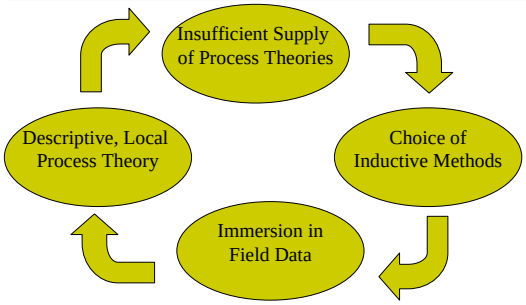
Point of Departure

- Admonition: "the primacy of theory" (Klein, Dansereau & Hall, 1994).
- Variance researchers have heeded the advice and developed methods (HLM).
- What have process researchers done?

Process Research and Theory

- Not many fully developed process theories available.
- Process researchers often proceed inductively.
- Immersion in field data.
- Resulting theory is often descriptive and local.
- Theory loses its primacy.

Self-Reinforcing Cycle



Three Examples and an Exercise

1. Seo & Creed (2002), Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective, *AMR*.
2. Howard-Grenville (2005), The Persistence of Flexible Organizational Routines: The Role of Agency and Organizational Context, *Organization Science.*
3. Bacharach et al. (1996), The Organizational Transformation Process: The Micropolitics of Dissonance Reduction and the Alignment of Logics of Action, *ASQ*.
4. Wang & Robey (2006), Social Capital in Open Source Software Projects: A Cross-level Research Model, unpublished.

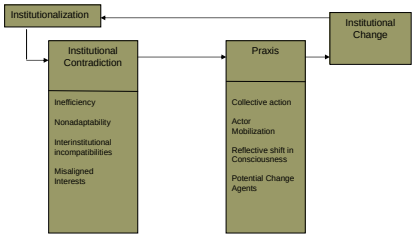
Example 1: Seo & Creed, 2002

- Purpose: To explain how new institutions are created and existing ones changed over time.

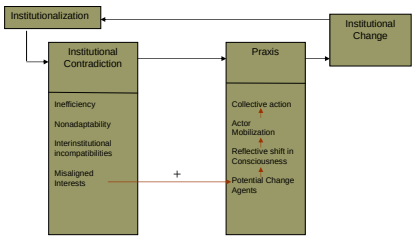
  "How can actors change institutions if their actions, intentions, and rationality are all conditioned by the very institution they wish to change?" (Holm, 1995)
- Approach: cross-level process theory engaging institutional contradictions with praxis.

Example 1: Seo & Creed, 2002

The simple version:
Institutions change because individual agents exercise praxis, or political action.



Example 1: Seo & Creed, 2002



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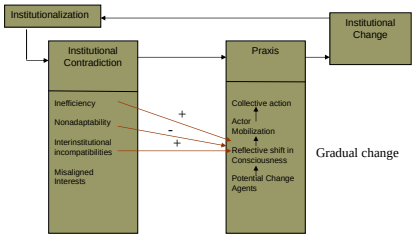
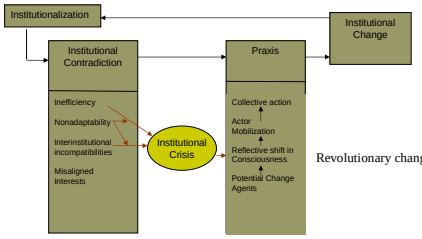


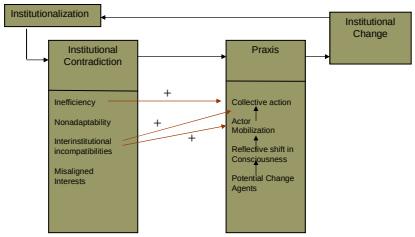
Gradual change

Example 1: Seo & Creed, 2002



Revolutionary change

Example 1: Seo & Creed, 2002



Example 2: Howard-Grenville, 2005

- Purpose: To explain why organizational routines that are performed flexibly may persist over time.

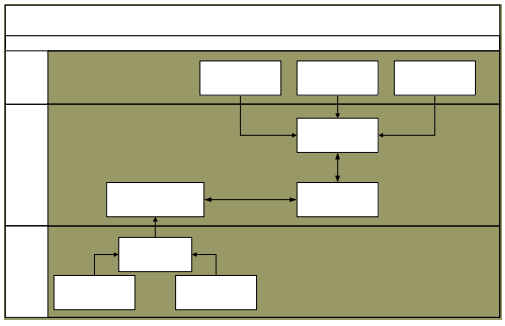
  "When does the flexible use of a routine produce change over time and when does it not?"
- Approach: ethnographic study of a high-tech company employing a routine called *roadmapping*.

Example 2: Howard-Grenville, 2005

- Level(s) of Analysis?
  - Collective agency: performance of the routine by project teams.
  - Individual agency: orientations, intentions (and power) of individual actors.
  - Organizational context: technological, coordination and cultural structures.

Cross-Level Processes in Howard-Grenville (2005)

(Courtesy of Alina Dulipovici, GSU and HEC, Montreal)



Example 3: Bacharach et al., 1996

- Purpose: to understand the process of organizational transformation.

  "…the transformation process may be illuminated by examining actors' micropolitical search for consistency in the logics of action across organizational levels."
- Approach: Study of relationships among top management, middle management and flight attendants in the U.S. airline industry following deregulation of the industry: 1977-1992.

Example 3: Bacharach et al., 1996

Institutional Level (top management)

Managerial Level (middle management)

Technical Level (workforce)

Levels of Theory

Example 3: Bacharach et al., 1996

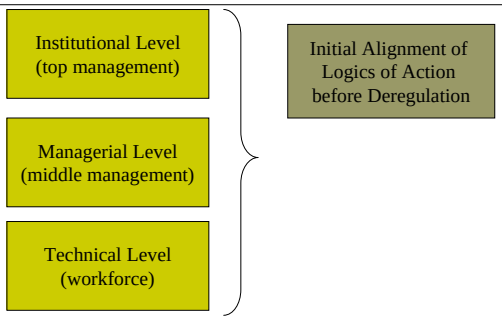
Institutional Level (top management)

Managerial Level (middle management)

Technical Level (workforce)

Alignment/misalignment of logics of action between levels over time.

Example 3: Bacharach et al., 1996



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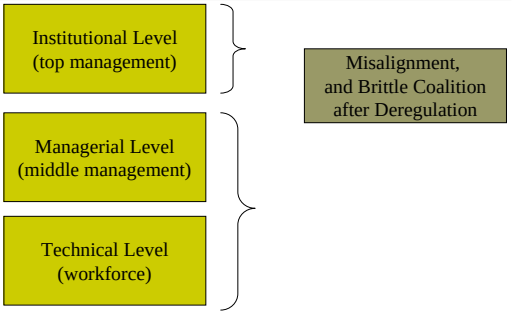

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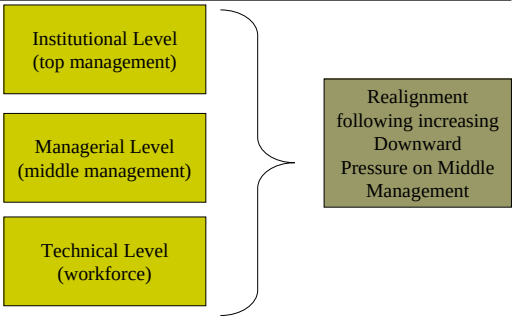
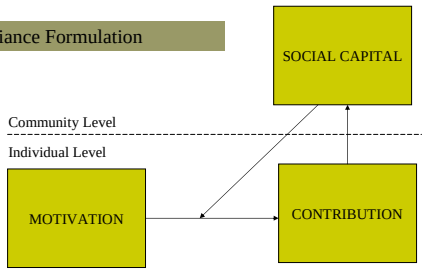


Exercise: Wang & Robey, 2006

- Purpose: to explain the role of community social capital on individual members of Open Source Software (OSS) communities.
- Approach: cross-level theoretical model.

Exercise: Wang & Robey, 2006

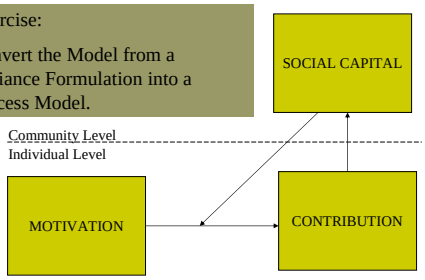
Variance Formulation



Exercise: Wang & Robey, 2006

Exercise:

Convert the Model from a Variance Formulation into a Process Model.



Understanding Cross-Level Relationships in Process Theory

- Processes at lower levels constituting processes at higher levels.
- Processes at higher levels constraining processes at lower levels.
- Operation of processes at multiple levels simultaneously.
- Movement of processes across levels over time.
- Moderation of processes at one level on processes at another level.

Conclusions

- Theory should attain primacy in process research.
- Theories should explicitly recognize cross-level processes.
- Theory should lead empirical work more often.

References

- Bacharach, S.B., P. Bamberger and W.J. Sonnenstuhl, "The Organizational Transformation Process: The Micropolitics of Dissonance Reduction and the Alignment of Logics of Action," *Administrative Science Quarterly*, 41 (1996), 477-506.
- Howard-Grenville, J., "The Persistence of Flexible Organizational Routines: The Role of Agency and Organizational Context," *Organization Science*, 16 (2005), 618-636.
- Klein, K.J., F. Dansereau, and R.J. Hall, "Levels Issues in Theory Development, Data Collection, and Analysis," *Academy of Management Review*, 19 (1994), 195-229.
- Seo, M-G., and W.E.D. Creed, "Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective," *Academy of Management Review*, 27 (2002), 222-247.
- Wang, J., and D. Robey, "Social Capital in Open Source Software Projects: A Cross-level Research Model," unpublished manuscript, 2006.