Building Process Theories

Part II

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A Typology of Approaches for Studying Organizational Processes

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>A Substance (&quot;thing&quot;)</th>
<th>A Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variance Approach</td>
<td>I: Variance study of change in organizations</td>
<td>IV: Variance studies via modeling of processes</td>
</tr>
<tr>
<td></td>
<td>Causal analysis of independent variables explaining change</td>
<td>Dynamic models of complex adaptive systems</td>
</tr>
<tr>
<td></td>
<td>(dependent variable)</td>
<td></td>
</tr>
<tr>
<td>Process Approach</td>
<td>II: Process study narrating sequence of change events</td>
<td>III: Process study narrating social construction</td>
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<td></td>
<td>in organization</td>
<td></td>
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<tr>
<td></td>
<td>Progressions of change (stages, cycles, etc) in the</td>
<td>Qualitative process studies of emergence</td>
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<tr>
<td></td>
<td>development of org. entity</td>
<td></td>
</tr>
</tbody>
</table>

Ontology
An organization is represented as being:

- A Substance ("thing")
- A Process

Epistemology
- Ontology
- Substance
- Process
Approaches to the Study of Organizational Processes

Case I: Using a Variance Approach in a World Comprised of Things

- Define variables that synopticize processes
  - Convert process into a variable, e.g. implementation, institutionalization
  - Process synopses can serve as dependent or independent variables

- Causal explanation using traditional statistical methods or case studies

- Examples:
  - Van de Ven studies of program implementation
  - Meyer and Goes study of hospital innovation
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Case I – Comments

- Enables rigorous test of hypotheses about processes (+)
- Fits within established modes of research and discourse (+)
- Synopses elide aspects of processes (-)
- Difficult to study process itself and how it unfolds over time (-)
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Case II: Process Study Narrating Changes in Substantial Entities

- Characterize processes in terms of stages, steps, states, sequences and properties of sequences
- Sequences or their properties can serve as explanans or explanandum
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Case II: Process Study Narrating Changes in Substantive Entities

Examples:

- **Phasic Analysis**
  - Poole, Hirokawa: studies of decision development
  - Nutt: Studies of strategic decision making and problem formulation

- **Case Studies**
  - Kuhn & Poole: Development of group conflict style and its impacts on decision-making
  - Leonard-Barton: Multiple case study of alignment and innovation
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Case II – Comments

- Explicitly defines elements of process (+)
- Enables us to study unfolding of process (+)
- States, stages, etc. are themselves synopses (-)
- Tension between defining process entities and fully processual approach (-)
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Case III: Process Study Narrating Social Construction

- Study of emergent processes
  - May be social constructionist
  - True to basic characteristics of processes
    - Focus on change as essential condition
    - Change in processes, as well
    - Try to avoid synoptic concepts
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Case III: Process Study Narrating Social Construction

- **Examples:**
  - **Narrative Histories**
    - Chandler: Emergence of Modern Organization
  - **Structuration (microanalysis)**
    - Feldman and Pentland: Routines in organizations
    - Orlikowski: Structuration of IT
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Case III – Comments

- Truest to processual view (+)
- Stimulates us to rethink static concepts and develop novel theoretical vocabularies (+)
- Potential for theoretical advances (+)
- Tendency to be self-fulfilling (-)
- An irony: It still involves representation of processes that may reify them (-)
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Case IV: Variance Study of Processual Organizational Phenomena

- Construct models that represent generative mechanisms underlying process—simulate or characterize the process in dynamic terms

- Enables visualization of process or analysis of how it unfolds under different conditions—these often go beyond what we could think through qualitatively

- Qualitative features of the results of models are often more important than quantitative results
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Case IV: Variance Study of Processual Organizational Phenomena

- Examples:
  - Markov Models
    - Poole et al. Analysis of Cochlear implant project
  - Analysis of temporally dependent data
    - Time series, Time series regression, Event history analysis
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Case IV: Variance Study of Processual Organizational Phenomena

- Examples:
  - Dynamic systems models
    - Systems Dynamics Models
  - Agent based models
    - Corman: Cellular automata of organizational processes
  - Complex adaptive systems models
    - Dooley
Approaches to the Study of Organizational Processes

Case IV – Comments

- Allows us to apply rigorous analytical methods to build theory about what generates process into our models (+)
- Enables us to generate large sample of processes via simulation (+)
- More complex than Case I studies (+)
- Reductionism and loss due to synopticizing the variables (-)
- Representation of process may lose some detail (-)
- Need new model forms—most current models (e.g. time series) were derived under variance assumptions (-)
- Still does not capture multifarious nature of processes fully (-)
Choosing Among the Four Approaches to Organizational Process Research

- Nature of the phenomenon
- Goals of research
- Researcher’s preferences with respect to methods