Building Process Theories

Part I

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What is a Process?

Some Definitions

- A process is a coordinated group of changes in the complexion of reality, an organized family of occurrences that are systematically linked to one another, either causally or functionally.

  Nicholas Rescher (1996)

- A pattern that is seen in reference to time is called a process.

  Monge, Farace, Eisenberg, Miller, & White (1984)
Characteristics of Processes

- They involve change
- They unfold over time
- They maintain self-identity through internal complexity that persists over time
Characteristics of Processes

- They may be *owned* by some agent or *unowned*

- Their generative mechanisms may evolve over time
How Has Process Been Treated in Organizational Research?

- As a narrative underlying relationships among variables
- As a special type of variable or concept
- As a pattern in changes over time
Two Ways to View Process

- Ontologically: As part of the fabric of (social) reality
- Epistemologically: As one lens to apply in the study of (social) reality
Process Ontology: Four Positions

1. **Process is primary**
   All things are processes

3. **Process has priority over substance**
   Processes engender, determine, and characterize things, but there are real things out there

5. **Substance has priority over process**
   The only sort of processes there are are those involved in the doings and comportments of things

7. **Substance is primary**
   Substance is all there is. Processes and changes are simply a matter of how things appear to certain (mind-equipped) substances

Source: Rescher (1996)
Ontology:
What are organizations made of?

- Organizations are made of things (Positions 3 and 4)
- Organizations are made of processes (Positions 1 and 2)
Process Epistemology

- Two Different Modes of Explanation & Inquiry for Processes
  - Variance Approach
  - Process Approach
Figure 1.2 Two approaches to explaining strategic change. Based on Mohr (1982) and Langley (1999).
Epistemology: The Variance Approach

- Key Assumptions
  - Focus on fixed entities with variable attributes (variabilization of phenomena)
  - Satisfactory explanations are based on necessary and sufficient causality
  - Satisfactory explanation is based on efficient causality
Epistemology: The Variance Approach

- Key Assumptions (continued)
  - The generality of an explanation depends on its ability to apply uniformly across a broad range of cases & contexts
  - Monotonic, “well-behaved” causal flow through hierarchical levels
Epistemology: The Variance Approach

Van de Ven study of implementation of local welfare programs

- Hypothesis: Planning process is critical to program effectiveness

Planning Process:

3. 1. Planning prerequisites
4. 2. Problem exploration
5. 3. Knowledge exploration
6. 4. Program design
7. 5. Program implementation, evaluation, operation
Epistemology: The Variance Approach

Van de Ven Study of implementation of local welfare programs

- Surrogate variables:
  - Participation
  - Planning Policy Board
  - Technical/Expert Assistance
  - Planning Team
  - Conformance to Program Planning Sequence
Epistemology: The Variance Approach

Van de Ven study of implementation of local welfare programs

Research Case

Program Effectiveness

- Participation
- Redesign
- Technical Assistance
- Planning Team Activity
- Board Activity
Epistemology: The Variance Approach

Incorporating Surrogate Process Variables
Epistemology: 
The Variance Approach

- Uses in the Study of Processes:
  - Identify variables in process and incorporate into variance models
  - Explore mechanisms that drive process
  - Works for processes that run very fast
Epistemology: The Process Approach

- Diverges from variance approach
  - In terms of explanatory model
  - In how data is conceived and gathered
  - In analysis

- Akin to historical and biological reasoning

- May diverge from historical tradition:
  - It often seeks to generalize
  - It often seeks to test or apply hypothesized theories
Epistemology: The Process Approach

○ Key Assumptions

• The world is composed of entities which participate in events and which may change as a result.

• Satisfactory explanations are based on necessary causality

• Satisfactory explanations are based on final and/or formal causality combined with efficient causality
Epistemology: The Process Approach

- Key Assumptions (continued)
  - Generality of explanations depends on their versatility.
  - Temporal ordering is critical to the outcome.
  - Explanations include layers of causation operating at different levels and temporal scales.
  - Causes are often not “well-behaved”.
Epistemology: The Process Approach

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