CRITICAL SYSTEMS THINKING AND ITS CONTRIBUTION TO 21ST CENTURY MANAGEMENT PRACTICE

Professor Mike Jackson
Hull University 2007
• The development of applied systems thinking
• The nature of critical systems thinking (CST)
• CST and theoretical critique: the case of knowledge management
• CST as practical critique: the case of systems thinking in housing
• What can CST contribute?
The development of applied systems thinking I

INCREASING DIVERGENCE OF VALUES

<table>
<thead>
<tr>
<th>UNITARY</th>
<th>PLURALIST</th>
<th>COERCIVE</th>
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<tbody>
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<td>HARD SYSTEMS THINKING</td>
<td>SOFT SYSTEMS THINKING</td>
<td>EMANCIPATORY SYSTEMS THINKING</td>
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INCREASING COMPLEXITY

SIMPLE

COMPLEX

SYSTEM DYNAMICS
ORGANIZATIONAL CYBERNETICS
COMPLEXITY THEORY

POSTMODERN SYSTEMS THINKING

THE UNIVERSITY OF HULL
The development of applied systems thinking II

Metaphors:
- machine
- organism
- brain
- culture
- political system
- etc

Paradigms:
- functionalist (positivist and structuralist)
- interpretive
- emancipatory
- postmodern
The nature of critical systems thinking (CST) I

- **Holistic**
  - ‘whole system’
  - multiple perceptions

- **Critique**
  - theoretical level (Boulding)
  - boundary (Churchman, Ulrich, Midgley)
  - social scientific
The nature of critical systems thinking (CST) II

- pluralism
  - multi-theoretical
  - multi-methodological
  - multi-method
- improvement
  - efficiency
  - efficacy
  - effectiveness
  - elegance
  - empowerment
  - emancipation
  - exception
  - emotion
CST and theoretical critique: the case of knowledge management I

- KM and the machine metaphor
- KM and the organism metaphor
- KM and the social-systemic metaphor
- KM and the coercive system metaphor
- KM and the carnival metaphor
CST and theoretical critique: the case of knowledge management II

- clarity about theoretical assumptions
- identification of strengths and weaknesses
- enriching the field
- link between theory and practice
- pluralist approach to intervention
CST and practical critique: the case of systems thinking in housing

Vanguard’s ‘Lean Systems’

- whole system (customer) perspective
- interdependence of parts
- design against demand
- minimum ‘command and control’
- encourages individual and organisational learning
- evaluates according to whole system performance
CST and practical critique: the case of systems thinking in housing II

**PARTICIPANTS**

- **Unitary**
  - Hard Systems
  - Lean Systems
  - System Dynamics
  - Complexity Theory

- **Pluralist**
  - Soft Systems Thinking
  - Viable System Model

**SThinking**

**YSimplE**

**T**<br>

**E**

**SM**
What can CST contribute?

• improving goal-seeking and viability

• exploring purposes and achieving mutual understanding

• ensuring fairness

• promoting diversity