Systems thinking at the Tavistock Institute: past, present and future

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With contributions from
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Overview

- Introduction - Why is systems perspective (or lens) important today? (5 mins)
- Systems thinking at the Tavistock Institute past and present (20 mins)
- Discussion – what place does systems thinking have in your work/field (15 mins)
- Systems thinking at the Tavistock Institute in the future – potential areas for development (10 mins)
- Break out group discussion – what might a ‘Tavistock’ approach to systems look like going forward, and how might this be helpful for you? (15 mins)
- Feedback (10 mins)
Why is systems thinking important today?

Upsurge in interest in systems and complexity

A systems perspective (or lens) helps to

- Highlight **interconnections and interdependencies**
- Understand the impact of external factors (**context**) on groups, organisations and communities
- Explore **boundaries** - and the role of **leadership** in managing boundaries
- Examine **relationships**: between parts of a system (**subsystems**) or **different kinds** of system (natural, technical, social, political, economic)
- Understand **dynamic relationships** e.g. between stability (homeostasis) and change
- Communicate **complexity** (complex adaptive systems)
Systems thinking when the Institute was set up

In the social sciences

- Ludwig Von Bertalanffy
  - "Organized complexities" consist of interacting parts
  - General systems theory
    - Looks for an isomorphism of law in different fields
    - Studies "wholes", which are characterized by such holistic properties as hierarchy, stability, teleology
  - A living organism is a hierarchical order of open systems, where each level maintains its structure thanks to continuous change of components at the next lower level

In the natural sciences

In cybernetics (in engineering, biology and management research)

Threshold / Reference

Sensor → Difference → Controller → Action → Other System

Reaction Feedback
The bigger picture...
Situating TIHR in the bigger picture

Diagram showing connections between fields such as Social action theory, Complexity science, Operational research, and others.
TIHR was set up to:

- Apply social science to contemporary issues and problems

  ...to **advance the study of the psycho-sociology of relations** (in the widest possible sense of the word) between human beings and groups or classes or categories of human beings, and **of the influence of environment** in all its aspects on the formation or development of human character or capacity, to **conduct research and experiment** for this purpose, and to **publish** the results of such study research and experiment for this purpose, and to **train students** in or for any branches of the said study. (from Articles of Association for the Tavistock Institute)

- Practitioners,
- Social science theory and methods
- Contemporary issues and problems

- Consultancy,
- Coaching
- Research
- Professional training
- Publications

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Systems theory combined with other theories and practices in applied settings

- Applied systems thinking in action research projects (1947 through to early 1980's)
- Open systems and turbulent environments (Trist, Emery, Miller)
- Socio-ecological and Socio technical action research
- Social systems as a defence against anxiety (Menzies Lyth)
- System psychodynamics and group relations
Socio Technical tradition

**Social Subsystem**
Concerned with the attributes of people (e.g. skills, attitudes, values), the relationships among people, reward systems, and authority structures.

**Technical Subsystem**
Concerned with the processes, tasks, and technology needed to transform inputs to outputs.

**External Subsystem**
Concerned with the outside influences and pulls on an organization such as stakeholder and partnering perspectives.

**Work System Design**

**Joint Optimization**
Small semi autonomous teams replaced by separated single workers operating long wall mechanization
Fillers

- Most common and **most isolated** role whilst being most vital to complete on time

- **Free for all** allocation of spots, competed for best spots and no cooperation in difficult conditions

- Defences against anxiety were: **withdrawal**, informal organisation, **reactive individualism** and scapegoating
STSI model developed

- Developed **intervention model** to ensure social situation for fillers was improved

- STS principles were:
  1. good work
  2. minimal critical specificat
  3. mutual adjustment
  4. multi-functionality
  5. permeable boundaries
  6. incompletion
Social systems as a defence against anxiety
Isobel Menzies Lyth (1960)

Organisational structures and cultures are not only created for the performance of a task but also used to provide their members with defences against anxiety the task may evoke.

Menzies Lyth was concerned with the containment of anxiety and suggested that this was an organisational design issue. The task is to design structures that contain this anxiety.

Bion: work groups and basic assumption groups
PRESENT
Systems thinking underpins all current work

- Action research
- Systems theory
- System psychodynamic models

**Activities**

**Consultancy and coaching**
- Publications
  - Human Relations
  - Evaluation Papers and monographs

**Research and evaluation**
- Professional development courses
  - PC3
  - Executive coaching
  - Board dynamics
  - Evaluation training

**Group relations events**
- Leicester conference
- Short and international GR events

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Systems thinking in TIHR evaluation activities

- Lewin: Field theory
- Action research
- Formative and participative evaluation approaches
- Contributing to innovative evaluation theory and practice
- Theory based evaluation: theory of change mapping
- Systems theory
- Part of wider evaluation community
- System based, Socio-technical, System psychoanalytic thinking
Evaluations strategies for a systemic intervention

Individuals experiencing multiple and severe disadvantage:
- Homelessness, addiction, criminality, mental ill health
- Each challenge treated in isolation, services not ‘joined up

Interventions:
- Flexible and bespoke (personalised) responses
- Seeking to address systemic causes of disadvantage (economic, political, social, institutional and organisational barriers, including lack of co-ordination between agencies)

Evaluation models in use
- Seek evidence of outcomes from one service rather than multiple factors leading to change
- Focused on individual rather than system level outcomes
An STS perspective for Community Resilience and Risk Perception (RESILOC)

- New strategies for improving preparedness of local communities against any kind of hazards,
- Knowledge and experiences of local communities combines with technical knowledge of hazard professionals to enhance community resilience
- STS perspective - bringing communities, professionals and agencies together to optimise resilience.
What dominates?

Technical System
rational calculation of risk, vulnerability, preparation and mitigation

Social system
Lifeworld experience - relationships, history, sense of place culture, emotional, economic.
Two French towns – same region, different systems

**Lattes**
- Population of 17,000
- Flood risk is low
- Flood defences consist of dikes, canalised watercourse and flood walls
- Most recent floods were in 2014

**Sommieres** – System for defending against flooding
- Population of 5,000
- Flood risk is high
- Flood defences consist of retention dams upstream, alarm systems and household scale adaptation e.g. main living space located on the first floor
- River floods annually

The risk perception journey

Stakeholders and Partners

- Arguing about indicators
  - RP - Emotional not rational
  - Lifeworld analysis
    - Recognition of systems
      - Socio-hydrological
      - Spatial
      - Technical
    - Pulling it together – co-producing a socio-technical system of risk perception and preparedness
  - Lifeworld
  - Spatiality
  - Inter subjective
  - Embodiment
  - Temporal

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Discussion 1

- Has a systems perspective helped you with your work/field/professional activities?
- Have you used a specifically ‘Tavistock’ approach – e.g. socio technical systems, system psychodynamic?
- Does a systems perspective inform how you think about
  - Boundaries (e.g. the role of leadership in managing boundaries) or
  - Context: e.g. how policies, economics, or social change affects your organization or project or
  - Relationships – between different parts of your organization (subgroups, subsystems)?
Systems thinking and complexity sciences

Complex systems: 2 traditions

Complexity sciences emphasise:
- Emergence
- Unpredictability and uncertainty
- Path dependency
- Domains of stability
- Tipping points
- Diversity of perspectives

Matt Egan From Gates (2016)
Growing appreciation of complexity in many fields

A policy or programme is increasingly complex/complicated:

- The more organisations and individuals involved
- The more layers or levels or types of intervention involved
- The more dynamic or crowded the environment (e.g. other polices and programmes taking place)
- The more cross sectoral and interprofessional (greater diversity of opinion and views)
Growing interest in complexity in evaluation

- MRC Evaluating Complex Interventions guidance published 2000, revised 2006
- 2009 DECIPHer, the Centre for the Development and Evaluation of Complex interventions for Public Health Improvement
- 2015 Centre for Evaluation of Complexity across the Nexus (CECAN)
- 2017 Centre of Excellence for Development Impact (CEDIL)
We might... help organisations think about complexity
We might....help organisations **map** the system in which they operate

Participative system mapping
We might help organisations respond to complexity

- Do not try to solve it! Steer, not control
- Explore it with rigour
- Think systems, think broad
- Use adaptive management methods
- Iterate through stages of research and design (action research)
- Active engagement of stakeholders

- Aim is to turn overwhelming complexity into actionable complexity
We might help introduce ‘agile’ and ‘adaptive’ management systems.

Action research

Developmental evaluation

Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use

Michael Quinn Patton

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We might situate ourselves in relation to current theory and practice.
Discussion 2

- What might a ‘Tavistock’ approach to systems thinking – and complexity theory - look like going forward?

- What external current developments (in theory and practice) should we be engaging with?

- What would you find most helpful in your work/field/professional practice, going forward?