

Systems Practice for Managing Complexity (SPMC)

Applying Systems Thinking to Public Services: GP's on the Line.

30th April 2003

EPSRC

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SPMC Network

- *this is one of a series of workshops attended by members of the SPMC network - with participants from commerce, the public sector, NGOs and academia (see spmc.org.uk).*
- *SPMC is emerging as a network of excellence for systems thinking and practice:*
 - *three day event in Oxford (15-17 July) - 'New visions for the 21st Century: systems practice for managing complexity'*
 - *Cliks - Framework 6 bid - Network of Excellence*

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Background to today

- Systems practice - ‘silent’ and often from the outside (an intervention);
- There are difficulties for many in engaging with systems. We have learned that one of the best ways is to start with participants' own experience, building on existing capacity for systems thinking;
- How might systems practice become a generic skill for managing?
- Research questions and projects emerging from the network

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Background to today

- Builds on an earlier workshop: Why do attempts to improve public services so often fail ? (Do they?)
 - Context partly set by Geoff Mulgan
 - Systems ‘out there’ or ‘formulated’ by someone
 - ‘Systems Failure’: publication by Jake Chapman for DEMOS;
 - ‘perverse targets’ -modernisation agenda
 - recent failures in ‘integration’ and ‘joined-up’ government - e.g. transport; the child support agency

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Rationale for today

- Over the next five years Richard Granger, IT Director of the NHS, will be spending £12 billion of public funds on various IT projects with the aim of improving the service offered by the NHS.
- Granger has the task of achieving 50% coverage by 2005 (The Economist, 19th October, 2002). Given the history of failure in major IT projects (e.g. the passport system, air traffic control and London Ambulance) and the pressure Granger is under to show evidence of success before the next General Election, what are the chances of another IT failure?

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Rationale for today

- Today is dedicated to the use of Systems ideas in complex environments to guide information systems development.
- In the first plenary Frank Stowell, an expert in IS development, will introduce systems tools for IS development;
- Laurence Harrison, a practitioner with Intellect, a consultancy working with Richard Granger on these IT projects in the NHS will present the second plenary session
- These sessions are intended to act as catalysts for the discussions and group sessions. Each speaker will be followed by a discussant, whose task it will be to draw out the lessons from the plenary sessions.

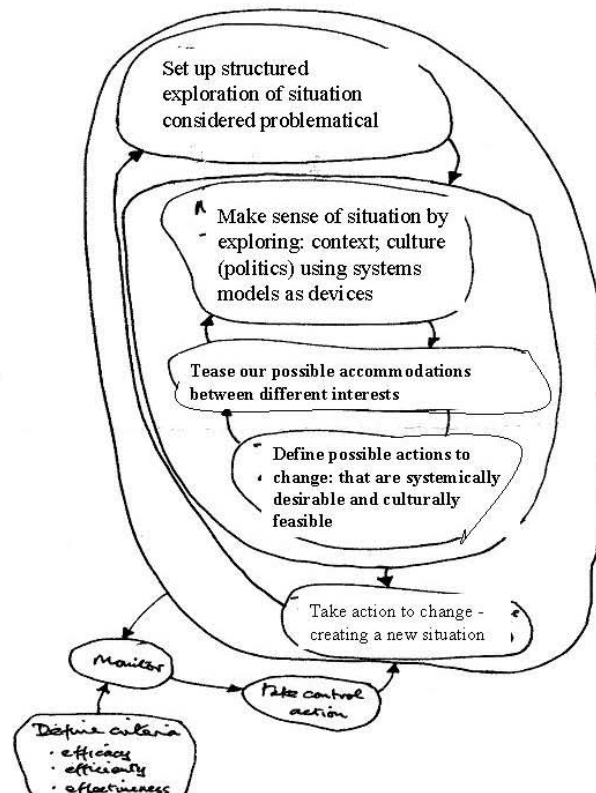
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Discussant - Laurence Harrison's Plenary

Ray Ison
Professor of Systems
The Open University

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The process of carrying out a systemic inquiry

SOME ISSUES

- **Central Control** over specification, procurement, resource management, performance management & implementation of the information & IT strategies
- **Communication** - how is this conceptualised in thinking about IT?

(central to systems thinking are how communication and control are understood;
I suggest at the heart of this issue are misunderstandings about communication and control)

- ‘Intellect’ has some challenges of its own; it is required to establish or undertake:
 - a representing function
 - setting up a Forum
 - coordinating industry response (by Healthcare Council)

Each of these presents its own systemic challenges.

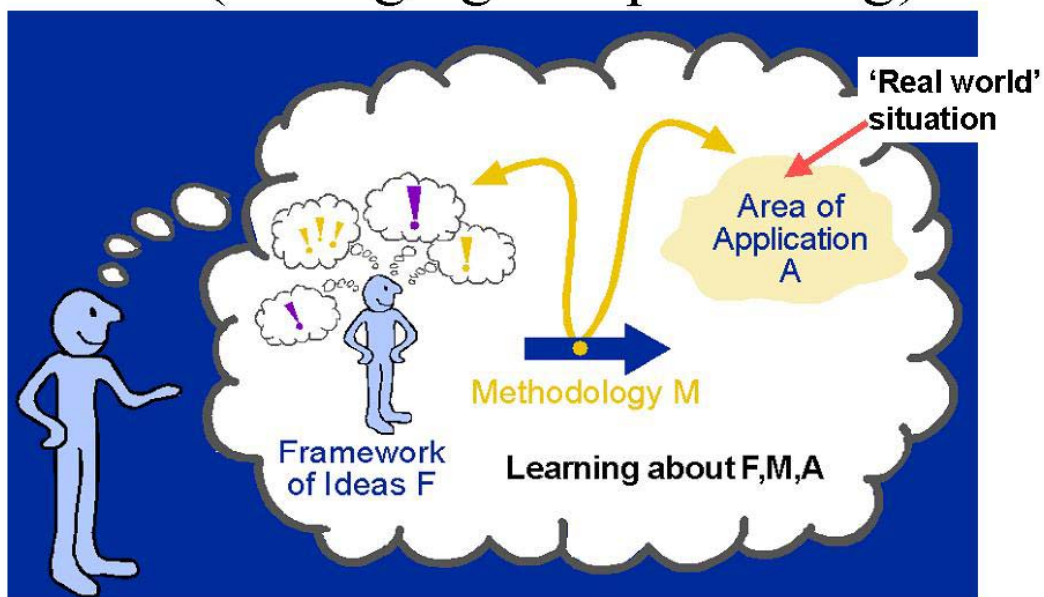
- Ministerial Task Force
D H Director
National IT
Prog. director
‘Turf wars’????
- It seems to me an act of ‘faith’ that the IT architectures being proposed deliver improvements (measures of performance)
- Richard Granger’s contract ending in 2005 – this in itself offers limited scope and establishes a perverse target.
- How is social & relational capital built and conserved in the NHS? How does IT enable or constrain this?
- Where is the main management of risk concentrated in the project?
- How, if at all, is learning built into the project? Who learns?
- As the story has been related here today I am struck by an apparent lack of appreciation of what technology is and how it operates (i.e there is no understanding of the philosophy of technology). In this case IT appears as a hammer without the realisation that to operate as a system there needs to be a hammerer (a person or people) and something that is hammered – and it is the relations between them that constitutes ‘a system’.



- there seems no scope for understanding the emotional context of stakeholders. It is emotions not resources that will deliver the necessary actions!

Granger will deliver...? This is stated as an imperative!

2. The elements of researching (managing and practicing)



Let's explore some of the thinking that seems to characterise the NHS/IT mess! What are some of the ideas that actors in the situation bring to their practices – whether implicitly or explicitly. Research we have conducted with metaphor is one way of exploring this situation systemically.

3. Revealing and concealing metaphors: understanding understanding

- Metaphors provide both a way to **understand** our understandings and how language is used;
- ‘Our ordinary **conceptual system**, in terms of which we think and act, is metaphorical in nature’
- Metaphors both **reveal** and **conceal** - e.g countryside-as-a-tapestry

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Some Metaphors from today’s talk

Reflecting particular traditions of understanding ...

“national roll-out ... of a messaging system”

“a Town planning system for implementation”

Knowledge management - ‘provide knowledge’

‘The National Health Service’ – is this a disabling metaphor?

“facilitator of suppliers”

‘the project as a train flying down the track’

experience **as** reusable

experience as capturable

knowledge as capturable

‘sandpit test beds’

standards **as** robust

3. Acting with new metaphors

- metaphors can be recognised by the use of the words *is* or *as*: e.g. countriesides-as-a-tapestry.
- countriesides are thought of *as if* they were a tapestry. This process of seeing one concept in terms of another is a useful way to look at our understandings and our reasons for acting in certain ways.

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Designing a learning system using metaphor in systems practice

- Two parallel streams acting as researcher-narrator and researcher-facilitator. The first role included the following steps:
 - Make initial distinctions around metaphors;
 - Bring-forth metaphors of the research context;
 - Explore the metaphors by considering revealed and concealed aspects;
 - Judge enabling and disabling metaphors and identify alternatives; and
 - Iterate, involving different people, different sources of metaphors, or different issues.

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See McClintock (1996) for more details

Questions of purpose:

From an outsider's perspective the following systems could be imagined from what we have heard here today. Remember bringing forth 'systems' is a way of learning about a complex situation not modelling or describing some 'real world' entity.

- A system to spend £12b as soon as possible ...?
- A system to deliver political messages within a given time frame?
- A system to implement the PM's vision of the role of IT in transforming UK society

Boundary Questions?

Accept current situation as a political reality?
How to act (ethically) in this context?

Geographical boundaries - English Regions?
- Strategic Health Authorities?

The espoused purpose?

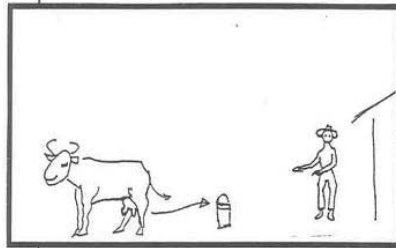
“A system to support a service designed around the patient which empowers both patients and professionals by offering explicit choice (eg. information about capacity; performance)

How do the espoused and actual match (if at all)?

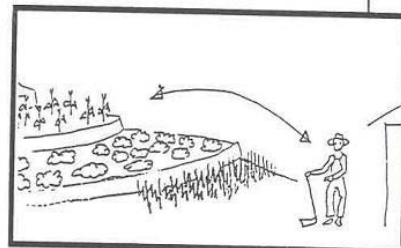
Experiencing local realities'

What the multidisciplinary Expert-mission sees

Different systems of interest?

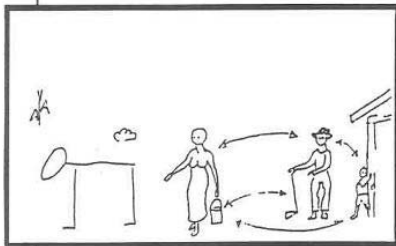


The view of the dairy-specialist

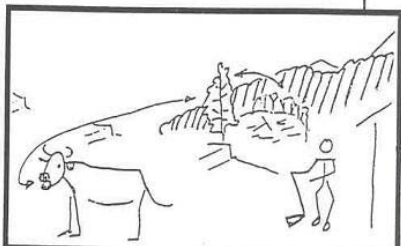


The view of the agronomist

Bringing multiple perspectives to the task?



The view of the sociologist



The view of the ecologist

From whose perspective is the NHS IT system being developed and implemented? This question applies to many domains not just IT.