

Grand Challenges in Systems (Panel)

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Abstract

The modern Systems movement now has a history going back over 50 years. During that time there have been many developments in theory and practice, but the 21st century has brought with it new problems and concerns. Examples of these concerns include such diverse areas as pollution and environmental issues, the globalisation of business and its impact upon national interests, school meals and infection control in public hospitals. Systems thinking has never been more important, yet in all but one UK University in 2007 Systems is no longer taught as a stand-alone subject. Paradoxically, Systems is gaining interest in the political arena and within industry. It is therefore worrying that the Systems movement today is in a state of fragmentation, and the ideas of the founding fathers of an isomorphy of concepts appears to have been forgotten as each group specialises and effectively becomes isolated. There is no consensus as to the significance and importance of problems to be addressed, or what those problems are. There is high task uncertainty in Systems research because the problem formulations are unstable. There are disconnections and rivalry within the field, which leads to a lack of communication, and difficulties in deciding what the problems are. It is in this context that two exploratory workshops have been organized, one in Portsmouth and the other in Newcastle-upon-Tyne, to discuss what are the Grand Challenges in Systems which face us now.

Introduction

In the late 1990's, ministers in the UK Government called for more 'joined up thinking'. This phrase was coined in the context of their policies on social inclusion. However, since that time the phrase has become pervasive in many areas of life. A recent Google search uncovered references to 'joined up thinking' in fields as diverse as conservation of fish stocks in the North Sea, improving standards in primary schools, institutional Web management and good practice in the construction industry. Simon Caulkin, writing in *The Observer* (26 February 2006), noted that the Government has struggled to keep to its professed policy, since 'joined up thinking' requires compatible management methods to make it work. He points out that 'joined up thinking' involves looking at elements of a problem as part of a larger whole – or, in other words, a system.

Systems thinking has never been more important. It is paradoxical therefore that, just when Systems is gaining interest in the political arena and within industry, Systems research is in a state of fragmentation. There is a lack of consensus as to what problems should be addressed, or the significance and importance of those problems. The field is beset by disconnections and a lack of communication about what problems it should tackle.

Examples of disconnects include:

- Lack of cohesion between senior management expectations and management theory and practice;
- Lack of communication of Systems research towards senior management;
- Lack of an interdisciplinary approach in use of Systems ideas;
- Lack of a communication forum for Systems researchers and practitioners;
- Lack of opportunities for education in systems thinking and use of systemic tools.

The world we experience as the 21st century unfolds seems ever more complex.. Changes in political, social and technological spheres have brought with them new challenges for businesses and ordinary citizens, as well as governments, and have generated problems and concerns for all systems thinkers, e.g. pollution and environmental issues, globalisation of business and its impact upon national interests, and concerns for the nation's health, such as infection control in hospitals, and a need for healthier school meals! There has never been a greater need for all those who aspire to 'joined up thinking' – managers, entrepreneurs, government servants, academics or systems practitioners – to establish a creative and meaningful dialogue about the way forward. Systems researchers must develop their understandings of what are the major problems or challenges, and must find ways to co-operate in tackling them. The workshops described in this paper are a first step towards these aims. Their purpose was to develop a set of Grand Challenges, or Hilbert Problems, that the Systems community could begin to debate and address.

The Portsmouth Workshop

Organization

The first of the workshops took place at the UKSS Southern Regional Centre in Portsmouth in December 2006. It was entitled "Grand Challenges 2006: Systems Thinking for the 21st Century - a workshop for managers, practitioners and all those concerned in systems thinking." From the outset, we realised that there were two practical difficulties for the organizers. The first of these was to target the right audience in order to achieve meaningful outcomes. Whilst participation from current systems practitioners and academics was clearly desirable, the workshop would achieve more by being inclusive towards people who had not previously considered 'joined-up thinking' in any formal way. People from the local community, businesses and government agencies would all have useful contributions to make to a Grand Challenge debate in the systems field. At the same time, numbers needed to be carefully balanced to achieve a useful discussion. A second problem then posed itself, which was how to ensure that individuals who did not necessarily have experience of systems concepts or modelling techniques could engage fully in the workshop activities. The organizers chose to structure the workshop around an adaptation of the Appreciative Inquiry Method (West, 1995). We believed that, with assistance from experienced facilitators, participants would be able to use the method effectively. (For a fuller discussion of our experience in using AIM in this way, please see Welch and Akers-Smith, 2007). A flyer for the event was prepared and sent out via a number of contact networks of UKSS, and the Schools of Computing and

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Business at the University of Portsmouth. This resulted in recruitment of the desired target of 40 participants, drawn from a range of organizations including local government, both small and large local businesses and Universities within the region.

Based on work in other disciplines, the following suggestions may help to trigger discussion on the characteristics of a Grand Challenge:
It arises from intellectual curiosity about the foundation, the nature or the limits of systems thinking.
It gives scope for radically changing system practice.
It will be obvious how far and when the challenge has been met (or not).
It has enthusiastic support from (almost) the entire research community, even those who do not participate and do not benefit from it.
It has international scope: participation would increase the research profile of a nation.
It is generally comprehensible, and captures the imagination of the general public, as well as the esteem of scientists in other disciplines.
It has clear application and relevance to business needs and systems practice.
It promises to go beyond what is initially possible, and requires development of understanding, techniques and tools unknown at the start of the project.
It calls for planned co-operation among identified research teams and communities.
It encourages and benefits from competition among individuals and teams, with clear criteria on who is winning, or who has won.
It decomposes into identified intermediate research goals, whose achievement brings scientific or economic benefit, even if the project as a whole fails.
It will lead to radical paradigm shift, breaking free from the dead hand of legacy.
It is not likely to be met simply from commercially motivated evolutionary advance.

Figure 1 Extract from the flyer for the workshop

Conduct of the Workshop

After welcoming addresses, delegates listened to an introduction from Frank Stowell about issues in systems thinking and practice. This was followed by an interactive session in which the delegates explored in small groups the reasons why they had been attracted to attend a workshop on 'joined-up thinking'. Conversation maps were drawn by each group (see Fig 2 and Fig 3), and displayed as posters on the wall so that delegates could share one another's views collectively over coffee. A study of the various maps revealed a number of common themes: a desire for *sharing* of views with other (different) people; *curiosity* to explore and learn about systems ideas, modelling, etc.; a wish to *challenge preconceptions* and received wisdom, to take a *wider view*; a wish to 'get out and meet people' away from daily routines.



Figure 2 Delegates creating a conversation map

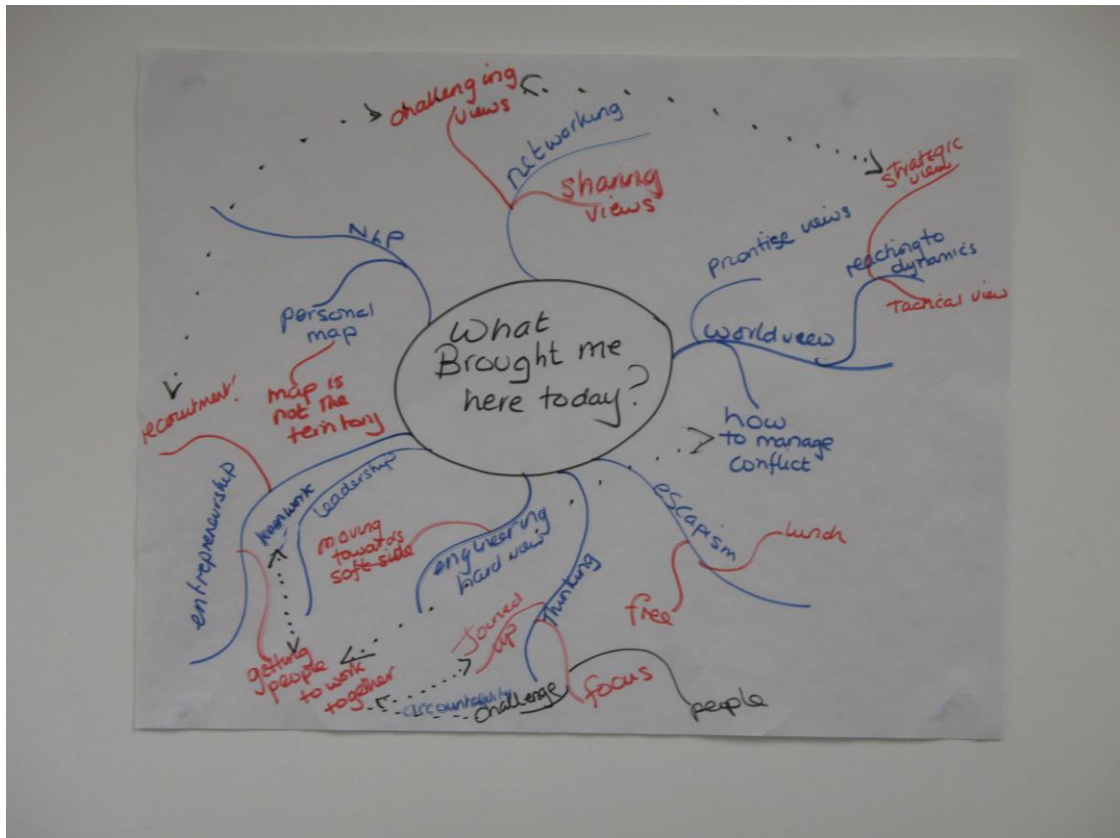


Figure 3 A conversation map

Delegates then reassembled to listen to a talk by Jim Scholes (MD of Strategos Europe and President elect of the UKSS) on ‘Systems Thinking for the 21st Century manager’. This led into the first of two breakout sessions in which delegates were asked to form small groups and create a discussion around a question, using the Appreciative Inquiry Method. In the first session, the question posed was ‘How can managers use systems ideas?’ Each of the five small groups endeavoured to carry out this brief, some taking to the

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AIM approach more readily than others. A number of ideas emerged in response to the question, with some interesting similarities in thinking between groups. Suggestions which emerged from discussion included: bringing about collaborative working; achievement of effective teamworking; achieving a better customer focus or customer relationship management; strategic thinking/business planning; project management; finding a way through the politics of the workplace and conflicting interests of stakeholders; communication. One of the concept maps produced in this session appears as Figure 4. The ideas from each small group were fed back to a plenary session, at which a consensual list of problems were identified for further debate. After lunch, in a second breakout session, the small groups reconvened each to discuss a different problem from the identified list.

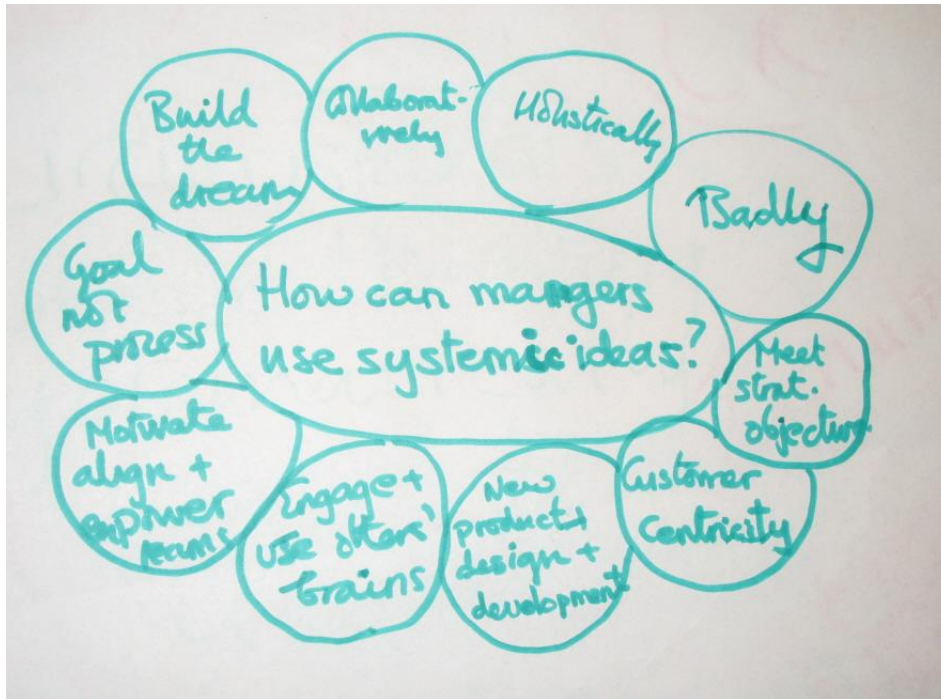


Figure 4 Example of a concept map

Four problems were tackled by groups in this session: 1. What makes systems practice expensive or inexpensive? 2. How do we improve understanding about Systems ideas? 3. How can we put Systems thinking into practice? 4. What can we do to improve communication about systems thinking? In the first group, discussion identified two perspectives to the question, centering on costs of using systemic thinking in management and costs which could be incurred by not doing so. Costs of use centred on unfamiliarity with techniques. It was suggested that many managers have been enculturated to analytical techniques involving breaking down of problems into smaller elements. Systemic tools might then appear counter intuitive and difficult to apply. Use of systems thinking, involving creation of learning spirals through reflection might be time consuming. Time was seen to be the scarcest resource in many management contexts. Training to acquire appropriate expertise was identified as a further cost. On the other hand, costs of not adopting systemic thinking would be indirect and therefore potentially hidden. However, these would be potentially heavier. The group identified bad practice resulting from lack of holistic thinking, leading to bad or inappropriate investment of resources. Delegates considered that cost/benefit analysis was justified but difficult to carry out in this respect. The group then went on to consider a Life Cycle of Adoption model in relating to systemic thinking in management (see Table 1).

Push Factors	What reasons are there to use ST? Is there a perceived need to bring about change? Are there external drivers, e.g. desire to achieve competitive advantage, a need to audit resource use?
Awareness	Perceptions of relevance of ST Perceptions of usefulness of ST Perceptions of value to be gained from ST
Sponsorship within organizations	Nature of present practice Perceived benefit – business case for ST Bench marking of tools and techniques Current management ‘buzz’ words
Training/ Networking by practitioners	Qualities of early adopters Fit to organizational cultures Approaches to introduction – top down, piloting etc
Implementation Evaluation Feedback	Experiences of using ST

Table 1 Life Cycle of Adoption for Systemic Thinking

The second group considered the question ‘how do we improve understanding about Systems?’ Discussion produced a number of suggestions. The group spent some time considering the target audiences to be addressed. The needs of academics and practitioners, of managers in organizations, of government agencies and the general public were identifiably different. Any group to be targeted should be considered carefully in terms of level of existing knowledge of Systems and of analysis and modelling more generally. Motivation to engage with Systems ideas would also vary, as would expectations from use of these ideas. Workshops of the kind currently occurring were considered to be a good idea but it was suggested to be necessary to ‘sell’ these to target audiences more effectively and to tailor them to particular needs. The key to success in disseminating Systems ideas would be demonstration of relevance to problems encountered by different groups, and establishment of particular ‘measures of success’ by which effectiveness could be demonstrated. Finally, and most important, the group considered the accessibility of the ideas in need of improvement. To remove excessive use of jargon, explain concepts in terms which people would readily understand and to establish and disseminate accepted ‘best practice’ in Systems thinking would be beneficial to all.

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Figure 5 Work in progress during a breakout session

The question ‘how can we put systems thinking into practice?’ was debated by a third group. Training and networking were seen as key tasks to be addressed here. The group believed that the role of the UKSS must change and that more members from industry and commerce, spreading the message that systems thinking is an effective approach, is the way forward. New and differing messages needed to be evolved for different target audiences in order to get this message across. Many different business models have risen and fallen in ‘fashions’ of management ideas, e.g. TQM. There is a need to show that this is not just one more ‘fad’ by demonstrable success in use. The group also suggested that education was a key area for development. Systems *thinking* courses need to be introduced, possibly early in the education process rather than in Universities. Availability of help and advice for users of systems approaches in industry and commerce were considered to be important and the group felt that academics and the UKSS should be providing these free of charge (resource implications were not discussed).

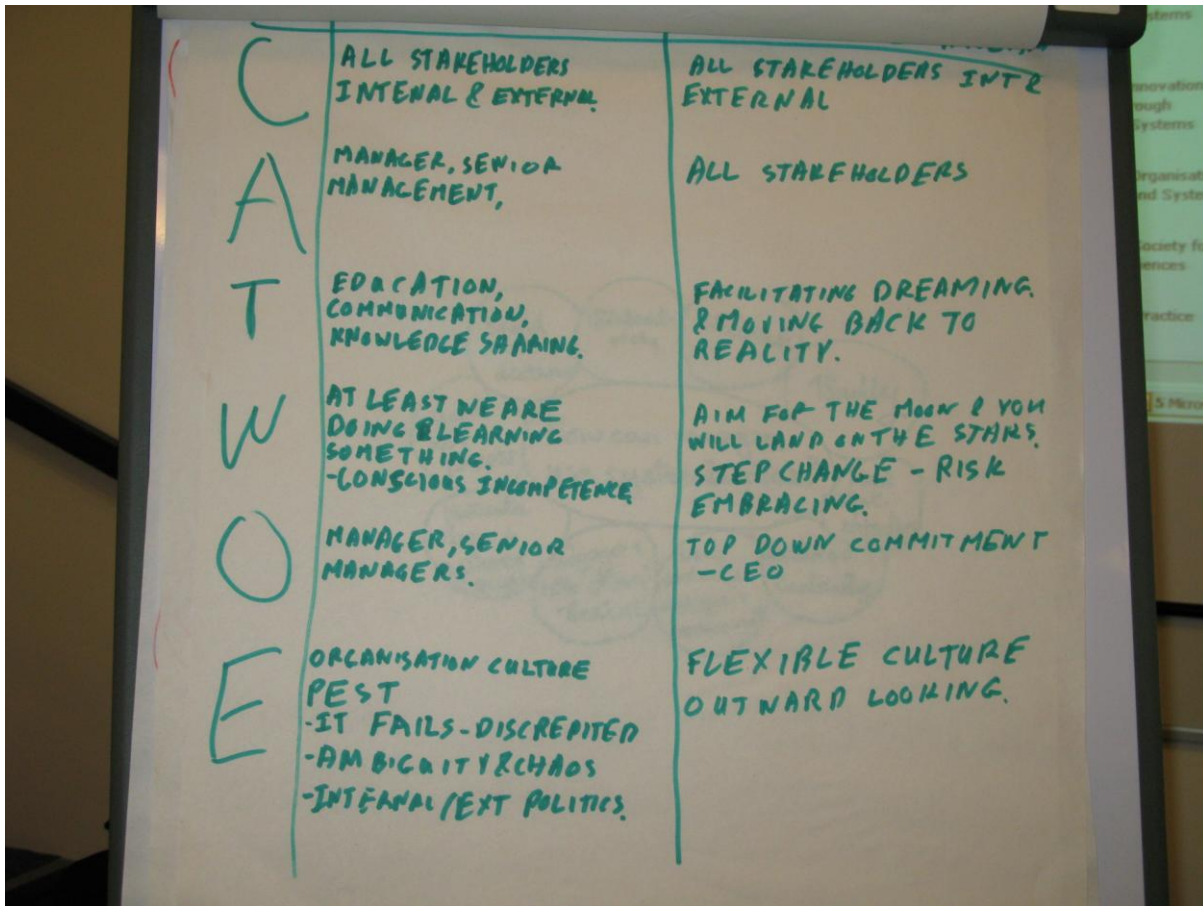


Figure 6 An attempted CATWOE for 'A system to promote systems thinking by managers'

The final group were asked to consider 'what can we do to improve communication about systems thinking?' Key elements identified here were: education, need for more concrete examples, reclaiming the lexicon – even abandoning the term 'systems thinking' as unhelpful, keeping concepts as simple as possible. (It might be considered that this last point is an inherent contradiction in relation to 'joined-up thinking'.) The group chose to expand upon the element of education and identified a number of tasks which the Systems movement would need to address: briefing key people and demonstrating successful applications of systems thinking; training the trainers of the future; promoting awareness/acceptance of systems ideas; producing systemic toys for children (see e.g. SIMS computer games); recruiting celebrities to the campaign.

Each group fed back the results of their discussions to a final plenary session in which an attempt was made to derive a list of Grand Challenges to be taken forward. It was clear that there was considerable overlap in the ideas which emerged from discussion of the various questions. One key challenge appears to be overcoming a barrier created by what is perceived to be unnecessarily obscure and complex language surrounding systems thinking. 'Reclaim the Lexicon' 'Keep it simple' were rallying cries emerging from discussion. Producing ideas, tools and techniques which are readily accessible to people in a variety of roles in public and private life may be our greatest challenge. Secondly, education appeared to be a key factor emerging from all discussions. Clearly, education within Universities for specific interested students was not deemed to be a sufficient response and a need to educate the public more widely, starting from an early age was identified. A need to overcome existing prejudices in favour of simplifying models, and against what are seen as 'faddy' management tools and to demonstrate clearly the usefulness of systemic thinking emerged strongly from debate.

The Northumbria Workshop

Organization

The second workshop *Grand Challenges for Systems Thinkers-UKSS Northern Region* took place at Northumbria University, Newcastle upon Tyne. The workshop was set to develop a creative discussion to identify and explore challenges that systems thinkers need to address today. This process required involving people with differing backgrounds and, intentionally and where possible, from different walks of life to ensure that a variety of perspectives is brought into consideration. There were 21 participants including academics from health and social sciences, politics, design, management, architecture, engineering, computing and IS, and managers and practitioners from the health sector and local government. Most of the participants had not previously considered 'joined up thinking' in any formal way, which allowed for exploring and emerging a meaning of 'joined up thinking' shared by the group.

Reflection on the characteristics and performance of the group suggests the following:

- The variety of participants' backgrounds contributed positively to the inquiry.
- The practitioners involved in the discussion were predominantly from the public sector. It will be beneficial in the future to involve the private sector.
- Several distinguished professors from different disciplines, e.g. politics, management, systems, engineering, etc., participated in the workshop. While their contribution to the inquiry was profound, it presented some difficulties in developing the dialogue in terms of emerging a shared meaning, as naturally these participants had strong opinions and ideas that they felt they needed to defend.

Conduct of the Workshop

The workshop was offered as a small step towards establishing a meaningful and creative dialogue about challenges and the way forward for Systems Thinking. Socratic dialogue was chosen as a form of inquiry.

Socratic dialectic

This interpretation of Socratic Dialectic in the form of a dialogue offers a unique form of inquiry open to all. The process is capable of promoting insight into an important question and provides an unusually rich experience of communication as it does so. Inspired by the processes of Socratic dialectic the idea was developed into a consensus-seeking process by the German philosopher Leonard Nelson .

The dialogue takes as its basis a concrete example drawn from the experience of one of the participants. Once described in detail and made accessible to all, it provides a means for answering the question. Participants are helped to clarify and justify their thinking and develop shared insight as the dialogue progresses. They enhance their ability to define concepts, distinguish levels and types of thinking, express themselves clearly, listen and question and build consensus. The dialogue process addresses feelings as well as thoughts, and group strategy and dynamics as well as philosophical understanding.

Facilitator

The dialogue session was facilitated by Nigel Laurie - an international management consultant, founder and editor of the *Journal of Philosophy of Management*, former Chair of the Society for Philosophy in Practice. Nigel is a Fellow of the Institute for Management Consulting and has over 25 years experience as a management consultant facilitating dialogues and events in organizations of all kinds and sizes throughout the world. He also teaches Philosophy of Management at MBA level at Royal Holloway University of London.

Programme of the Day

The programme of the workshop is shown below:

UKSS Northern Region, Northumbria, 11th May, 2007

9.00	Coffee and registration
9.20	Welcome, David Bell, Northumbria University
9.30 – 11.00	Dialogue session 1 (choosing and example from direct experience)
11.00	Coffee
11.15 – 12.00	Dialogue session 2 (describing and exploring the experience)
12.00 - 13.00	Lunch
13.00 – 14.30	Dialogue session 3. (exploring the experience with relevance to the question ‘What are the criteria for joined up thinking’)
14.30	Coffee
14.45 – 15.30	Dialogue session 4. Challenges for Systems Thinkers.
15.30 – 16.00	Dialogue conclusions.
	Jim Platts, University of Cambridge
	Prof David Weir, European Business School
	Ian Roderick, UKSS
	Petia Sice, Northumbria University, UKSS North
	Review and action commitments, Prof Frank Stowell
	Portsmouth University, UKSS

Inquiry

The dialogue starts with each participant describing an example, one of which will later provide the basis for a philosophical investigation during the dialogue. After initially encouraged to share first thoughts as to what ‘joined up thinking’ relates to, participants were asked to suggest an example related to ‘joined up thinking’ that they have directly experienced. Examples included: engaging people from different disciplines at conferences, building redundancy in transport systems, caring for the elderly, etc. (Appendix A). The group chose to look at the situation ‘caring for my elderly father’ put forward by one participant. Dialogue session 2 focused on describing and exploring the experience. Full description of the situation is provided in Appendix A. In dialogue session three, subgroups were formed and asked to explore the experience with relevance to the question ‘What are the criteria for joined up thinking?’ (Appendix A). the final session, session four, built on these insights and broadened into what challenges do Systems Thinkers face today. The workshop closed with some of the participants being invited to make observations about the day these were: Jim Platts, University of Cambridge, Prof David Weir, European Business School and Ian Roderick, UKSS. The outcomes of the workshop were summarized by Prof Frank Stowell, UKSS.

Findings

Several themes of importance were identified during the inquiry. These are:

- There is a need for Systems Thinking;
- There is a need for “simple” descriptions of the constitution and maintenance of meanings within systems concepts;
- A more accessible means of communicating the use and thinking about systems ideas;
- Highlight the drivers for meaningful systemic inquiry and complexity.

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A summary of the discussions and findings related to these themes is given below.

The Need

It is to be recognised that developments within science and technology have created enormous opportunities. The capabilities and energy sources available to human society have risen considerably. Consequently, processes, which in the past, would have taken years to achieve can now be fulfilled in weeks. For example, the design process, whether for a glass bottle or for an aerofoil can now be completed in only a few weeks. To organise a conference, one only needs access to an email system, whereas in the past a whole pool of typists were required. Videoconferencing now brings together different space and different time. In fact, the speed of events within the world, has increased to such an extent that once opposing traditions are now able to merge without mutual destruction and to form connections of joint benefit, that were not possible previously. However, the psychology of mankind is far behind its energy capabilities. Thus, if we are to effectively harness the potential of this vast store of as yet untapped energy, we require a language that orients our behaviour to look for and explore such connections. Systems Thinking promotes the development of such a language. Systems Thinking and Practice could help us to gain a better insight into how our society is advancing and what the consequences may be, e.g. Systems Thinking could help us reflect on how the focus on extending life affects our society, etc. It is also useful in explaining why and how things may work or not work. The first time many of us recognise the importance of Systems Thinking is when we experience the effects of it being missing.

Communicating Systems Ideas

Communicating systems ideas is important but one difficulty is in achieving simple definitions but at the same time avoiding oversimplifications. For example, too frequently we hear comments on national television and from Government spokespersons to “systemic failure” which is shorthand for no one person or thing was to blame it is the fault of everyone.

To promote Systems Practice within a wider context, it is important that Systems Thinking is introduced into school curricula, as well as at University level as a generic discipline. It was suggested that an introductory text on Systems Thinking (e.g. ‘A Systems Guide for Everyone’) would contribute to encourage systems practice. Workshops are particularly useful in enabling people to experience using systems ideas.

Constitution and Maintenance of Meaning of Systems Concepts

It was suggested that in many cases joined-up-thinking (Systems Thinking) may be used as a buzz word or even as a cover-up to suggest participation but avoid true involvement of relevant stakeholders in appreciating a situation of concern. Also, some systems concepts, i.e. boundary, purpose, etc., could be misused to support the status-quo rather than promote a meaningful inquiry. This may lead to a cynical attitude towards Systems Thinking and Practice. To counteract this, it is important that the meaning of Systems Thinking and systems concepts is considered within the context of human values and is actively constituted with the involvement of all stakeholders as part of the systemic inquiry.

Drivers for Meaningful Systemic Inquiry

The quality of a systemic inquiry will to a large extent depend on involving the relevant stakeholders. Creating conditions for them to interact and where possible meet regularly could be beneficial if focused on developing trust and relevant competencies, i.e. communication and reflective skills, etc. Trust is not a naïveté, although it is often portrayed as such. Trust as a civic virtue is something that needs to be

developed, it does not occur on its own accord. Addressing cultural values of responsibility, communication, openness, could contribute to emerging a goodwill trust.

‘It is important to travel well as to arrive’. This comment made by the participants refers to the importance of the process of systemic inquiry. It was acknowledged that involving the relevant stakeholders in the process was essential but not sufficient. The quality of the inquiry would also depend on the awareness and noticing skills of the individuals and the group and the individual and group creative capacity. What this means is, there is a need for participants to develop and nurture systems thinking skills together with awareness, listening and creativity skills at individual and group level. A meaningful inquiry requires:

- the use methods for enhancing the quality of personal experience (quality of awareness, attention, noticing);
- working from lived experience (grounding the inquiry into reflection on lived experience)

This however is not enough. It is through explicitly introducing the insights of experience into language that will allow for new ways of acting. Caution is to be applied as this in turn will shape and condition experience (Figure 7).

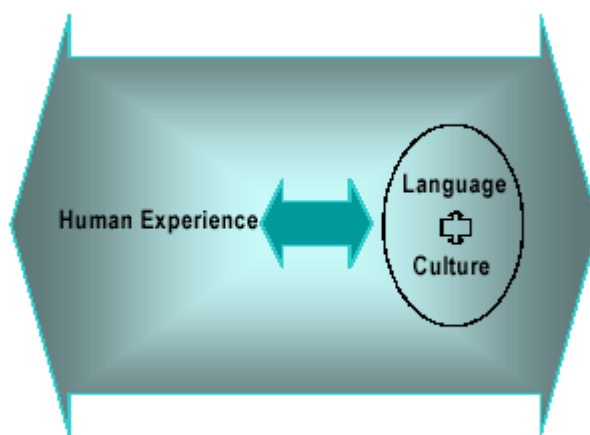


Figure 7 Reciprocal Relationship between Experience and Language

Since we exist within an environment in which language is the prime facilitator, the domain of discourse that we generate becomes part of our domain of existence and constitutes part of our environment. We have a responsibility to create communication practices that will allow, at least transiently, the coexistence of different understandings as we develop and explore our language together. Discussion and debate are not sufficient. Dialogue is needed to encourage not only communicating different perspectives but trying to understand how these perspectives emerge. The basic idea of this dialogue is to be able to talk while suspending your opinions, holding them in front of you, while neither suppressing them nor insisting upon them, not trying to convince but simply to understand. The first thing is that we must perceive all the meaning of everybody together, without having to make any decisions or saying who's right who's wrong. In this way a group is able to take conversations and collective practices to a deeper level of building awareness of what there is to be heard without focusing it through the lenses of our judgements and assumptions. This form of dialogue process should be seen as a core element within a meaningful inquiry. It is also a foundation for a human centred ethics, where a person arises as a legitimate other in coexistence with oneself. This creates an opportunity for expanded intelligence that emerges from the group rather than from accepting (defending) one individual perspective over others.

Complexity

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Social institutions are complex webs of interactions and interrelationships of individuals and their natural and human-made worlds. The dynamics of these webs, their evolution, and transformation are at the focus of the study of *social complexity*. This study is centred in the rich conceptual basis of the non-linear science and chaos theory, order and disorder, emergence and fractals, i.e. the science of complexity. The complexity paradigm significantly refocuses the basis for understanding social life. Instead of searching for and trying to impose some type of final order (be that a new 'Third Way' or a 'new and improved' health system), researchers and policy practitioners are starting to look for ways of promoting complex interactions and systems for enhancing rather than eliminating complexity.

The complexity paradigm has a potential to offer valuable insights for research into organisational behaviour and handling change in enterprise and society. It is important that a systemic inquiry could incorporate such insights.

Conclusion

Our traditional thought (or educational) processes teach us to look for solutions (or at least for a predetermined approach) to problem situations. This approach is valid as long as we recognise that 'the search for the way' and 'the way found' are pre-conditioned by the frame of reference we apply. Thus, before we embark on a chosen path of reasoning, Systems Thinking or other, we should first pause, and contemplate the assumptions with which we 'are looking'. Unfortunately, neither the educational system, nor the practices of commercial consultancies encourage the questioning of our frame of reference. Thus, problem solvers whether consultants, managers or students are continuously immersed in a culture in which they rarely test the validity of the assumptions that lie behind the 'chosen' approach to problem exploration or solution. In the academic environment we are particularly guilty, since we often teach methods, tools and techniques without any discussion of the frame of reference they adopt. Why is this? The answer is straightforward: this is convincing, it is easy to conceptualise and communicate and it provides the students with answers. Consequently, we are trained within an environment where the assumptions that underpin the various methods are explicitly 'hidden'. Thus, they become implicitly accepted in the process of inquiry.

Applying Systems Thinking without reflection on the underpinning assumptions is flawed. What is more, it is bound to lead us to an incomplete understanding of the situation under consideration, since it places 'restrictions' on the ways we question the validity of the knowledge unearthed in the application of the systems concepts. There is a need to actively engage in inquiry into the assumptions that support systems ideas. Such an inquiry requires 'different kind' of competences, i.e. developing quality of attention, awareness and noticing capabilities at individual and group level. In addition, it is also necessary to bring into the open the tacit assumptions that are 'hidden' within the practitioners or participants who are to apply Systems Thinking to problem exploration or problem solving arenas. To accomplish this, it is beneficial to move away from the 'lonely' (or individual) questioning of assumptions (although this can be a valid approach) towards a true dialogue involving all the actors who form the particular situation of concern. Dialogue as distinct from discussion, is a form of communication that embodies 'open' assumptions, about the subject or the situation.

Appendix A	Accreditation of adult learners as participants in a research project
Socratic dialogue (report)	Vijay Family - academic - business relationships
first thoughts	
Interrelated	Kevin
Challenging	Bringing colleagues to collaborate to understand the system (positive instability)
Interaction	
Cover-up	
Collaboration	Ian
Coherent	Right idea at right time helped people join have up thinking
Joins up bits you already have	
Slippery	
Innovation	Rod
Confusing	Ikea: Joined-up thinking so customer does it all
Political and B-S slogan	Rod - cats - sparrows - aphids but not much thought
Overlapping	One idea following another: Popper
Conscious, deliberate and designed	
examples	
Robert	Kerry Organising trek for hospice. Conflict resolved looking for shared priorities and goals
Conference - how stunningly difficult to engage people with different backgrounds	
The example	
Safwat	1. Last December my father (80) saw Dr A about aches and pains. He had a blood test, cancer was diagnosed and he spent three weeks in a haematology ward (hospital A). Dad - not the hospital - told me about his admission in advance.
Difficulty of engaging academics with industry	2. I live 200 miles away (and my sister further) and it was hard to find someone to talk to. Dad was too ill to communicate (painkillers) and Dr A would not (for confidentiality). Hospital A had nobody with authority to talk when I was visiting. I had no idea of progress or prognosis.
David	3. I called every night and spoke to the ward sister: "He should be leaving tomorrow ". I started to work out how Dad would get the support he needed at home - I spent one day tracking down some one to talk to (Social Services, Mental Health Unit, Help the Aged).
Transport - why not build in redundancy?	
Leslie	
Arranging care for my elderly father	
Paul	
Airline ticketing, journey and baggage handling	
Frank	
Surveillance report: Airport security	
Tina and in	

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4. I tried contacting Dr A but he was off long-term sick. The ward sister wouldn't give much detail about Dad's condition. The consultant in two minutes gave limited information. I got information about the condition off the internet.

5. Dad's return home. Each day I phoned hospital about ambulance or taxi. I asked: What happens at home? He can't be left.

I assumed Dr A would hear from the hospital about discharge and then he would put in place support. (I didn't think of asking the police.)

6. Dad returned home. I phoned nightly but he was confused. I found he'd nobody in and no food for five days.

7. I phoned Dr B (at 11am). He was unaware of Dad's existence or situation. He offered to see if someone could go and visit dad this afternoon. I assume that would sort it out. I was getting a bit cynical now - "joined-up thinking is just a myth".

8. Next morning I phoned Dr B to check whether any one had visited. Dr B was not in, the receptionist said he had been visited but couldn't tell me what the outcome was. It was on the computer but confidential.

9. I asked Dr B's receptionist for Social Services name and phone number. She didn't know and suggested Googling. I was a bit stunned.

10. I contacted Social Services. They knew nothing about the situation and there was a waiting list. I said: It's critical, nobody's near by, etc. They said the Emergency Response Team would handle it but only after reference by the G P. I began to feel I was being expected to take responsibilities I could not accept.

11. I (had to) phone Dr B. He then got to the Emergency Response Team and they went in.

12. I also in tandem contacted the mental health nurse - they went in at my request for (to check his mind as it turned out).. They then contacted

me confused to say the Response Team had gone in. This made me feel apologetic for calling everyone in (out to desperation).

13. It was now three weeks later. The hospital Social Services called for the first time to see if everything was ok. By now I was completely confused (I did not know hospital Social Services existed). I told them what I had done. They put my mind at rest: about transport to and from hospitals A and B for my father's future treatment.

14. Now: we pay to have food delivered weekly. The hospital arrange treatment twice a week.

15. I haven't been told of or seen a care plan.

Criteria for Joined-up Thinking

Group A

Lack of joined-up thinking

Information holder status

Inhibition of processes eg confidentiality

Lack of knowledge - of subject, of actors

Incorrect assumptions

Geographical/logistical problems

Delay of processes

Hierarchy of processes

Placement of actors in the system

Joined-up thinking

Effective communication eg dad to doctor and to daughter

Diagnostic knowledge eg hospitalisation

Engaging others e g actors, or doctors, nurses, health care

Facilitator - the narrator

Group B

Lack of joined-up thinking

Key people don't know/don't tell	Expect improved outcome
Tunnel vision of " who is the client/are the clients ".	Multiple " joined upness" help patient
Inadequate degree of sensitivity to condition and context (uniqueness)	Versus
Expectation versus actual over time (any learning process?)	Exit them
Abrogation - delegation	Versus
	Save money
	Versus
Joined-up thinking	Push effort on to the family
Situational stakeholders	Is the word useful?
Movement of information to create further value	- as a buzzword: no
Feedback loop	Joined up is ok, but don't assume it is positive
Keeping knowledge up to date	Other words:
Acting on knowledge	Networking, connections, communication, systems
Situational progress	Issues
Obstructions	Name the 's' - identify the 's' to be served and - then the serving's in'
Facilitators	
Communication	A joined-up 's' is a joined-up 's' because we say it is. (solipsism)
Inquiry	Who owns the's'? (ought ownership rights to be constrained?)
Group C	
Problem join up improved outcome	Does the owner know that they own the 's'? Should others be told?
Assumes causality, predictability	What happens when there several owners of the same system
Multiple definitions/ambiguity	
Buzzword definitions	
Contested	
Will solve complex, multi-factorial problems	