

Curtin University of Technology

Curtin Business School

A Deep Conversation on the Theme:

Generative Organisations?

*Methodologies and ideas for thriving
in a world of change and complexity.*

November 25th & 27th, 2003

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Foreword

In late 2003, Curtin Business School was delighted to host the visit of Emeritus Professors Peter Checkland, University of Lancaster and Kees van der Heijden, University of Strathclyde. Professor Checkland is the creator of the Soft Systems Methodology and Professor van Heijden is one of the world's best known Scenario Planning experts. We were fortunate to also be joined by Mr Jaap Leemhuis from the Global Business Network (GBN) Europe, a highly skilled practitioner in this area.

A core element of their visit was participation in a two-day Deep Conversation on the synergies and divergences of the two methodologies. This Deep Conversation was held with Curtin Business School staff and external practitioners who had experience using the methodologies.

The main points of this discussion were captured and form the following document *A Deep Conversation on the Theme: Generative Organisations?- Methodologies and ideas for thriving in a world of change and complexity.*

We at Curtin Business School are delighted with the outcome of this meeting which generated a number of ideas for further development. These have been taken up within Curtin by Professor Lynn Allen and Ms Trudi Lang - soft systems and scenario planning practitioners respectively. They constitute Curtin's newly formed Emergent Futures Group which provides strategic thinking and dialogic methodologies to assist organisations and communities address issues related to their medium to longer futures. The Group continues to liaise with Professors Checkland and van der Heijden as they pursue this research.

I invite you to explore this informative account of the Deep Conversation and to be part of Curtin's ongoing conversations around these methodological challenges. Any feedback or ongoing discussion on any of the issues raised will be most welcome.

Professor Mike Wood
Executive Dean
Curtin Business School

Preface

During 2002, extensive discussions between Lynn Allen and Trudi Lang developed a mutual respect for and appreciation of soft systems methodology (SSM) and scenario thinking(ST) as methodologies that will enable us to generate alternatives that create adaptive and resilient futures for business and society. It became clear that there was at least a prima facie case for exploring the methodologies with a view to their enhancement, convergence or synergistic application to longer term strategic projects, organisational development, and the tackling of 'big issues'.

With Lynn's interest in narrative theory and Trudi's in the Futures field generally entering into the mix, we agreed to explore the possibilities of engaging in a conversation with Professor Peter Checkland (SSM) and Professor Kees van der Heijden (ST). Thanks to the generosity of Professor Mike Wood Executive Dean, Curtin Business School, the CBS Research Committee (which conducts the visiting fellows program), Professor Nimal Jayaratna of the School of Information Systems (which sponsored Professor Peter Checkland) and the Scenario Planning and Research Unit at the Graduate School of Business (which sponsored Professor van der Heijden) the visit was made possible. The additional generosity of Mr Jaap Leemhuis, Global Business Network Europe, in joining us, meant we had a very distinguished group of scholars and practitioners meet in Perth in November 2003.

The visit far exceeded our expectations, leading to clear evidence that the exploration of the above ideas is worth continuing. This document is the record of a two-day 'Deep Conversation' which formed the focus of the visit.

We sincerely thank the many participants and supporters of all aspects of this initiative, especially Professor Peter Checkland, Professor van der Heijden and Mr Jaap Leemhuis.

Trudi Lang and Lynn Allen

Participants

Visiting Fellows

Professor Peter Checkland, Lancaster University
Professor Kees van der Heijden, University of Strathclyde
Mr Jaap Leemhuis, Global Business Network, Europe

Curtin University of Technology Faculty Members

Professor Lynn Allen
Professor Alma Whiteley
Professor Nimal Jayaratna
Emeritus Professor Jo Barker
Ms Trudi Lang
Ms Anita Kelleher
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Guests

Ms Annemie McAuliffe
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Abbreviations used in the text:

SSM	Soft Systems Methodology
ST	Scenario Thinking
AS	Appreciative Systems
SSM(P)	The system to do the study (belonging to the problem solver).
SSM(C)	The content to be studied (belonging to the problem owner).

Thinking With Scenarios

After an introductory session led by Ms Trudi Lang in which the purpose of the Deep Conversation was discussed in detail, along with the backgrounds and research/practice interests of the participants, the first session was led by Professor Kees van der Heijden of the University of Strathclyde. He generated discussion by reflecting on 'Scenario Thinking' (ST) as a methodology and its evolution over time, as well as his own experiences and understandings from using this approach. Professor van der Heijden placed the Deep Conversation in context by recounting a Taoist story:

There was a farmer in a Chinese Village. He owned the only horse in the village so was considered very well-to-do and all the other villagers said "you are very lucky" but the farmer simply said "maybe". The next week the horse ran away and everyone said, "How unlucky". The farmer only said "Maybe". A week later the horse came back with two other horses. The other villagers said, "How lucky you are". The farmer only said "Maybe". The next week his son tried to ride one of the horses, fell off and broke his leg. This time, everyone said, "How unlucky you are." The farmer again only said "Maybe". Another week passed then conscription officers came to the village and took all the able-bodied young men away to join the army...

Discussion Regarding The Concept Of Framing

This story is about framing. More particularly, it is about how reframing creates meaning. Very often, frames are created to sustain existing frames. A good example of this is the way people's framing affects their views of '9-11' and the current 'War on Terror'. The influence of frames on world events is too enormous to describe, and too little understood. It is important to realise that frames are what we use for decision-making (and are incredibly powerful tools for this), and that frames give meaning - meaning that in turn drives our responses and our choices. Everyone creates frames all the time but those frames are chosen. There are always alternative frames that could have been applied but we all 'come to the table' with blinkers. Given this, perhaps it is surprising people ever make good decisions at all!

Soft systems methodology (SSM) and Scenario thinking (ST) are both attempts to apply more than one frame to a problematic situation. This is absolutely fundamental. Both methodologies teach wariness of simplistic, unquestioned framing in the hope of increasing the chances of better decisions being made. Both put great emphasis on 'asking the right questions' and applying multiple frames.

It is important to remember that each scenario planning exercise is a 'strategic conversation' with certain key elements:

- The group composition is a crucial factor in determining success – diversity is essential.
- Particular rules are also essential. They are -
 - Every perspective has *prima facie* validity. Suspending disbelief is important.
 - It is good for the conversation to cut across discipline boundaries but also important not to lose the thinking structure they offer. This is why scenarios are about making links, not breaking boundaries. This is the role of story or narrative – to make the links and give them meaning. The storyline is very important to scenarios. Pictures are not enough when you are striving for integration.
 - Each scenario and its storyline must follow a strict logic – it must be internally consistent and all aspects must flow from beginning to middle to end.
 - Facilitation must be good, otherwise rules are not applied properly and you don't get anywhere.

Discussion Regarding The Role Of 'Purpose'

One of the most fundamental questions in working with scenarios is the question of purpose. Developing scenarios is a purposeful human activity but the purpose behind a scenario project is usually vague. So why do people do scenarios? Often it is because someone has told them they should, or that they think it is necessary to improve decision-making. There is a common assumption that scenarios are useful 'because they always make people think'. This is why it is better for decision-making than simple forecasts. This is, of course, based on a world-view that making people think is desirable. This point highlights the fact that there is often much that remains undeclared when working with scenarios and that worldviews are always at work.

Generally, the purpose of a scenario project falls into one of four categories (although which one applies is typically not made explicit):

- To assist in very practical decision making to answer a specific question (eg which width of pipe to use)
- To attempt to make sense of a phenomenon or situation
- To improve anticipatory powers (eg Asking the question, "How can I better prepare for what's ahead?")
- To test strategic goals (eg Asking the question, "Are these goals really what we want?")

The danger of not making purpose clear is that if you don't know where you want to go, then 'any road will do' and you can end up somewhere you and the client/participants are less than happy with. This is unsatisfactory. So a possible improvement would be to be more explicit about framing (worldviews) and to investigate whether SSM(P) would help in planning the process of scenario planning.

ST is meant to tackle big intractable problems. An example of this is a recent project addressing public health for a certain European city. In this case, no particular person, group or organisation is recognised as 'the owner' and this project is now hamstrung because the Town Council is being unsupportive (largely because of ownership and responsibility issues). SSM(P)¹ could perhaps have helped identify this potential problem beforehand.

1. SSM(P) refers to the system to do an SSM study, ie the problem solving system, while SSM(C) refers to the content of the study itself, ie the problem content system (see the section on SSM from page 14).

“What would happen to a finished scenario study inside Shell?” The answer depends on whether it was a large, high-level study or a short, little one. Big ones are generally published in a book and circulated widely. There is usually much interest from people’s desire to ‘know how management is thinking’. Then workshops would be run which are useful for people ‘doing’ scenarios but they are not necessary in order to generate strategy from the scenarios themselves. People must do their own scenarios, and generate a shared language.

The process of de-centering, testing and then re-centering is important for this methodology. It sounds simple but is actually hard to do. For example, with the concept of worldviews, the test is how much you are losing to adapt to a particular cultural group.

Other Questions Raised During This Discussion:

- Does having a purpose declared in advance predetermine the outcome?
- Does this just mean facilitating it differently?
- Don’t we always need to know the client’s purpose(s)?
- In the systemic world, purpose defines the boundary of enquiry. Does this make it limiting? Does it lead us to miss out on things that may be relevant?
- You force methodological variation when there is a purpose but without a purpose will we get more failures (or at least perceived failures)?
- Can the notion of risk be a purpose for ST – risk as a function between ambitions and uncertainty?
- Is there relevance here for a new version of Critical Theory? ‘Critical Theory for Enlightenment’ (which is different from Critical Theory) is a liberating theory. Scenarios are both liberating and enlightening...they establish social intelligibility, which is not the same as consensus. This means we have created a common frame. Could ST then have a menu of purposes to choose from? If we think in terms of cultural anthropology’s distinction between emic and etic approaches...is the etic the common frame itself and the emic what is in the frame?
- Don’t we need to remember the role of the client who makes it all possible?
- Can’t we ‘have the cake and eat it’? Can we have the benefit of an explicit purpose without the limitation of one?
- How do we respond when the role of client is unclear?
- Doesn’t proceeding without a defined purpose, and its intrinsic ‘open-endedness’, actually offer great value? In some scenarios work there may be a declared purpose at the beginning but the clients views about purpose(s) can change significantly during the process.

Learning From a Recent Case Study - 1

In a study conducted in Western Australia with a large organisation, scenarios were part of a three-stage change process:

- Stage 1: Developing Scenarios Phase
- Stage 2: Developing Strategic Intent Phase
- Stage 3: Implementation Phase

Officially, the scenarios were driven by a focal question about the corporation's fear of competition, but lots of different purposes became apparent as the project proceeded. It became clear that competition was actually not a big issue for this organisation at all.

Most participants in the study had positive perceptions of the scenario planning process but comparing responses before and afterwards generally showed very little change in people's work practices or mindsets. The main changes found were in people's views regarding competition and those necessary for alignment with the outcomes of the change initiative. People tended to see in these outcomes, things that largely reinforced their own pre-existing perceptions. Essentially, many tended to adapt the change process to them, rather than adapt themselves to the change process.

In this situation, the study/change process was driven in response to regional, national and international events. Before long, both the events, and some of the people involved at the time, used to be driving forces. If the driving forces change, what, in retrospect, does this mean for the data? What does it mean for the project and process themselves? An explicit purpose can be overly prescriptive, especially when key people can move on and driving forces can change.

This example leads to a core question: “Can you have a purposeful human activity without a purpose?”. This question grapples with the issues of implicit and explicit expectations. In turn, this raises further questions in response:

- Isn't the purpose ultimately subjective? Is every human activity purposeful for those doing it?
- How would we explain events like falling in love or getting the flu? They are human activities that are not purposeful yet clearly meaningful.
- Should we view them as 'activities' at all? Does not the word 'activities' come from “to act”, and does that not require choice and free will?
- Do we need to draw a distinction between that which is 'purposive' and that which is 'purposeful'? Are purposeful acts by definition those 'with intent', ie including the use of free will, while purposive acts may have a reason, but may not necessarily include intent such as the operation of root system in plants. This suggests consideration of the mind-body question in philosophy: implying not a Cartesian distinction but one more aligned to the work of Nonaka.
- Does this challenge us to change our worldview to that of the facilitator? Do we need to know the intent of the client in order to facilitate it?

Further Discussion on the Structure and Use ST and SSM

The great strength of SSM is that, at its centre, is always the human being and a clear focus on worldviews of a perceived human activity system. Is this a point of difference with ST– it doesn't place the human being at the centre? Does this mean the process can be over-influenced by certain personalities? Yes, ST does not work like this and it can indeed cause problems. Good facilitation (eg distributive justice), however, can prevent results being skewed.

The relationship between scenarios and implementation can be unclear. It is important, here, to note that the terms "scenario" and "planning" do not naturally go together although they are used together widely. We do not undertake scenario development for strategic planning. We do so in order to apply multiple frames, to ask open-ended questions and to learn from these. Scenarios are best when they are part of a strategic conversation, and it is in this context that they contribute to implementation. Like other questions, the answer in this context depends on the client's needs. Some scenarios are developed to help make specific decisions and are clearly implementation-focused from the outset. The strategic conversations lead to innovation but this implementation is a different process.

In contrast to this are questions about implementation and therefore outcomes at the meta-level. Scenarios are used at different levels of decision-making with the 'highest' being the societal level – eg those done by World Business Council, Global Business Network, Club of Rome etc. Does this mean they are too broad to have real outcomes? No – the outcomes are real and can be very influential indeed. In particular they are useful as over-arching ideas for thinking.

No outcome can be predicted with certainty, however. Both ST and SSM are used in forward-thinking ways, but neither tackle the concept of uncertainty directly. For example, Peter is currently working on an SSM study to explore how to improve the system for dealing with and preventing child abuse. How could scenarios be used for that?

In scenarios you need to distinguish between two levels of environment: the transactional environment – the level you interact directly with and act on, which influences you and you, in turn influence it; and the contextual environment – driving those factors which influence you but you don't really influence them. The real uncertainty is in the contextual environment and it is dealt with in the ST process. Where do you find uncertainty in SSM? Are scenarios about the future and SSM about both the present and the future? Scenarios are a way of working in conceptual space to help make sense of now.

There are enduring questions about using SSM at the societal level. If the owner is all of 'society', where does the learning go? It can result in publishing of a paper somewhere but it is not clear how it will actually help the problem situation. But it is possible to explore changes by moving things around in CATWOE². For example, you could try different owners to see what differences this makes. This worked well at the Library and Information Service of WA (LISWA) where deliberately outrageous "What If...?" exercises produced challenging stories through altering CATWOE elements.

So SSM and ST can be tools in strategic conversations about the future and maybe every scenario project could start with a CATWOE exercise. Both methodologies have the ability to "shift mental furniture" but they must always have good communication devices. For example, if global warming is the perceived problem situation – who is the client? For a project like improving the way society handles child abuse – would an SSM approach focus on finding improvements and a ST approach focus on finding causes?

With ST, the learning takes place first through gathering a huge amount of information up front, so it is slow to lead to action. SSM, on the other hand is quick to act – it is action-oriented and the learning is actually driven by the action.

Is ST about helping people think for better decision-making? No, it's actually all about framing and reframing.

2. CATWOE is the mnemonic (for Customer, Actors, Transformation, Worldview, Owners and Environment) used in preparation to model notional human activity systems in SSM.

Overview Of Conclusions From The Opening Session:

- Both methodologies are learning tools, but with SSM the learning is driven more through action
- In a distinction between the world of management and the world of business, it can be argued that ST operates in the world of knowledge where we mobilise knowledge and move to drive thinking in that world of knowledge. SSM is action-oriented and operates in the world of management.
- Whereas SSM can be used as a visioning tool (eg at community level), scenarios would tell you if the vision you developed was feasible.
- In both methodologies, the learning comes from the minds of the participants but SSM is largely limited by the knowledge of the participants while ST is not.
- Both methodologies are about generating 'higher thinking', working with, but not limited by thinking 'boxes'.

Soft Systems Methodology

Professor Peter Checkland led the second introductory session. He reflected on soft systems methodology with reference to the earlier discussion and explored the contribution of Geoffrey Vickers. (Refer to Appendix 1 for Professor Checkland's diagram.)

The central core of SSM are ideas and experience and, most important of all, the constant interaction between them. SSM is not concerned with either ideas or experience alone, but intensely focused on how they work together. The process is captured in the colloquial Scots phrase "I hear you".

Conventional systems engineering approaches take the existence of a system as a given. This is the 'hard thinking' approach built on the belief that there are systems in the world that can be engineered to work better. Experience showed that this assumption fell apart in the messy world of human affairs. This realisation gave rise to a profound shift in thinking towards an approach which says the world is complex but we can approach finding out about it as a learning system.

This was the beginning of 'soft thinking', which says "Wow, isn't the world complex. Chaos and confusion abound but the process of inquiry can be made to operate as a learning system." This has been difficult for people to grapple with, largely because it uses the word 'system' which is so widely used in other ways within the English language. In SSM, it is only ever a notional concept and practitioners must guard against assumptions that a system exists in the real world. From this derives SSM's strict division between use of the words 'activity' (for what is in the model) and 'action' (for what is in the real world).

SSM has a rigorous technology which includes Root Definition and CATWOE, the 'Three Es', Rich Pictures and Analyses 1, 2 & 3. People often focus on this technology as it gives structure for teaching and learning about SSM. It is important to remember, however, that SSM sees roles as fuzzy things. For example, the client can be, but is not necessarily, the problem owner. SSM can be project-focused or content-focused. The program focus, SSM(P) refers to the system to the study itself and belongs to the problem solver. Conversely the content-focus, SSM(C), refers to the content or situation to be studied, and belongs to the problem owner. Importantly, there may be a long list of problem owners and this can actually be a good source of useful models.

As a methodology for decision-making, SSM implies making an intervention in social reality. Given this, it is important to 'come clean' about what the participants perceive as social reality.

SSM is a meta-discipline and its fundamental idea is the generation of conceptual models, then debate about those models which leads to taking action to improve a perceived problem situation. This action in turn leads to learning which again drives the modelling-debate-action sequence. It is important to remember Jim Scholes' comment that SSM is way of being a manager, not just a way of doing a study. The process of how SSM starts change remains mysterious - with the mystery operating at deeper levels than the debate itself. As a meta-discipline, these mysterious processes are at a meta-level. They are initiated by debate about the models and having more models, surfacing more worldviews, engages people and gets them excited. Building models only accesses a person's logical capacity. Debate about those models can somehow involve the 'whole person' including their feelings, emotions and instincts. ST shares this ability to mysteriously access the whole person. At this meta-level, the process is, as in ST, essentially about constructing narrative, telling a story. It encompasses making sense, reframing and creating meaning from and in the problem situation.

Discussion Questions Regarding Universities

- How does this relate to the context of universities and the need to do pure research, yet the context of declining funding for anything except applied research?
- Is the concept of small, independent centres of expertise best?
- Does the whole idea of a university need to be rethought for the modern context?

Geoffrey Vickers's Work As Basis For SSM

Geoffrey Vickers had a long, high-level career in public life in the UK, including working with Winston Churchill. In his retirement he devoted himself to a new career attempting to make sense of how the world works. He concluded that most management literature was based on the assumption that all human behaviour is goal-seeking. Vickers came to reject this assumption, describing it as 'poverty stricken'. He argued instead that human society is actually focussed on sustaining relationships over time. Goal seeking is only a special case of this (and a stark one at that). The cybernetics field, for example, seemed to offer potential for understanding how the world works but its core assumption of a pre-determined course fundamentally limits its value. Vickers then developed his idea of Appreciative Systems – basing it on the idea that events can be imagined as two strands twisted together to form a (conceptual) rope that cannot be unwound and in which we all live. We interact with this rope through a process Vickers called an 'Appreciative System' – we perceive reality, judge it according to our standards and values and then we envisage action. This cycle of perception-judgement-envisaging is what Vickers called the 'appreciative setting', It leads to action which feeds the events stream. (See Appendix)

Importantly, the source of the standards we use for the judgement process is the history of the process itself. In this sense, Vickers described an autopoietic system in which the system's elements create the system itself. There are some important points to bear in mind about this:

- Through our experiences in the world, we develop readiness to notice certain things more than others, and indeed to not notice some things.
- We only partially perceive reality and the process by which we interact with it, yet we must constantly make judgements.
- These judgements about what we perceive are of two kinds: "What is reality?" ("What are things like?") and "What are the values?" ("Is this good or bad, acceptable or not acceptable?").

From here, Vickers argued, we envisage possible acceptable balances between the relationships we need to maintain. He called these 'accommodations' (and perhaps this is where SSM and ST come together). This, in essence, drives the process of appreciation we are all participating in all the time. Appreciative systems can happen anywhere, within any of four levels: personal, group, organisation, society.

SSM is a process to articulate Vickers's concept of the appreciative system. It does not make the deeper mechanisms of appreciative systems any less mysterious but it does offer a chance to

work with it – to ‘put it on the table’ and examine it. In this sense are both SSM and ST attempts to articulate social reality and then to work with it?

Vickers was not intuitively an academic and his work has generally not been ‘discovered’ by academics. He received far more interest from people in management. Is this because academics have trouble dealing with things they can’t test? Perhaps it is because when Vickers was writing most of this work, the academic approach to knowledge was undergoing a radical transformation. In the 1950s, ‘hard’ thinking dominated – it was philosophically positivist and sociologically functionalist. In contrast, ‘softer’ thinking is philosophically phenomenological and sociologically interpretivist but the shift is not quick. Grounded Theory took a long time (at least into the 1980s) to establish validity and usefulness. In that context perhaps it is not surprising that academia did not pay much attention to Vickers’s efforts.

There are possible limitations of Vickers’s model , specifically;

- The conversation is not made clear. It is not explicit where the conversation takes place, if at all, and this could lead to appreciative systems missing out on a great deal of value.
- It is also not clear where the ‘passion’ comes from in Vickers’s model. ST uses the term ‘fun’ instead of passion but it is nonetheless very important. Aesthetically, there must be energy (from passion or fun) to drive Vickers’s model forward. But where is the energy in the model, where does it come from? Does the energy come from a perception of dissatisfaction?

Vickers's own response to these questions would probably be that the conversation and energy made explicit in ST and SSM are implicit in the appreciative systems model. Vickers would also argue that people can, and do, hold in their mind completely contradictory appreciative settings. Appreciative systems are all about relationships. This is where the risk management – and the accommodation - takes place. Understanding this can be powerful, eg a particular work site in where the workers run everything with 'conversations'. The idea of these conversations is central and driven by an explicit and consensual view that 'people are fragile', that relationships matter.

In Vickers's model – levels each act as individuals (and perhaps it is in the interaction between the levels that the mysterious processes take place). In this sense, the social constructionists would argue that in appreciative systems reality is a product of interaction, that reality is being socially created. SSM may have been based on the concept of appreciative systems but its power in this respect comes from the SSM technology declared upfront which says "This is pretend" and makes the distinction between the real world and the thinking world very explicit. For SSM, the 'action' is in the real world, for ST it is in the world of knowledge.

"How can the stigma of 'soft' be challenged so that people don't equate it with weak?" Soft thinkers can see the hard within the soft - but hard thinkers can't see the soft within the hard. Isn't the stigma attached to 'soft' thinking just temporary and will resolve itself naturally? Has this already happened to some degree with the new term 'Soft O.R.' having real kudos, at least in the UK/Europe? Testing hypotheses to the point of destruction as prescribed by the conventional wisdom of hard thinking simply does not work in the world of human affairs.

Discussion Regarding The 'Mystery'

Both methodologies experience mysterious processes that play a critical role in the outcome of any project. Do we need to explore and even translate this mystery in order to understand and use it more fully? Perhaps it is enough to ensure the intuitive connections of the groups are developed enough to facilitate the mysterious processes taking place. The mystery goes into the collective unconscious and, at some point, do we find an obvious need to just accept that the mystery exists? It can be argued that we would do best to simply leave the mystery – that, as long as it happens, it is not important to know its anatomy. However it can also be argued that we need to know what 'hard' things you need to do to help the mystery happen. After all, both SSM and ST are essentially practitioner's arts. (Would the term 'magical' be better in this context than 'mysterious'?) There are hermeneutic aspects built into the iteration – even SSM's early 7-step model had hermeneutic aspects, and there are Jungian processes involved as well.

This leads to demonstrating the important point that each study (using either SSM or scenarios) should be carried out with others. It can't be done well by one person alone because different psychologies are needed for the conversation to occur, and for the mysterious to emerge. Experienced practitioners know that the conversation is always much more important than the technique [because of its ability to access the mystery].

Discussion Regarding The Role Of Narrative

During the discussions regarding Vickers's work, the deep conversation again incorporated discussion of the role of narrative:

It is interesting to note, alongside the observation that Vickers has largely been overlooked by academia, that theory in the humanities underwent a complete rethinking from the 1980s with schools of thought such as Russian Formalism and French Structuralism emerging and gaining credence. One of the key outcomes of this change process for literary theory is how it empowered the role of the reader in the construction of meaning, how the reader's relationship to the text was completely re-thought to recognise that readers are active participants, not just a passive audience for an omniscient author. This has had enormous impact on the parallel development of narrative theory, particularly regarding the construction of meaning in the novel.

Narrative plays a central role in human life. We all tell stories and these stories are shared and changed over time. Indeed, some cultures overtly use stories collectively to explain what has happened and this can be enough to create understanding and learning. SSM uses models to tap into the imaginative process, taking away the fear component by making the 'let's pretend' aspect clear. As such, SSM can involve everyone in the narrative, including people who otherwise do not exert a strong influence due to their personality or their power relationships. The discourse concept of the 'folkloric' is valuable here as it is oriented to dialogue, not monologue. In ST, a group constructs the stories. The act of story is very important as it has the power to change worldviews. Storytelling also accesses passion, and this drives action, especially when people explore the stories implied by the scenarios. The aesthetics also play a central role in the whole storytelling process.

In Practice

Mr Jaap Leemhuis led the discussion for Day 2 of the Deep Conversation by reflecting on his many years' experience as a practitioner.

The “So what?” question can be paralysing. The original purpose of ST was trying to understand risk better, but a conversation about scenarios and risk can be muddled. You are not always sure whether you are talking about one or both of these. Fundamentally, there are two realms in ST (and these are referred to as the ‘scenario framework’). One realm is that of the environment in which we must grapple with uncertainty. The other realm is that of the self in which the organisation (or individual) must grapple with ambition (also described as ‘strategic intent’ and ‘long term objectives’). Risk occurs intuitively in the relationship between these two realms.

Within the business environment we use group scenarios to explore uncertainty. Many variables may be relevant but some are far more important than others. Intuitive research suggests (and shows) there is typically a set of key variables (usually between five and seven) that could have a big impact. It is important to determine which are interdependent and which independent.

Discussion Regarding Working With Risk

Within the individual self we have ambition, an articulated business idea with strategic intent and long term objectives. The interplay between criteria and options expressed by the individual leads to strategies where risk can start to be worked with. The strategic conversation is a process of testing between the articulations of risk and the focused scenarios that are derived from a better understanding of the ‘big impact’ key variables in the environment.

Complexity and risk are connected but not the same and it is important to be clear about the distinction. Complexity exists as a real world phenomenon, while risk exists only as human perception. This implies a slight, but key, difference in where the methodologies came from.

Normally in an organisation, potential options move ‘from the bottom up’. But the ‘bottom’ of an organisation uses a different language than the ‘top’ of that organisation. This poses communication problems in articulating options and having a conversation about these. ‘Top’ and ‘bottom’ operate at different domains of responsibility and therefore have different views of risk.

Learning From a Recent Case Study - 2

This project has recently taken place within a public service organisation (in a European country). This organisation has two briefs – to audit government spending in terms of account management and to audit spending in terms of effectiveness.

The organisation comprises a great many people who are experts in their field. As a whole, the organisation works on five-year planning cycles. The staff members generate research and project proposals which move from 'the bottom up'. These proposals have already deliberately aligned with seven declared themes of priority.

There was an internal lack of cohesion and a perceived need to mobilise resources better. There was a significant gap between policy intent and policy effectiveness and this is what really drove the use of ST. But in using scenarios with the group, it became clear that ST could 'only take it so far'. In particular, scenarios were not useful attempts to make sense of program content. So the practitioners used a version of rich pictures – they identified the organisation's six most important processes. However they still needed to grapple with a lack of consensus on what constitutes 'good governance', not to mention the best way to achieve it. The concept of *Weltanschauung* (the worldview, W, from SSM) was very relevant in this respect

The lesson learnt from this case study is that the ST realm of the environment is either the Problem Situation or the E of CATWOE. In this case, an SSM-type approach was used effectively to grapple with the content that ST couldn't handle. This raises questions including: Would it be effective to tack between the two methodologies (ST-SSM-ST-SSM)? Should the tacking be between strategies and core values?

This case study also demonstrated other important principles for practitioners:

- Keep the process open
- Keep the methodology 'second and hidden'
- It is valuable to use models for 'looking at externals'

Further discussion inspired by this case study included consideration of the following:

Can the UN Governance Model referred to in this study be used to create an SSM model? The E of CATWOE is key – and it is the most difficult and most often misunderstood part of CATWOE because there is so much that can be encompassed. But you need to separate worldviews in discussion of any uncertainties.

This raises the question of whether holons work the same way in SSM (ie. “What can be taken out without things falling apart?”). But in fact nothing should be able to be taken out. A root definition should be irreducible - the root definition and the model must be fully and entirely reflective of each other – nothing extraneous, only the minimum necessary activities should be included.

Conclusions – Reflection & Synergies

Professors Lynn Allen and Nimal Jayaratna opened the discussion by surfacing questions of whether attempts to find points of integration or accommodation between the two methodologies are values-driven and what is the philosophical position of this process. Professor Jayaratna asked whether, structurally, these methodologies can sit side by side, informing each other?

Discussion On The Value Of The Deep Conversation Process

- Discussions like these are valuable because they can break down any feeling of protectiveness towards a particular model.
- SSM in Mode 2³ works well in practice, but it is becoming clear that practitioners need a new, rigorous and defensible model that helps deal with increased levels of uncertainty.
- There is a need to strengthen the practitioner's 'toolkit' and perhaps this practice-focus is creating a drive to find complementarity between the application of these two methodologies.
- A methodological framework is needed to guide practitioners when and how to use each tool.
- Theory and practice can each have their own purposes and perspectives. These methodologies could be taught separately or engaged complementarily in actual situations.
- ST is not knowing the future, but about creating a framework for understanding the future. Does this mean ST is about knowledge solicitation?
- Is one methodology context- to-content and the other content-to-context?
- SSM users soon become sophisticated and 'light-footed', using SSM in very internalised way, loads of shortcuts and this actually improves it, not weakens it. Can this happen with ST and, if not, does this pose a problem or incompatibility? This forum's answer is an emphatic "Yes" that ST can be used this way. Nonetheless, it is important to bear in mind that other ST practitioners would disagree as they believe it is crucial to follow an explicitly prescriptive procedure.
- "If we consider SSM at the level of the 'Etic', when doing Mode 2 of SSM, how much can you lose of SSM before it becomes meaningless?" Quite a lot can be lost as long as you stay in soft thinking mode – even a little hard thinking takes the value away. It is very important to be careful that people don't start constructing and thinking in real world models – because this means no learning takes place.

Discussion Of Ways in Which SSM And ST Relate To Each Other

The classic diagram of SSM can be redrawn for ST, with scenarios in place of models (see Appendix 2). This raises several questions and observations:

- Should ST be used to inform SSM? In this sense, is ST an outside-in process and SSM internally focused?
- Is ST mostly concerned with strategy while SSM is mostly concerned with human activity?
- Are they both ways to furnish your mind for an SSM study: you can model the project itself as in SSM(P) and/or you can use scenarios.
- In the corporate world would it be helpful for scenarios to be prepared and the strategies suggested by each one to then be modelled using SSM? (You would need to couch the discussion in terms of activities, in reality people tend to use nouns rather than verbs).
- Is it possible to model a system to make use of each scenario but does this already get done while you are 'finding out about the problem situation'? Do we need to do this exercise ...
 1. ...for the study itself?
 2. ...for the knowledge transformation
 3. ...for the 'self' in the ST framework

The purpose is clear for 1&2 but it is not necessarily clear for 3. (Central to ST is the question of the business idea - What is the fundamental idea that is keeping the organisation going? What is the capability of the organisation?)

- There is a crucial distinction to be made between the stated/declared purpose and the emergent purpose. Does this imply a hierarchy of purpose? If so, do we need to build fixed aspects into change programs and make those things explicit? At some level, things are stable so the things above the 'bedrock' can change. At a philosophical level, identification with something occurs, eg good governance. So what we're looking for is a transitional object. Perhaps that is where these methodologies are useful.
- In a problem situation, at one level we may change but it's unlikely initial conditions would change.

Discussion Regarding The Requirements of Methodological Rigour

- Is ST a practice in search of a theory?
- Why do we have a methodology at all? Why not just do things? Two main reasons:
 1. We are intervening - this entails responsibility and an obligation to do so as wisely as we can. Openness in modelling shares the learning (we are not alone in making interventions.)
 2. We are doing applied social science. Repeatability can be achieved in the natural sciences but social sciences can be limited to plausibility only. The weakness of this is the limits it places on later research by third parties at later times. This is why we must declare our epistemology up front. This way we can at least achieve recoverability through findings which have been adequately recorded.

Does ST offer as much recoverability as SSM? Can ST say “how we know what we know?” in a way that:

- Is systematic
- Is transparent
- Has a clear ‘audit’ trail
- Is clear about components
- Is authentic

ST does offer recoverability but can’t yet answer the “How do we know what we know?” question. There is an important difference between looking for a comprehensive framework and looking for a valid methodology. Scenarios don’t have enough methodological rigour but perhaps integration with SSM could address this.

Both these methodologies have a social constructionist ontology. They work with meaningful pieces of speech but use data and logic. The outcomes can’t be factual, provable or testable but they can pass the following tests (based on the criteria above):

- Being systematic
- Handling logical steps
- Being iterative
- Showing a clear ‘audit trail’
- Being transparent and authentic (which implies that people are allowed to ‘have their say’).

Comments And Questions Regarding The Implications For Research

- It is fundamental that research does not lose touch with the action. Action learning is in the knowledge domain - action learning is part of action research. Both these methodologies use action research as the learning mode.
- New students are needed to drive the learning forward. Graduate students are needed to work in organisations then revisit the intervention for learning purposes. This offers the iterative reality of practice-and-learning-and-practice-and-learning and so on.
- When working with students we need to think about how the learning is captured and assessed? It is not fair to mark them on real world outcomes. We need to involve them in comparing the theory with their practice and assess them on this instead as ‘systems lessons’ are a better measure of performance. Should we carry out these comparisons before, during and after the interventions? In this respect we can learn from other examples of reflective learning practices such as Professor Checkland’s “Thinking Like a Manager” initiative in an Executive MBA program and Professor van der Heijden’s revolutionary use of scenarios as teaching tools (see Appendix). There is a need for more primary literature on this approach.

Postscript

Overview of Proposed Convergences and Divergences

At various stages during the course of this Deep Conversation, a number of points of either convergence or divergence for these two methodologies were proposed. In most cases these were offered by one or more participants as an observation and not explored fully through discussion. There was not explicit consensus from the group on whether these observations are useful, accurate or indeed comprehensive but an overview is provided below.

Convergences

- Both methodologies grapple with the problem of framing, recognising that frames and worldview significantly influence subsequent decision-making. They are based on a worldview that awareness of frames (and *weltanschauungen*) can lead to deeper understanding and better decision-making.
- ST and SSM both focus on learning and improving decision-making/action/understanding/etc
- Each of these methodologies is about 'sense-making' through using conversations to assist participants to develop a shared understanding of a situation or issue.
- Both ST and SSM are enabling technologies and arise from the action research paradigm.
- Both methodologies are effective in 'shifting mental furniture'.
- Inherent in both methodologies is the worldview that asking the right questions is more important than reaching a quick conclusion.
- ST and SSM both place enormous emphasis on the value offered by a diversity of views in efforts to gain a better understanding of a subject or issue.
- These methodologies are both 'soft' thinking approaches. They are philosophically phenomenological and sociologically interpretivist. (In contrast, 'hard' thinking is philosophically positivist and sociologically functionalist.)
- Each methodology relies on the skill of the facilitator/leader to effectively 'execute' a project.
- Both ST and SSM are 'practitioner's arts'.
- SSM and ST are both knowledge-generating methodologies and they share a strong emphasis on the value of the narrative/story in that process.
- Both methodologies use conceptual models (holons and scenarios) as tools in an iterative process to explore how things might be.

Divergences

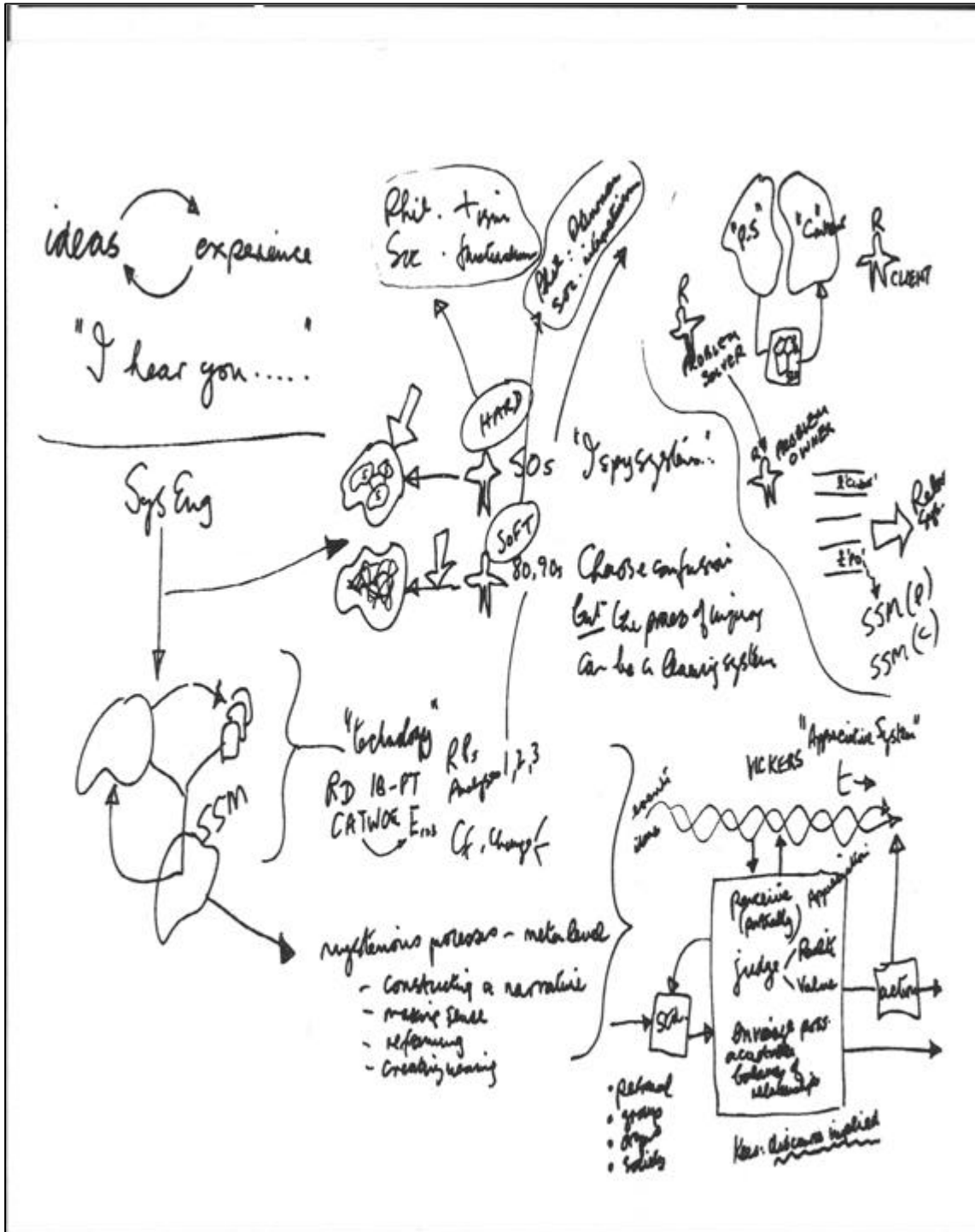
- SSM operates in the world of management while ST operates in the world of business
- SSM is driven by the struggle to grapple with complexity (and may be better at dealing with ambiguity) while ST is driven by the struggle to grapple with risk and uncertainty.
- The inputs into each SSM study are limited by the actual knowledge of participants. This limit does not apply in ST projects because it explicitly incorporates information from a variety of sources.
- SSM is particularly effective at increasing people's awareness of their own worldview(s) and how this differs from others' worldview(s). (This could be argued to be valuable in itself.)
- SSM is more focused on the present, ie on improving a problem situation. ST is more focused on the future, on trying to understand it (and, generally, in some way preparing for it).
- The purpose of an SSM study is always action orientated (it leads to action to improve a situation). The purpose of ST can vary from project to project (but it is always based on understanding drivers of change and how these might 'play out' in the future).
- Although both methodologies are learning-driven, SSM puts a more explicit emphasis on using the methodology to learn about the methodology, through drawing a distinction between SSM(P) and SSM(C).

Appendices

1. Professor Checkland's diagram of the SSM process and Geoffrey Vickers's Appreciative Systems model.
2. Professor van der Heijden's diagram.
3. References.

Appendix 1

Professor Checkland's diagram of the SSM process (including a diagram of Vickers's Appreciative Systems model).



Appendix 2

Professor van der Heijden's diagram on scenario planning interpreted as an SSM human activity system

Kees presented the following 'model' on the second morning of the Deep Conversation. It was an outcome of work undertaken by himself and Peter over the intervening day and was initially presented at the Executive Dean's seminar on Wednesday.

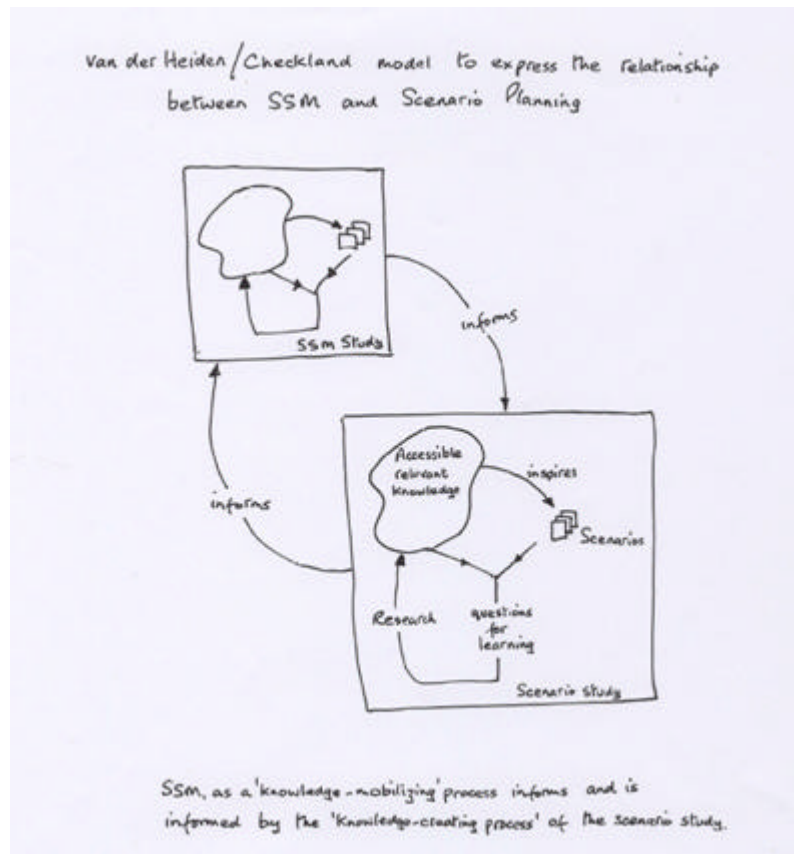
The model speaks to the purpose of scenario planning raised by Kees in the first day of the conversation. It posits that scenario planning can be interpreted as an SSM human activity system.

In a traditional SSM study, the problem situation is defined and understood, which leads to choices as to what conceptual purposeful activity models are to be developed to explore potential solutions from a range of different perspectives. These potential solutions are compared with the real world situation and accommodations and suggestions made to improve that initial situation.

Peter's SSM methodology (which is conceptually similar to the scenario planning process) can also be viewed as a general model of thinking/learning which gives rise to its applicability to both problem solving and knowledge generation. The model here outlines this application.

In the model, a scenario planning study starts with accessible, relevant knowledge which in turn inspires scenarios that are containers of different interpretations of what we know about the world. (The notion of transformation in systems language here applies to 'knowledge mobilised' or going from 'ignorance to having knowledge'.) These scenarios are then compared with the initial (accessible, relevant) knowledge leading to the identification of knowledge gaps which require further research. The process is therefore iterative and aimed at surfacing research questions.

The relationship of the two methodologies in this model is the potential to improve a problem situation through mobilising knowledge (scenario planning) and having that fed into a process that is orientated towards learning preparing for action (SSM).



Appendix 3

Key References

Checkland, P. , 1999, ***Soft Systems Methodology in Action***, John Wiley and Sons.
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Van der Heijden, K., 1996, ***Scenarios – The Art of Strategic Conversation***, John Wiley and Sons.
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Vickers, G., 1995, ***The Art of Judgement – A Study of Policy Making***, Sage Publications.
ISBN 0803973632