

**Learning for Action**

**A Short Definitive Account of Soft Systems Methodology and its use for Practitioners, Teachers and Students**

**Peter Checkland and John Poulter**

**Wiley, 2006**

Peter Checkland is pushing 80 and this book may well be a valedictory statement on his life's work: soft systems methodology. For two reasons Checkland would like this to be a definitive account of the approach: first, because the authors are convinced that over the last decades the methodology has sufficiently matured to warrant full and definitive codification, and second, because something needs to stop the annoying profusion of faulty interpretations of SSM in the secondary literature. With this book, Checkland and Poulter are offering a bare bones, practical introduction to the methodology.

The book falls into two parts. The first one is conceptual and explains SSM in three passes (first a 5-page preamble for very busy people, then a skeleton version - about 20 pages long - followed by a more fleshed-out account). The second part is devoted to practical case studies, with one chapter focusing on management situations and another one on problematic situations in the field of information systems. Then there is a section on SSM "misunderstandings and craft skills". The final few pages once more sum up the basic principles behind the approach. Five short appendices contain optional material on the theory, concepts and history.

Soft systems methodology is an enormously useful contribution to the field of systemic problem solving. It combines conceptual rigour with an enormous flexibility in application to real-world problematical situations. In its zen-like purity, simplicity and modesty it is almost aesthetic. The subtlety of SSM is reflected by its vocabulary. In SSM we don't refer to "problems" but to "problematical situations"; we don't talk about "organisations" but about "human activity systems", not about "consensus" but about "accomodation". All these differences are vitally important in steering away from a hard systems approach that objectifies the process of enquiry and the problem under study.

So, SSM may be simple but it certainly isn't simplistic: applying SSM demands a very skilled and centered problem solver or facilitator. With the development of SSM, Checkland was one of the pioneers in creating problem-solving strategies that are more nimble, more adaptive, more local, and more socially robust than the heavy-handed, technical apparatus of erstwhile decision-making experts. Today this ethos of "learning for action" is taken further in the explosive development of action learning approaches worldwide.

I think this short, definitive account is a very welcome addition to the SSM literature and a good reference point for anyone - both beginners and more advanced professionals - wanting to learn more about the approach. However, I have one or two reservations about the book. In their discussion of craft skills, Checkland and Poulter focus on the application of the methodology. In my practical experience there is also a lot of craft skills involved in convincing potential clients to adopt the methodology. Indeed, "SSM" may not be the most helpful label to denote the approach. Many people instinctively shy away from the notion of "systems" - they think it has something to do with computers - or they assume that a "soft"

methodology will hardly be capable of dealing with their "hard" problems. So some practical advice about how to build confidence in the approach with people that have not been initiated to it would be helpful.

Another skills issue which is overlooked in this book concerns working across the boundaries of a given organisation. Working with a dispersed set of actors brings its own challenges, such as lacking problem ownership and potentially much more outspoken tensions between interests and worldviews. I would love to have some practical advice on this aspect.

My second reservation concerns a conceptual point that lies at the heart of the methodology. SSM users create an organised process of enquiry and learning by making models of purposeful activity. Ironically, Checkland is very ideological about a non-ideological point, namely that these models should reflect a single, "pure" worldview, not some kind of consensus model everybody assumes to be a part of the real world. SSM-based activity models are conceptual devices to ask good questions about the real-world situation and nothing else. As these models only reflect one way of looking at reality and one is invariably working in the tectonic zone of non-overlapping (and potentially conflicting) worldviews, one usually doesn't stop with developing one single activity model: one builds several models, each of them grafted on a particular worldview. This underlines the relative nature of each of these constructs and expands the basis for asking relevant questions.

However, in practical situations it may not always be so easy or even desirable to go beyond a single model. For example, in dealing with complexity people are prone to premature cognitive lock-in: they cling to the first speck of structure they see emerging from the chaos and are unwilling to go beyond and reaffirm the multiplicity by developing several activity models side by side. As a practitioner you may well be facing a problem solving team that would rather embrace a quasi-consensus than to keep several activity models in suspension. So I sometimes wonder whether the accommodation can also happen at another point. If, for whatever reason, there is no basis to go beyond a single activity model, is it then possible to build a kind of consensus model in which there is a specific module dedicated to dealing with the tensions between different worldviews? The multiplicity remains, but is absorbed by the model itself. Checkland doesn't entertain this option and I doubt that he has any sympathy for it. (It is, on the other hand, an approach that is defended by Brian Wilson, another very prominent practitioner of the methodology whose contribution to its development is nowhere acknowledged in Checkland's definitive account).

A final, but minor point, is the fact that none of the section headings in the book is numbered. This makes navigating this slim volume unnecessarily complicated.

Despite these few reservations there is no doubt that this book deserves five stars for "lifetime achievement". Thank you, Mr. Checkland.

**Strategic Modelling and Business Dynamics**  
**A feedback systems approach**  
**John Morecroft**  
**Wiley, 2007**

John Morecroft's book is an excellent primer in system dynamics for aspiring practitioners. The backbone of his argument, developed in 10 chapters, focuses on developing intermediate skills in building models. The purpose of these models is to help us explain the dynamic behaviour of systems in the world of industry and business.

The first two chapters are introductory but vital reading for starters in the discipline. One learns about the rationale behind system dynamics and its basic underlying notions (causality, positive and negative feedback, the use of causal loop diagrams to visualise interdependences). Chapter 3 moves into dynamic simulation proper and discusses how changes in stocks and flows can be visualised and represented in algebraic form. Chapter 4 presents itself as an innocuous case study ("World of showers") but holds important lessons, both at a literal level (as a model to investigate temperature instability among interdependent shower takers) and at a metaphorical level (as a model for understanding competition for resources among interdependent business units). This chapter also introduces the big subject of goal seeking behaviour (driven by balancing loops) which is further elaborated in Chapter 5. In the latter, Morecroft zooms in on cyclical dynamics rooted in the presence of a powerful balancing loop with a delay. In addition, the discussion is a canvas for discussing generic strategies to move from problem articulation to a working simulation model in team-based, practical settings.

In Chapter 6 the perspective moves from goal seeking behaviour to the dynamics of growth (due to diffusion, as elegantly encapsulated in the Bass diffusion model) and this is further developed in the next chapter where Jay Forrester's Market Growth model is the basis for the exploration of the risks of imbalances (due to underinvestment) between production capacity, sales force and customer orders. Throughout the discussion is thorough but didactic and hands-on. Numerous diagrams facilitate the understanding. In addition there are numerous references in text and diagrams to a number of modelled case studies that can be consulted and worked through on a CD with a working version of iThink. Chapter 8 and 9 consolidate the learning by working through the simulation of macroscopic systems in business (oil markets) and in the public policy arena (urban dynamics, fisheries policy). The final chapter focuses mainly on practical strategies to validate models at different levels of rigour (tests of model structure, model behaviour and learning).

In these pages one senses a mind that has applied this methodology to a variety of real-world problems, and has a long experience in developing and working through these models with decision-makers (who are as a rule uninitiated in the arcana of systems modelling). In addition to the main line of his argument, Morecroft highlights seemingly small and unspectacular things that in practical settings often take on significant importance. For example, as he writes on p. 54, in naming variables (for a causal loop diagram) the choice of words is vital: "each variable must be a noun. Avoid the use of verbs or directional adjectives." Indeed, practice shows what a cumulative difference this kind of "language hygiene" makes to the problem

solving capacity of a team. In many other places Morecroft shows himself very sensitive to the demands of real-world problem solving.

This experience also explains his keen attention for the various ways in which system dynamics models can be used. Indeed, over the last decades the systems approach in general has bifurcated into what seem to be two rivaling schools: the hard systems and the soft systems approach. The former is interested in modelling real-world systems, whilst the latter relies on modelling as a pragmatic device to support problem-solving oriented conversations between different stakeholders (and different conceptions of what the problem is about). Morecroft tries to find a middle ground between these two approaches (it is no accident that he asked Peter Checkland, the father of Soft Systems Methodology, to provide the foreword to this book). Just as a soft systems approach, the development of formal simulation models can be organised as a social learning process to discover the feedback structure that lies behind the observed dynamics. Models then function as transitional objects, aiding understanding and improvement of our mental models of the world rather than bluntly replicating reality. To a certain extent, this intellectual move certainly helps to bridge the gap between a hard and soft systems approach. However, important conceptual differences remain. A system dynamics model represents a consensus view of the problem (Morecroft gives no reason to assume that this is not the case) whilst in a soft systems approach (at least as advocated by Checkland) there is a multiplicity of world views that is kept in suspension: one modestly works towards a pragmatic, temporary accomodation to enable action for improvement of the problematic situation.

There is no doubt that this book is a very valuable addition to the (still surprisingly limited) literature on a subject of great practical importance, particularly in times of significant macro-dynamic instability such as ours.

**Making Work Systems Better  
A Practitioner's Reflections  
Luc Hoebeke  
Wiley, 1994**

Wanting to testify how important Hoebeke's 'Making Work Systems Better' has been for my practice as a process consultant, I felt compelled to write this review. The book is both in style and content unlike any other management book I know. The terseness of the discussion - stretching to a mere 180 pages - and its obvious conceptual rigour make it at first difficult to approach. It took me a while to tunnel through to its deeper messages, but now I feel confident with the material and I find it informs many aspects of my practice as a professional in the field of strategy and organisational development.

The breakthrough in my appreciation of Hoebeke's work came when I realised how masterly it bridges the gap between the 'lived texture of organisational life' (thus Peter Checkland in his Foreword) and the elegance and power of systems science concepts. 'Never confuse a definition with the mysterious reality beneath it', is a key message very early on in the book and yet for a long time I failed to grasp its importance. I can see now why that is: as a professional it takes time to mature up to a point where one enters open and relaxed into a client organisation, without being stifled by fears of personal failure or feeling compelled to 'make a point'. Paradoxically, this groundtone of empathy with the messiness inherent in a concrete organisational reality creates a much more effective starting point for the mobilisation of disciplined conceptual thinking. It is only when this insight started to sink in that this book moved into the center of my practice.

If I want to do justice to Luc Hoebeke's fundamentally anti-bureaucratic stance, I need to be careful here with the concept of 'organisation'. As a matter of fact, in an attempt to avoid its pernicious connotations with power and ownership, the author disposes of the term right from the start. Instead he prefers the concept of 'work system' which denotes a purposeful but more or less loosely coupled and self-regulated group of people. Organisational boundaries as a rule do not coincide with those of related work systems. By looking at the reality around us as composed of myriad interacting and overlapping work systems, we see sets of meaningful and concrete 'activities' and set of 'relations' between the people performing these activities. Hence, the bulk of Hoebeke's book is devoted to a conceptual framework that allows us to identify relevant work systems, the sets of activities that constitute these volatile systems and the contributions that are made by those people engaged in the system. Again, the formal character of the language should not obscure the fact that it refers to the concrete, living reality of people burning carbohydrates in manifold ways, all in the process of jointly pursuing a shared purpose. As such, the framework and the language that goes with it constitutes a fundamental alternative to the ideological organisational templates that are populating textbooks on organisational development.

Work systems are firmly anchored in the world surrounding them by the purpose they have identified for themselves. Building on Peter Checkland's notion of 'system definition', Hoebeke characterises this purpose as an elementary transformation of a specified input into a particular output. Once there is a shared understanding of this purpose then there is a basis for studying in depth the processes or activity models

that support this transformation (and thereby constitute the essence of the work system). It is here that the specifically systemic nature of Hoebeke's framework comes into play: processes can be differentiated in a recursive hierarchy of domains, stretching from the operationally oriented 'added value' domain to the spiritual domain, with the 'innovation' and 'value systems' domain in between. The recursive nature of the hierarchy comes down to the fact that the output of work systems operating at a higher recursion level are creating viability conditions for the underlying domain. Each of these recursion levels is associated with different types of activities which unfold over increasingly wide timescales as we move up the systemic hierarchy.

The bulk of the book is taken up by a detailed treatment of each domain in terms of its basic characteristics, generic transformation process, strategic dilemma and information needs. Hoebeke lightens the otherwise quite uncompromising rigour of his discussion by weaving in many examples of his own professional practice, often in quite adventurous settings. They warrant detailed study as many of them are exhilarating examples of out-of-the-box thinking. The move from the added value domain, dictated by a purely economic logic to the spiritual domain, where the struggle with one's own mortality is fought, is a captivating journey. Hoebeke approaches the latter with trepidation and his treatment of these highly personal and at the same time universally human issues is of utmost brevity. Yet the depth of insight is truly humbling. Together with a few chapters from Roger Harrison's 'Consultant's Journey' these are amongst my most cherished pages in the whole of 'management' literature.

In Chapter 8 Hoebeke starts to play around with the framework as a whole, showing how elegantly and effectively it leads us to the disclosure of all kinds of socially constructed paradoxes, tensions and controversies that continue to wreak havoc. At each of the recursion levels, Hoebeke broaches fundamental issues - such as the nature of competition in the added-value domain and of democracy in the value-systems domain - all in his characteristic, quietly iconoclastic way. It is an excellent demonstration of the framework's power as a diagnostic tool when in capable hands.

A fifteen-page synopsis, neatly summarising the key points for each of the domains, brings the book to a close.

'Making work systems better' is a wayward book. Sometimes I find the basic ideas simple, only to bump in unexpected layers of complexity the next day. Its layout is scientifically rigorous, yet at the same time the book holds on to a strangely labyrinthine quality. It gives few answers but prompts many good questions.

It is a pity that this book never had a great audience. Wiley published it as a hardback in 1994. Since it has sold about 1.500 copies. Now it has been withdrawn from the catalogue. A cheap paperback reissue, more moderately priced than the original publication, would be most welcome. I know from personal correspondence with the author that he has been considering a reissue, taking the opportunity to expand the book with a rich collection of essays written in the last five years. I advised him strongly against doing so. The book as it stands now has all it needs to become a classic in the long run. Not only in its uncompromising terseness and severe logic I would compare it to Wittgenstein's *Tractatus Logico-Philosophicus*. Similar to the latter its angular facade conceals a humane and wise attempt to help us to come to terms with the world and our place in it.

**The Certainty of Uncertainty  
Dialogues Introducing Constructivism  
Imprint Academic, 2004**

Bernhard Poerksen

This is an excellent, very readable collection of conversations with leading "constructivist" thinkers. A plus of this book is that it goes beyond the usual suspects such as Varela, Maturana and Von Foerster and introduces less familiar scholars and practitioners - such as Siegfried Schmidt and Helm Stierlin - to English-reading audiences.

The intellectual horizon covered by this book is actually wider than constructivism, adding an interesting blend of systems thinking (with a waft of complexity science), philosophical pragmatism and phenomenology to the mix.

The philosophical thrust of most of these conversations is epistemological and ethical (i.e. the focus is on answering the questions "what is true?" and "what is good?"). However, the constructivist-pragmatist ethos that is represented in various hues by these thinkers shies away from any ontology, any reliance on an objective, external reality. The resulting worldview is very dynamic, acknowledging a mutual dependence between world and observer. Self and world are then conceptualised as emergent properties, recursively created through incessant interactions embedded in language. There is no Truth, but only many truths that perish and make way for other truths along this co-evolutionary path.

The acknowledgment of mutual dependence leads naturally to an ethos of communality and unescapable responsibility for each and every of one's actions. This modesty is very characteristic for (almost all of) the thinkers represented in this book. For example, Varela tells us that an intellectual stance defined by pragmatism ("truth is what works") and a mitigated constructivism ("the world is a (contingent) set of stable patterns emerging from interactions between subjects and objects") spontaneously leads to "a panorama of coexistence, a dialogical space". Maturana talks about "a space of common reflection, a sphere of co-operation."

Poerksen - a still young German academic researcher - conducts the interviews with great gusto and expertise. It seems he is not at all intimidated by the reputations and intellectual stature of his interlocutors. Poerksen prods, tickles, plays the devil's advocate and on occasion squarely and stridently disagrees with his counterparts. But his positions are always well researched and articulated. All this makes for engaging reading and leads the conversation into many fascinating themes.

This book is definitely recommended to anyone seeking an entertaining but serious introduction the fascinating, honest and humane intellectual space that emerges from the interaction between constructivism, pragmatism and systems science.

**Reframing Business**  
**When the Map changes the Landscape**  
**Richard Normann**  
**Wiley, 2001**

A visit to the business book department usually is not a very uplifting experience. The unabashed shallowness of content and representation reveals the often questionable intellectual standards of those professionally engaged in the creation of economic value. A thoughtful book such as 'Reframing Business' is welcome oxygen for someone who finds this lack of discipline deeply troubling. For those in need of convenient shortcuts in dealing with strategic issues, Normann's book carries mixed messages. The good news is that shortcuts are indeed possible. The bad news is that this requires serious conceptual thinking and reformulation of the issues at a higher level of abstraction. The key word, therefore, is 'elegance' rather than 'simplification'.

'Reframing Business' talks about 'maps' and 'landscapes'. The landscape denotes the dominating logic of value creation that forms the backbone for a given configuration of business systems. Maps are a metaphor then for the symbolising processes of the mind, the conceptual frameworks we use to make sense of what happens in the business environment. Between these two lines of thought Normann posits a dialectical relationship: our strategic paradigms are shaped by the existing business context, which in turn is influenced by the mental frameworks we espouse to approach it. The co-evolution between business reconfiguration and mental reframing is the central theme of the book. Normann's approach is obviously indebted to systems theorists such as Maturana and Varela who introduced the idea of a fundamental interdependency between mind and world almost 30 years ago. This is not new and neither are the implications that Normann elaborates from these basic principles: the experience of the outside world as a dynamic continuum of opportunities and the need for an organisational infrastructure that supports recurrent purposeful emergence (autopoiesis) in order to thrive in it. This is the hard part of course for those seeking quick fixes in this book. As the author rightly points out, the ability to look at the world as a continuum of opportunities constitutes a fundamental choice. Normann believes that to a certain extent, this way of being in the world can be consciously learned and a large part of the book is in fact a very cerebral introduction to the sister disciplines of 'mapping' and 'landscaping'. The latter centers on the ability to recognise and shape the business offering as a tool for organising co-production between various players in the environment. 'Mapping' requires conscious 'upframing' of the strategic issues to higher levels of abstraction, which Normann undergirds with a rather generic thinking process.

For those with sufficient conceptual agility, Normann's landscaping and mapping toolbox indeed constitutes a rich collection of 'shortcuts' for thinking through strategic issues. They will have no problems of buying into the argument, even if it is occasionally more suggestive than substantial. In fact, for these readers the book will fit snugly into their mental breast-pocket, ready to yield any of the numerous goodies hidden between its covers. However, those readers who have no feeling for the founding principles of this theory, will have a hard time in finding their way in what will seem a sprawling and arcane conceptual edifice.

It is clear by now, I hope, that I worked through this book with considerable enthusiasm. However, to my mind it doesn't qualify for a five star rating, for two reasons. An important reservation concerns the kaleidoscopic variety of sources that

is mobilised in order to substantiate the main argument. Normann dips into systems theory, cognition theory, social constructionism, complexity theory and much besides. Swiftly and imperceptibly, he crosses disciplinary borders and switches from metaphorical use of concepts into rigorous explanatory mode. I am convinced this methodological eclecticism obscures the argument. A focused and economical effort at integrating systems and management science would have yielded a more elegant and timeless contribution.

Secondly, as indicated this work takes a conceptual angle in trying to come to grips with the issue of securing organisational viability in a complex environment. This is only part of the story and Normann knows it. In the final chapters on leadership, which I find amongst the weakest of the whole book, he discusses these issues only briefly. Groundedness, authenticity and humility are key aspects of the more spiritual side of leadership and they imperatively need to complement the more cerebral view of leaders as people with a strong capacity 'to perform the mental process of imagining and synthesising in the domain of the upframed conceptual future'. Margaret Wheatley has written eloquently on the 'softer' side of leadership in her books 'A Simpler Way' and 'Leadership and the New Science' but then, as a woman, she can probably afford to strike a more 'emotional' tone in the macho world of management and management science. The problem with Wheatley's book is also that they lack the conceptual incisiveness of Normann's approach. For a combination of intellectual rigour and humane wisdom we need to move out of management science altogether, with the exception, perhaps of Luc Hoebeke's 'Making Work Systems Better' (also published by Wiley) which in its systemic, sober, low-key approach to the discipline of human value creation does not fail to make a deep impression.

Despite these reservations, I have no doubt that Richard Normann's book is a very valuable addition to the management science canon. It deserves to be recommended to thoughtful practitioners and managers.