

# Reviews

---

R.L. Flood and M.C. Jackson, *Creative Problem Solving: Total Systems Intervention*. Wiley, Chichester, 1991, ISBN 0-471-93052-0.

This book proposes and develops an approach to intervention in organisations which is called Total Systems Intervention (TSI). The approach is based on 'systems thinking', the nature of which is described in Chapter 1. Chapter 2 then introduces a type of contingency approach whereby particular systems techniques are linked with specific types of problem situations. Chapter 3 describes the logic and process of TSI, involving three phases of creativity, choice and implementation. The first phase results in the selection of a 'dominant' metaphor of organisation with which to investigate the situation; the second phase then chooses an appropriate systems-based intervention methodology; the third phase uses the methodology to generate specific proposals for change. Chapters 4 to 9 each contain a description of a particular intervention methodology, which can be used within the overall umbrella of TSI. In each chapter, the philosophy and principles of the methodology are described, a case study of its use is given, and a critique is presented. The book ends with Chapter 10 which gives an example of TSI in action, and provides a critique of TSI itself together with some conclusions on its value.

The scope of the book is considerable and many important and complex issues are addressed. However, some of the material is highly contentious, and the TSI approach can be challenged with respect to its theoretical basis, methodological approach, and practical utility. It is not possible in this short review to deal adequately with all the issues raised by the book, but I will concentrate on some broad comments and criticisms.

Turning first to the framework in Chapter 2, the categorisation of relationships between partici-

pants assigns them as unitary, pluralist or coercive, but this is of doubtful theoretical validity. If one views power as endemic to all relationships, then all contexts are coercive to some extent, and our interest should be in a more detailed investigation of the nature and evolution of these relationships. The second dimension of the framework is to describe systems as simple or complex. Apart from the crudeness of this classification, it is confusing to use the word system here, even though it is put in quotation marks, since the view taken elsewhere in the book is that a system should be considered as a way of viewing the world, rather than as a subset of the world itself. The two-dimensional framework is qualified by the authors as representing only 'ideal types', but the types should be reasonably convincing, and I did not find them to be so.

A second comment I have concerns the philosophy underpinning TSI described initially in Chapter 3; this is stated to be provided by critical systems thinking, following Habermas and others, and its objective is emancipatory. However, this flavour does not come across at all in the case material presented in the later chapters. For example, a case is presented of an African safari company, using the methodology of viable system diagnosis as the appropriate approach within the TSI framework. We are told that this approach is only appropriate for a 'democratic milieu' and yet this will certainly not be the case in the type of context cited, where widely skewed access to resources, and massive inequity in the society at large, create manifestly undemocratic conditions. The language of the case also reflects a managerialistic stance; for example, one person is described as an 'obsolete member of staff'.

A related point to that above is that Flood and Jackson's criticisms of other methodologies, such as that of Checkland's soft systems methodology (SSM) in Chapter 8, rest on the argument that such methodologies reinforce existing power and authority. Apart from the point that their own cases appear to do the same, they ignore through-

out the book the knowledgeableability of the human agent applying a particular methodology. They categorise all interpretivists as complete relativists, who think that 'every viewpoint must be accepted as equally valid'. This is clearly a 'straw man' argument, since human agents applying SSM do not do so in a mechanistic way, but bring their own subjective beliefs and values into the analysis. Of course, different methodologies do help to influence analysis in particular directions, so there is some force in the Flood/Jackson critique, but they do not help their case by setting up simplistic views of the applications of methodologies such as SSM.

The final chapter of the book gives a case study of the application of TSI with SSM as the dominant methodology. It is interesting to note that the authors' own intervention has a rather pragmatic flavour to it, and the emancipatory dimension is not particularly visible. In addition, it is a pity that we are told nothing about the implementation or otherwise of the recommendations of the study. The authors say in this final chapter that they have been able to 're-establish "systems" as a unified discipline of thought which can readily be grasped by managers and decision makers'. I cannot agree with either part of this statement, since I find TSI an unconvincing unified framework, and the complexity of the approach is not likely to be grasped easily by managers, or anyone else for that matter.

On the positive side, the book describes six alternative systems-based methodologies for organisational intervention, and in each case provides an application, a critique and a student example for further work. The discussion of the philosophy and principles of each method is a useful contribution to the literature, although the relatively inexperienced reader should perhaps have been warned that some of the views expressed are highly controversial. Despite the criticisms given above, the book is worth reading for the interesting issues it raises. However, as a student text, it would require a lot of additional time to be spent with the students to enable them to read and discuss some of the original source material on the methodologies and approaches outlined in the book. One final comment is that the authors' emphasis on emancipatory methods is valuable in my view, but future work could perhaps concentrate on this focus rather than

in trying to produce an all-embracing methodology such as TSI.

Geoff WALSHAM  
*Judge Institute of Management Studies*  
*University of Cambridge*  
*Cambridge*  
*England*

---

John P. Van Gigch. *System Design Modeling and Metamodeling*. Plenum Press, New York, 1991, 453 pp., US\$ 79.50.

In this reviewer's opinion, John Van Gigch's 'System Design Modeling and Metamodeling' comprises two important books, each standing on its own merits.

The first (Parts I and II) is a summing-up; a crisp but thorough overview of general system concepts, viewed as bridges between complex reality and its simplified representation through model-building. In the second (Parts III and IV), the author steps up to a higher level of abstraction, 'metamodeling' where the model-building process itself is examined and modeled, leading to a general methodology for complex system analysis and design. (The path from reality to model to metamodeling is comparable, for example, to that from territory to map to cartography.)

In the following a summary of the four parts, mostly in the author's words:

Part I, *The Nature of Reality* shows how knowledge uncovered by science is in a constant state of flux and illustrates how, in the course of time, the worldviews and the paradigms of scientific disciplines are brought into question and modified. The reader is introduced to systems thinking; the *systems approach* is offered as an alternative methodology which can begin to solve some of the problems of complexity.

Part II, *Modeling* explains system design as a sequence of decision-making processes in which modeling plays a crucial role. Several model types are described; in particular, decision models, optimization models, tutoring models, epistemological models, simulation models, expert system, diagnostic models and, finally,

metaphors and myths. Part II also contains a discussion of complexity, control and regulation in systems. Part I and II include material which appeared in Van Gigch's 'Applied Systems Theory', 2nd.ed. (Harper and Row, 1978)

Part III, *Metamodeling* is devoted to a presentation of abstraction and metamodeling, illustrated by a flow diagram of the metasystem design process or metasystem paradigm. It emphasizes the distinction between modeling and metamodeling, taking place at different levels of abstraction. It discusses failures and malfunctions in the context of systems and of metasystems.

Part IV, *Metamodeling and Organizational Decision Making* elaborates the metasystem paradigm as a methodology by which the problems of hierarchical organizations can be probed. The concepts of controllers and metacontrollers is introduced to show how control (or the lack of it) can take place at various levels of decision making. Several instances of applied metamodeling, developed by Van Gigch's students at California State University, cover subjects as diverse as: barriers to the employment of the disabled; environmental pollution in Japan; the U.S. tax system; reproductive-health-care system; the U.S. nuclear industry. Finally, the issue of morality in system design is examined.

Even this wide-ranging list of topics does not fully reflect the work's considerable reach. For example in Part II, the chapter on 'model types' also addresses in depth an essential aspect often neglected in systems analysis: the human skills and levels of expertise required to design and operate complex systems.

The application examples illustrate problem identification and solution in existing systems rather than the building of new ones, showing that the term *design* in the book's title is used in its widest meaning, as defined by H.A. Simon [1]: 'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones'.

Ever since its formulation by Ludwig von Bertalanffy in the mid 1940s, General Systems Theory

(GST) has fueled hopes for improved interdisciplinary communication and cooperation, and for a better understanding – and control – of complexity, natural and man-made. How far have these hopes been realized? Assessments range from 'cure for chaos' [2] to 'not a bad idea' [3].

There is no doubt that effective tools for dealing with complexity are badly needed. Many indicators now point towards a growing 'crisis of control' (as described by James Beniger [4]), where the combined information processing capacity of humans and computers falls short of the Requisite Variety [5] necessary to master the overwhelming complexity of man-made systems. This imbalance may cause ineffectiveness, malfunctions and, with growing frequency, catastrophic breakdowns.

The latter refer not just to the likes of Chernobyl, Bhopal, or Challenger – systems developed by traditional engineering methods. Disasters occur even in those designed and operated using the best and most experienced available systems thinking: witness several recent major outages in the communication services of AT&T. The September '91 failure of a Manhattan switching center (due to a mishandled power problem) crippled the area's air traffic control facilities and cascaded into an international air travel mess. If applied to this case, Van Gigch's metamodeling principles would reveal the design weaknesses of a traffic control system that takes communication support for granted, and a communications system insufficiently shielded from power failures.

Less dramatic, but critical for the economy, is the whole question of effectiveness and efficiency in the management and operation of large business and other complex organizations. Several studies indicate that, despite massive investments in information technology, the U.S. productivity growth in the information-intensive services sector has been dismal during the last decade. The problem is not with technology; computers and communications are constantly improving and their costs are dropping. The secret lies in properly (and affordably) integrating advanced technology and human skills with the organization's goals, a task requiring systemic thinking across many disciplines: management, administration, economics, computer science, education, engineering, psychology, so-

ciology, to name a few. Van Gigch addresses this important issue in his discussion, in Part III of an ideal OIS (Organization Information System).

On all accounts the systems approach, enriched by the metamodeling techniques put forward by Van Gigch, promises significant enhancements of the design process and our command of complexity . . . provided it finds enough practitioners. Unfortunately GST, rather than becoming the interdisciplinary lingua franca it set out to be, largely remains an academic specialty. A few U.S. universities offer GST curricula, but career opportunities outside of academia are unclear. Also, a wider diffusion of this book is hindered by its high price, obviously the result of the publisher's low sales forecast, which thus turns into a self-fulfilling prophecy.

How can system thinking break into the mainstream and build up the wide 'user base' it undoubtedly deserves? In my view, GST should be adopted and practiced, as a 'second language', in all appropriate branches of higher education – engineering, business, computer sciences, etc. Van Gigch's book is an apt vehicle for supporting this endeavor.

Sigfrido LICHTENTHAL  
Columbia University – Continuing Education  
Dept.  
New York, NY  
USA

## References

- [1] Herbert A. Simon: *The Sciences of the Artificial*, 2nd Edition (MIT Press, Cambridge, MA 1981), p. 129.
- [2] Simon Ramo: *Cure for Chaos* (David McKay, New York, NY, 1969).
- [3] C. West Churchman: *The Systems Approach* (Dell, New York, NY, 1968), p. 232.
- [4] James A. Beniger: *The Control Revolution* (Harvard Univ. Press, 1986).
- [5] W. Ross Ashby: *An Introduction to Cybernetics* (Chapman & Hall, London, 1956).

Gábor RÉVÉSZ, *Perestroika in Eastern Europe: Hungary's economic transformation, 1945–1988* (Westview: Boulder, 1990, pp. 182, with index, references and additional bibliography.)

'When you ask a Hungarian a simple question,' a friend of ours has observed, 'you get a history lesson.' To understand Hungary's economy an economic history is needed. This is fortunate for Révész because any book on the 'current situation' in Eastern Europe becomes a history before it reaches the bookstore shelves. His book provides a neat, compact, and accessible history of Hungary's economy and its several attempts at reform. As such, it challenges some of the myths which far too many westerners have believed about life behind the iron curtain.

For most Hungarians, daily life was not a great deal different from the lives of people in other poor European countries, except that Hungarians had to have several jobs to survive. Hungarians (unlike East Germans) have been generally free to travel in the past two decades. You could say more or less anything as long as you didn't try to publish it or do something about it. The population was largely depoliticized, so that most people, withdrawing to their family concerns, did not have confrontations with the authorities. The book provides a nice introductory chapter designed to give the reader an impression of how typical Hungarians lived. It is fairly sensitive to the differences between the city and countryside and to the differences that exist between rich and poor. But by listing prices and salaries at the time of writing (late 1988), the author inadvertently shows us how much things have changed in the past three years. As we shall see, there is more which is inadvertently revealed.

As a single coherent history, the book fills a vital role in any seminar trying to understand attempts at reform within socialist economies. Gorbachev's *perestroika* was less radical than the Hungarian reforms of 1968. China is still committed to bringing market efficiencies to a socialist economy. The partial successes of the 1968 reform (transforming Hungary into the 'happiest barrack') and its ultimate failure, make it a piece of history well worth studying. The book's greatest strength lies in its description of the thinking behind the 1968 re-

forms. Révész was an insider at that time and it is here that the book has the most new to say. But even here it is conventional in its overall analysis. The book follows the line of the reform wing of ruling party at the time, although the author was well aware of one competing and extremely well researched and argued economic history of the same period (unfortunately not available in English). This deficiency can be overcome by supplementing the book with essays from János Kornai's *Vision and Reality, Market and State: Contradictions and dilemmas revisited* (Harvester-Wheatsheaf and Routledge, New York, 1990) along with chapters from his ground-breaking work on socialist economies, *The Economics of Shortage* (North-Holland, Amsterdam, 1980). Such a combination would provide outstanding insight into the Hungarian economy and difficulties with reforming socialist economies.

The book's value is not limited to the classroom. It is quite accessible to a western laymen with an interest in Eastern Europe. And as westerners doing business in Hungary find themselves subjected to more and more history lessons, they will crave a book in which it is all written down. This book provides that economic history up to 1988.

The book is also a contribution to a larger debate. At the present time it is impossible to find a Hungarian calling for 'market socialism' or for any other form of socialism. Many westerners are disappointed by this fact, and some are even surprised. Révész's book, by providing a history of attempts at reform, makes it clear why Hungarians do not wish to tamper with socialism but to abandon it. Exactly those moves required to implement substantial reform from the center weaken the center to the point where it is not able to overcome the resistance of the apparatus. Révész in his summary chapter recognizes this point, but he makes the call for market socialism anyway. This may be a consequence of the politics of the day. In late 1988, one could still not publish calls for the abandonment of socialism in Hungary; and market socialism may have been a code word for a market economy. But several things lead us to take Révész at his word: Although his book makes it clear why Hungarians are frustrated with attempts at reforms within socialism, this was not the intent of the book. Second,

he fails to look at the possibility that the individual cases of reform failures which he chronicles are related to a more fundamental problem of socialist economies, namely the 'soft budget constraint' of Kornai. Thirdly, as pointed out above, he largely reiterates the economic history supported by the Party reformers despite the fact that a more critical and better researched history had been published in Hungary. Finally, Hungarians were more or less free to publish in English what would not have been acceptable in Hungarian.

We do not believe that market socialism is a workable solution (unless what is meant by that is capitalism with a human face), but we fear that the question is not properly debated in Hungary today. If there were no socialists in Hungary, there would be no need to debate; but judged by their actions, we believe that there are many politicians who do support a strong role for the state in the ownership or control of a substantial portion of industry. Judged by their rhetoric, everyone is a laissez-faire advocate. This wide-spread self-delusion makes it nearly impossible for the debate to continue productively in Hungary. Instead it will have to continue in the West, and Révész's book is a good place to start.

Livia MARKÓCZY  
*Judge Institute of Management*  
*University of Cambridge*  
*Cambridge, UK*

---

Russell Keat and Nicholas Abercrombie (eds.), *Enterprise Culture*. Routledge, London, 1991, 239 pp.

To anyone living in Britain when Margaret Thatcher was prime minister, the title of this book will be immediately meaningful. But what of anyone reading it in say 30–50 years time? This suggests that a book of this nature has at least two reasons for being written: as a contemporary attempt to understand or convey the meaning(s) of a current phenomenon, or the mores and practices of our time; and also as a historical document so that future readers may draw some understanding of the context of those mores and practices.

This book is a collection of papers born of a ser-

ies of seminars, organised by the Centre for the Study of Cultural Values, University of Lancaster, on a general theme of 'the values of the enterprise culture'. Following an excellent introduction by Russell Keat (though what will the reader of 2050 make of the subtitle: *Starship Britain or Universal Enterprise?*), the book is divided into three sections labelled 'Political Representations of Enterprise', 'Enterprise Culture in Different Contexts' and 'Market Values and Consumer Sovereignty' and twelve papers have been 'shoehorned' into them. Fortunately, some have very elastic sides, considering the constraints of such titles and the wide brief that the contributors were given: 'to be speculative where they saw fit; to write from within their particular disciplines'. Briefly, the papers explore various meanings given to and by the concept of 'enterprise culture'; despite the disparity of the fields covered, all papers show very clearly the intricate and inevitable linkages between what have often been treated as differentiated realms: the political and the social. Several papers focus on the rhetoric of government policy in attempting to create a 'new Britain' – that of the 'enterprise culture' – and 'new Britons' – the enterprising. For many of the contributors, this has meant discussing the concomitants of Thatcherite policy – establishing the primacy of 'market forces' and the 'free market', the creation of the sovereign consumer and the 'niche market', the widespread 'privatisation' of public enterprises and the overthrowing of the so-called culture of dependency which was the sickness of the welfare state.

Whilst there is a paper by Paul Bagguley on the 'fordist/post-fordist' debate, in which he introduces the concepts of flexible working and industrial relations, there is not a systematic account of the enterprise culture and industrial relations. Part of the rhetoric widely discussed in the book is that centred around 'market forces'. This immediately posits a tension when one considers the unprecedented volume of interventionist legislation in labour relations, which flies in the face of a voluntarist system. This is just one example of the ways noted in the book in which state empowerment is increased, running counter to the public face and rhetoric of Thatcher policy.

What these papers make clear with their focus on

rhetoric, communicative technologies, technologies of representation and the inextricable interrelation of people and people-moulding institutions is that there is a wider agenda for students of organisation than that put forward in mainstream organisational literature, namely the way that the state and its various institutions become producers of organisation, organising people through a variety of disciplinary and normalising technologies. Getting to grips with this approach involves tackling the hitherto unquestioned differentiation inherent in for example Blau's notions about social structures. Russell Keat and, to a certain extent, Raman Selden lay the ground for students of organisation, who specifically are interested in working systematically on making connections on such a project, for a wider understanding of how the social order is or may be created: how social organisation is produced. There is little here for 'designers of organisations on a contingency model'.

The saddest aspects of this otherwise stimulating collection are the index, which, as is the trend it seems, is merely a sop to the possible role of index, and the lack of any reference to gender or sexuality. Like Thatcher's cabinet, there is not a woman to be seen, listened to or read. Shame on you. Mind you since the cover photograph is also of men (in an office and perhaps portraying workers whose role is now stereotypically allocated to women) maybe that is intended as an ironic statement on gender issues.

Stuart MORGON  
*Judge Institute of Management Studies*  
*University of Cambridge*  
Cambridge  
UK

---

*John D. Bigelow (ed), Managerial Skills: Explorations in Practical Knowledge.* Sage Publications, Newsbury Park, 1991, xiii + 269 pp., £14.75.

How do we go about 'building' better managers? This book represents an interesting collection of contributions relating to the development of teaching and assessment of managerial skills. It collects together a variety of different approaches current

in the United States and provides a variety of valuable information and insights for those involved in management education and management development. The nature and tone of most of the contributions means that the book is primarily aimed at Business School academics and those involved in similar activities. Inevitably, with a collection of 16 articles written by a total of 30 authors, there is some considerable variability in style and approach. However, in general, the collection is relatively cohesive and provides an exceedingly valuable contribution to a debate of major significance in the United Kingdom and elsewhere at the present time.

Perhaps one of the most interesting points made in the book is actually a footnote to the introduction written by the editor (Professor John. D. Bigelow) which states 'the terms: practical knowledge; non-cognitive skills; competences; action skills and the like are considered synonymous'. That note which seems to fit with the approach adopted by the various authors in itself is a significant contribution to the discussion of competences in the United Kingdom. In Britain, it would seem that the current debate is very much about whether management education should aim *to develop competences as its final product*, whereas this book rather indicates that in the United States the debate is about the extent to which managerial skills training should be *part of* management education at all levels.

The assumptions of most if not all of the authors contributing to the book would seem to be that *skills-training* should be an element of management education and the book is basically about how large an element it should be and how this should be carried out and importantly how such skills can be assessed in a conventional Business School system.

It should be noted that in most of the book, management is *implicitly* defined in a somewhat more limited way than would be common in the

United Kingdom and relates very much to the people side of management. However, with this limitation, the book provides a series of valuable contributions to the competences debate in the United Kingdom.

It is difficult to give a fair picture of the content of such a wide-ranging book but one can in summary say that it starts with a consideration of some of the philosophical issues involved and then moves on to a substantial Part II, looking at a variety of different approaches to learning managerial skills. The third part of the book is devoted to assessing managerial skills and the fourth and final part attempts to portray a variety of insights into the notion of managerial skills. Personally, I found the third part of the book the most interesting as the problem of assessing managerial skills is one which has occasioned considerable interest common in the United Kingdom. Some of the ideas put forward would seem to be relatively simple and capable of implementation in many business schools whereas others seem potentially expensive and conceivably somewhat subjective.

Overall, the book represents a useful collection of readings which should be of interest to those struggling with the ways of bringing the teaching and assessment of managerial skills more fully into the Business School curriculum. Perhaps, most important of all, the implicit message of the book, that there is a need for a balance between teaching skills and more conventional approaches inculcating knowledge and conceptual understanding, deserves careful consideration.

Roger MANSFIELD  
*Cardiff Business School*  
*Cardiff, CF1 3EU*  
*Wales*

---