Book Selection

Diversity Management: Triple Loop Learning

RA Flood and NRA Romm

John Wiley and Sons, Chichester, 1996. xiv + 253 pp. 24.95. ISBN 0 471 964494 2

Flood and Romm's book presents a new metatheory called diversity management and a new style of practice called triple loop learning. Diversity management in the sense used by Flood and Romm is: 'about managing the increasing diversity of issues that confront humankind in contemporary organisational and societal affairs. Initially this meant people managing the increasing diversity of issues they confronted by increasing the diversity of types of model, methodology and theory available to do the job. Diversification, however, created a brand new issue to be managed—how to choose between the models, methodologies and theories. Consequently the emphasis in diversity management switched to people managing the increasing diversity of models, methodologies and theories' (page xi, again with minor variations on 9 and page 53).

The book promises (back cover) to 'provide a strong intellectual contribution' to the issue of managing diversity, it states that it is 'thoroughly illustrated with case studies' (back cover again), so far so good. It further promises that: 'the focus on triple loop learning increases the fullness of learning about the diversity of issues and dilemmas faced. It brings together three main learning centres in one overall awareness so that the process is more reflexive and those involved can operate more intelligently and responsibly' and that it: 'shows theoreticians and interventionists how they can operate with a consciousness that is more than the sum of its parts' (the back cover again). Eager but slightly confused, I opened the book, anticipating my further growth and illumination. This review follows my journey through the book and then reflects on its aims and audiences.

Let us start with an overview of the structure. The book begins with a short preface which explains the overall structure, defines diversity management and triple loop learning, and suggests different routes through the book for theoreticians and interventionists: the remainder is in four parts. Part 1, entitled Conclusion, is a single chapter containing an expanded version of the Preface. This addresses the background to the authors research program (sic) in terms of a brief Euro-centric history of human thought, introduces the concepts of diversity management (see above) and triple loop learning (see below), and introduces the authors' definition of four different types of stance found in social theory (pragmatism, isolationism, imperialism and complementarism). The first three of these stances (as defined by the authors) are found wanting, and diversity management emerges as Flood and Romm's particular form of complementarism. Part 2 is then on diversity management, with chapters on 'metatheory, philosophy and the history of knowledge', 'metatheory, theory and methodology', 'metatheory and systems thinking' and finally 'contours of diversity management'. Part 3 is on triple loop learning, with a chapter on 'typology of power', a chapter each on the first two loops of triple loop learning, two chapters on the third loop, and a final chapter on the 'contours of triple loop learning'. The final part, Part 4, is entitled 'Beginning' and contains a single short chapter entitled 'closing remarks'. So much for the skeleton, now what about the flesh.

Part 2 is suggested as the first destination for theoreticians. Chapter 2 briefly reviews the Enlightenment, Kuhn, Habermas, Foucault and postmodernism. This (necessarily) selective treatment relies heavily on secondary sources, the epistemological and ontological stances of which are not acknowledged, nor indeed is the authors' stance in these matters clearly presented. I note in passing that the versions of Foucault and postmodernism offered are rather modernist views. Chapter 3 discusses theory and methodology first in the natural sciences (a quick review of Bohr's complementarity theory[1] and similar 'lines of thought' in biology), and then in the social sciences (a quick review of Picou *et al*[2] on rural sociology, then on to review various

commentators on Burrell and Morgan's work on organisational analysis,[3] a fast canter through other writers on organisation, finishing with a discussion of reflexivity drawing on Goulde,[4] Brown[5] and Wexler[6]).

Chapter 4 turns to systems thinking and reviews in turn cybernetics, General Systems Theory, and systematic interpretivism, all argued to be forms of isolationism, then moves on to critical systematic modernism as expressed in Total Systems Intervention (TSI). Here it is asserted that, at the metatheoretical level TSI made significant advances in complementarism, (page 47), which are further extended through a postmodern critique, 'resulting in a new metatheory called diversity management and a new style of practice called triple loop learning' (page 52).

In Chapter 5 the authors 'crystallise out defining tips from our discussion on metatheory', arguing that 'linking these tips draws the contours of diversity management' (page 53). To paraphrase their conclusions, they assert that diversity management represents a metatheory that operates somewhere between critical systemic modernism and postmodernism, that it accepts that all arguments involve (insoluble) dilemmas, that critique and self-critique are important in the process of choice-making to avoid relativism and absolutism, and that choice making is locally contingent.

We now arrive at Part 3, the suggested first destination for interventionists, which presents the new style of practice associated with diversity management, namely triple loop learning. We have already dealt with the authors' definition of diversity management, it is now time to tackle their definition of triple loop learning: 'Triple loop learning is the dénouement of single loop learning and double loop learning. There are three types of single loop learning each with a different centre of learning. There are specific questions asked respectively for each centre. The first centre asks, Are we doing things right? This assumes that choosing things to do is not problematic. A second type of single loop learning accepts that identification of things to do is often problematic and makes this its centre of learning. It asks, Are we doing the right things? A third form of single loop learning centres the issues that rightness is often buttressed by mightiness, and mightiness by rightness, resulting in very little learning at all. The question here is whether mightiness is acting as too much of a support for definitions of rightness or conversely any presumed right way is becoming too forceful (that is, fanatical). It makes this its centre of learning and asks, Is rightness buttressed by mightiness and/or mightiness buttressed by rightness?…Triple loop learning…wants to establish tolerance between all three centres of learning and preserve the diversity therein. It does this by bringing together the three centres of learning from the three loops in one overall awareness, Are we doing things right, and are we doing the right things, and is rightness buttressed by mightiness and/or mightiness buttressed by rightness? Triple loop learning links into a triple loop the three centres

of learning. Triple loop learners loop between these three questions. (page x–xi and then again page 9–10).

Given the above, I had expected that Part 3 on triple loop learning would be about answering the three questions, that is it would focus on the process of addressing them, the process of intervening, which is certainly what the discussion quoted in my opening paragraph implied. and it is also implied by the authors statement in the preface that Part 3 is intended for interventionists. It was in this that I had most problem with the book, since the focus of this part is not always directly on the process of intervention.

So on to the journey through Part 3. First in chapter 6, we are introduced to various typologies of power, (Oliga[7] and Clegg[8]), out of which the authors define three arenas of 'discourse', distinguished by different views of power: structuralism (which highlights power as a collective property of systems), intersubjective decision-making (which highlights interpersonal interaction as the arena in which power is used), and finally might-right management (which highlights power as entrenched in forms of social relationship). These three arenas imply the three different questions that govern triple loop learning and corresponding to each of these a single criterion is identified for the purposes of evaluation through reflection. The structuralist arena is concerned with questions of design and has the criterion of relevance. The arena of intersubjective decision-making is concerned with processes of decision-making and has the criterion of consideredness. The arena of might-right management is concerned with whether interaction is governed by disempowering relationships entrenched in social practices and has the criterion of astuteness.

Chapter 7 considers the first loop, design management, the question here is expressed in the chapter subtitle as 'How', rather confusing to this reader, as most of the discussion did not focus on how to bring about a chosen design, but instead what design might be most appropriate. The sections in chapter 7 present descriptions of six different types of organisation design and two different process designs, each with a case study of a situation in which such a design was utilised together with brief reflections about the design's relevance to the situation; no insight is given as to how those designs were or could be actively created. One of the case studies is drawn from the authors' own experience, one (on postmodern organisation) is fictional, and the rest are based on published articles by others. In terms of organisational design the types considered are bureaucracy (traditional hierarchy), circular organisation (democratic hierarchy), organic organisation, viable system organisation, community organisation and postmodern organisation, while the process designs considered are quality management and business process reengineering.

Chapter 8 on debate management, (rather confusingly subtitled 'What?'), discusses six different processes that can be used to structure or manage debate. Four of these

represent rather broad frameworks (metatheories even?): Revans' action learning,[9] Whyte's participatory action research,[10] Argyris and Schön's action science[11] and Flood and Romm's own particular interpretation of postmodern debate. One is a specific methodology—Checkland's soft systems methodology,[12] and one a specific method—Mason and Mitroff's strategic assumption surfacing and testing.[13] A short description of each process is followed by one or two case studies of it in use and a discussion of the process's 'consideredness' within the situation concerned. Most of the case studies are based on the published work of others, and again the 'postmodern' case is fictional.

Chapter 9, the first of two on might-right management, (with the subtitle 'why?'), switches the focus to considering the transformation of social relations. This includes brief presentations of four different approaches that can be used, each with a case study and a discussion of their 'astuteness'. Two of these (Hölscher and Romm's Dialogical Intervention Strategy,[14] Ulrich's Critical Systems Heuristics[15]) are considered in terms of use for 'vitalising educational practices', while the other two (Reason's Collaborative Inquiry,[16] Fals-Borda and Rahman's Self-Reliant Participatory Action Research[17]) are considered in terms of use for nurturing self-reliance. The chapter then ends with sections on Fuenmayor and Lopez-Garay's interpretive systemology[18] and protest; the discussion here switches to the theoretical.

Chapter 10, the second on might-right management presents the authors' own approach: the oblique use of models and methodologies. This is defined (page 208) as the 'option of redirecting the purpose of a model or methodology in terms of principles and purposes not provided for by its usual theoretical underpinning'. Two examples are provided, on the oblique use of cybernetics and the oblique use of interactive planning, and these present re-interpretations of past case studies.

Finally, in Part 3, Chapter 11 'draws the contours of triple loop learning'. This is mainly a recapitulation of what has come before, without detailed discussion of the processes or issues involved in tasks of looping between the three questions, only assertions that this process of looping brings forth a 'new reflective consciousness', so that 'triple loop learners operate intelligently and responsibly. Their whole consciousness becomes more than the sum of its parts' (page 229). Unfortunately, I do not think there any such guarantees available, and this is the fundamental contradiction that runs through the book. Such assertions fly in the face of the ostensible use of postmodernist ideas and recognition of the locally contingent nature of choice. The assertions betray a longing for some guarantee.

Almost at the end of the journey through the book, the final part, Part 4, is titled 'Beginning' and contains a single short chapter entitled 'closing remarks'. In this we learn something about the authors, and they make a polemical plea against polemicism and for optimism, relevant designs, considered decisions, and astute judgements over might-right issues.

The journey complete, it is now time for reflection.

First of all, the case studies presented are unsatisfactory for a number of reasons. First, they are each located within one loop, and we have learnt that triple loop learning involves looping between the three questions (Are we doing things right? Are we doing the right things? Is rightness buttressed by mightiness or vice versa?). Chapter 11, on the contours of triple loop learning is notably free of case studies. So the book does not directly tackle, through practical illustration, the very area that the authors argue is key to their new style of practice. It would have been more helpful, to this reader at least, to have concentrated on fewer case studies, but to have taken each of them through the three loops of learning in turn and then to have illustrated and discussed in Chapter 11 the process of looping between the three questions. A second problem is the use of many case studies drawn from the literature rather than the authors' own practice. In such literature-based case studies, the depth of reflection achieved is noticeably less and the discussion remains at the level of surface description, rather than insight. This also seems rather contradictory to the authors emphasis on the locally contingent nature of choice-making: would not the reflections of the involved be more pertinent?

I would also like to say a word or two (actually rather more) about the book's style and use of language, which I found jarred with the pleas for tolerance, emancipatory practice and reflective practice that it contains. The book is riven with unfortunate metaphors of conflict and war and an unreflective use of language, born out of an unacknowledged binary modernism. One particular usage is the metaphor of dark-light for bad-good: what stereotypes does this reinforce? The book is also written according to that good old dictum about telling people what you are going to tell them, then saying it, and finally telling them what you have told them. This is indeed a useful pedagogical device, however in an academic text one expects the middle presentation to go beyond brief definition or assertion, unfortunately in the case of some key areas, like the all-important process of 'looping', this is not the case in this book, leaving me to wonder if the book is more an application of the dictum of Carroll's Bellman[19]: 'What I tell you three times is true'.

So overall, who is this book for? As someone who enjoys theoretical debate, it failed to satisfy my desire for depth of theory by presenting only brief, selective, highly debatable and mainly unreflective reviews. As an interventionist, it introduced me to some interesting discussions, although it stayed for far too long in the individual loops and spent far too little time in discussing moving between them. The authors maintain a veil of mystique over the looping that they now place as so important in diversity management. So the book did not entirely live up to the claims on the

back cover, instead it was rather like the curate's egg, good in parts.

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Information Systems Provision: The Contribution of Soft Systems Methodology

FA Stowell (ed)

McGraw Hill, London, 1995. xiv + 208 pp. 22.95. ISBN 0 07 707716 4

Although this review appears belatedly, it is important that the book considered in it is not ignored. The book presents the views of nine experts in the systems field with particular emphasis on soft systems. The book seems quite short and is fun to read but there is no shortage of content nor of ideas to consider further.

There are nine chapters, each written by a different author. Three contributions come from colleagues at the University of Warwick, three from the University of Paisley (as at 1995) and two from the University of Lancaster, so there is a uniformity about the chapters that is often missing from an edited volume.

The book commences with a solid chapter by Checkland tracing the developments of Soft Systems Methodology (SSM) at Lancaster. The chapter in essence takes the reader from Checkland[1] to Checkland and Scholes[2] and beyond. A number of familiar looking diagrams from the authors' earlier work are provided.

Chapters 2–4 provide the Warwick 'school of thought'. Mingers points to the lack of success of 'hard' approaches to information systems (IS) design and cites the failure of the London Ambulance System. Others are discussed (many of which, along with newer ones, are featured in the magazine *Private Eye*). Later in chapter two, Mingers works though eight models of SSM approaches to IS and offers a critique. In Chapter 3 Galliers makes a plea for integrating IS strategy and business strategy. This echoes pleas made by Ormerod in his work for Sainsburys[3] and relates to Chapter 4. In that following chapter Ormerod introduces eight short cases of 2–3 pages each, including material from Sainsburys (which is more extensively considered in an award winning case in *Interfaces*[3] and its enjoyable associated video[4]). Some of the cases use SSM to develop an IS strategy, including work undertaken for British Coal during the 1984–85 miners' strike. Some cases use the strategic choice approach of Friend and Hickling[5] and Wilson's Maltese Cross[6] approach is also considered. This chapter, as with many others, can only scratch the surface, but provides much food for thought.

In chapter 5, Avison and Wood-Harper introduce Multiview, an IS development approach they pioneered ten years ago. The approach combines hard and soft styles, though CATWOE is very much part of it.

Chapters 6–8 provide the Paisley 'school of thought' as it then was. In the first chapter of the group Stowell pleas for empowering the client in the style of the now fashionable 'empowerment' movement. He introduces client-led design (CLD) and the five phases of this approach are described and discussed. In Chapter 7, West describes the appreciative inquiry (AIM) method which is distinguished from SSM in the fact that AIM is not a change agent, but instead an inquiry agent. In the later stages of AIM CATWOE is also used. In the final chapter of this group Gammack describes tensions in the elicitation of knowledge and attempts to model subjective requirements objectively. The IDIOMS (intelligent decision-making in online management systems) approach is described and discussed.

In the final chapter Lewis looks at the challenges for data

analysis and provides an overview of approaches from the past and pointers for the future.

In this review I have tried to indicate what the book contains, rather than to comment on the usefulness of the content. This approach somewhat mirrors the style of the book which presents various methodologies but does not attempt to suggest 'best practice'. This is fortuitous as it avoids falling into the trap of being condemned for being insufficiently far reaching. Other IS schools of thought from other authors are not included but I will not venture into a debate on any shortcomings.

Who should read the book? On the cover, the editor suggests practitioners and students should find the text a useful source of reference. I would agree with this view. The book is approachable but provides a depth by introducing topics in a straightforward way and encouraging the reader to follow up details later. Students might find the book disarmingly easy but should be encouraged to read it and to read between the lines as well.

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Multicriteria Analysis

J Climaco (ed)

Springer, Berlin, 1997. ix + 616 pp. £95.00. ISBN 3 540 62074 5

A good conference is a vibrant, creative event, full of discussion and novel ideas. How can one capture that in a proceedings? Some editors try by recording and publishing the discussion alongside the presented papers. Clímaco has tried a different approach, and, to a certain extent, succeeded. His solution is to ask several of the leaders within the multi-criteria decision making community to write short pieces *after* the conference on their views of the future of their discipline. Some ten percent of the volume is made up of these thoughts on 'Future Trends in Multi-criteria Analysis'. I attended the conference and do feel that these pieces capture some of the 'live issues' that arose at several points in the discussion.

One them which continually reared its head at the conference and which runs through many of the contributions in this section is the place and coherence of multi-criteria decision making (MCDM) as a discipline. Personally I rather doubt that MCDM will evolve into a single discipline: it is inherently *multi*-disciplinary. MCDM brings together inputs from many disciplines and combines them to support decision making. Thus, by definition, it seems to me that it will never have the coherence of a single discipline. But that personal view is not meant to devalue these short discussion pieces in any way.

The other ninety percent of the book is a 'standard' conference proceedings. Some fifty papers are presented in ten sections

I   Theory and Methodology
II   Aggregating Preferences: Outranking and Utility Function Approaches
III   Multiobjective Mathematical Programming
IV   Uncertainty in Multiobjective Programming
V   Multiobjective Integer Programming
VI   Multicriteria Interactive Methods
VII   Group Decision and Negotiation
VIII New Computer Science Developments and Multicriteria Analysis
IX   Behavioral Research and Multicriteria Analysis
X   Multicriteria Approaches in Practice—Applications and Methodological Issues

The quality of the papers varies as in any conference proceedings, but there are some excellent ones.

Overall this is a useful addition to a library. I am doubtful that it would be worth buying it for a personal bookcase. It is collection of papers to browse rather than a text that an OR worker would wish to refer to constantly.

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