Reviews

M. Hammer and J. Champy, *Reengineering the Corporation: A Manifesto for Business Revolution*, HarperBusiness, New York, 1994, US$13, Paperback, 233 pp.
H.J. Johansson, P. McHugh, A.J. Pendlebury and W.A. Wheeler III, *Business Process Reengineering: BreakPoint Strategies for Market Dominance*, John Wiley & Sons, Chichester, UK, 1994, US$17.95, Paperback, 241 pp.

1. Business Process: An Enticing Unit of Analysis and Action

At present, 'reengineering' is undoubtedly best known in business as another name for *downsizing* or *restructuring*. Even Hammer and Champy worry about the misuse and abuse of *reengineering* – a term which not only has permeated the vernacular of the business media but it is also used in marketing goods and services to confused executives. And for those confused about reengineering, its proponents have some special treatment in store. With these two paperback editions, both academics and practitioners will now have an opportunity to reacquaint ourselves with Michael Hammer's non-conjoint notions of business process reengineering (BPR).

On the one hand, Hammer and Champy have embellished their book in order to clarify the thinking that had originally appeared between hard covers and to amplify 'what reengineering isn't' (pp. 47–49). They have even added a new chapter after their epilogue in order to answer the questions that concerned readers ask. In doing so, Hammer and Champy finally admit that in BPR the term process is 'the most important concept to grasp' (p. 219), a point most welcome because

the only absolutely essential element in every reengineering project is that it be directed at a process... that

commandment honored, practically everything else in reengineering comes down to technique (p. 159).

Except for a rough-cut influence diagram, however, which they call 'the business system diamond' (p. 80), some market segmentation scenarios *rhetorically conjured up* – as opposed to *computed* [3] – about hypothetical insurance services (p. 140), and the *Texas Instruments Semiconductor Business Process Map* (p. 119), Hammer and Champy shy away from anything related to method or technique, leaving BPR's substance to Johansson et al., and to other researchers [1,8].

On the other hand, the Johansson et al. team of Coopers & Lybrand (C&L) presents a more systematic, refined work. Its collection of tenets of how businesses are managed now and will be in the future does not claim academic research standards either but does go beyond the typical consulting or 'How To' book that merely recounts aggregate experience and observations. While working with numerous leading-edge firms, the C&L team built on Michael Hammer's BPR ideas in order to incorporate what might be considered *applied OR* (operational research) or *management systems theory* (in a wide sense of this term) rather than just recounting experiences. Yet the C&L team agrees with Hammer and Champy that in BPR there can be no compartmentalization of business functions and disciplines: all management frontiers are violated when BPR 'breaks the china' but violated on principle.

2. Simply BPR

This *breaking-the-china* act that BPR proponents advocate does not simply push for more of what downsizing (or *rightsizing*), restructuring, or information technology accomplish only partially and incrementally when used piecemeal. To reap the benefits of effective BPR, managers should be willing to straddle radically, and in a sufficiently magisterial manner, more than a couple of disci-

plines and organizational functions. In the impressive collection of war stories detailed by Hammer and Champy, executives at IBM, Bell Atlantic, Capital Holding, Ford, K Mart, Kodak, Procter & Gamble, Taco Bell, Texas Instruments, and Wal-Mart appear eager to engage in rule-breaking straddles with an ambition to bypass the 20 percent *operational fix* and go for the 80 percent *process reengineering solution*. Their process-improvement orientation and creative use of information technology require breaking the habits of attending to narrowly defined tasks and of working within predefined organizational boundaries.

BPR not only causes jobs to change but also the persons needed to fill them. Similarly, the relationships those persons have with their managers change and so do their career paths, the way each person's performance is measured and compensated, the roles that managers and executives take, and even what goes on in people's heads. To this new mind-set, one might add that when this straddling of disciplines and interrelated elements in a management system is well done (as in the cases mentioned above) the results can be impressive; when less well done, disastrous. Although Hammer and Champy estimate that 'as many as 50 to 70 percent of the organizations that undertake a reengineering effort do not achieve the results they intended' (p. 200), they view BPR as a low-risk endeavor. To them, BPR is not a high-risk endeavor, if a firm is willing to map (i.e., to model) the fragmented processes that make up its business and to give new names to the re-integrated processes that replace existing functions. One question is whether firms are both willing and ready first to model, and then to redesign and to replace, for example, their (a) sales department with a *prospect-to-order process*, (b) order-fulfillment center with an *order-to-payment process*, (c) service division with an *inquiry-to-resolution process*, and (d) product development function with a *concept-to-prototype process*. Should they?

A further question is whether Hammer and Champy misconstrue abstraction for reality, not realizing that the model of a business process is a simplification of reality, an idealization. The *Flow Diagram Showing the Enterprise as a System*, for example, which W. Edwards Deming built in 1950

to help the Japanese understand how a business process works [6, p. 19], is an abstract model that many 'quality experts' mistakenly view as a real system.

Although Hammer and Champy have already had some criticism leveled at them because of the evangelical tone and missionary zeal they use, personally, I find these characteristics rather suitable on this duo of a self proclaimed 'originator' and a 'leading authority', respectively, who literally *preach* 'business reengineering as the single best hope for restoring the competitive vigor of American businesses' (p. 5). The truth is that neither Hammer nor Champy invented BPR. Firms were reengineering before these authors came along 'but in a haphazard fashion' (p. 220). More importantly, however, the Hammer and Champy book aims at selling BPR as a deliberate process:

> It is a selling job that begins with the realization that reengineering is required and doesn't wind down until well after the redesigned processes have been put in place (p. 148).

Often 'expressed in some corny but effective ways' (p. 155), their concept of BPR is worked out as a critique of the traditional functional organization which tends to fragment production processes. What they really mean by *reengineering* entails re-envisioning a firm and 'inventing a new way of doing its work [where] redesign is the most nakedly creative part of the entire process' (p. 134).

Paradoxically, however, the organizational form that Hammer and Champy prescribe for the implementation of BPR looks rather traditional (Fig. 1). Imagine the inexorably emerging stratified manifestation that grows quickly out of Fig. 1 as firms are called to reengineer $m = 2$, 4, or 16 business processes simultaneously. While playing doctor in what otherwise comes forth – in their examples at least – as *process consultation* [5], the rigid machine that Hammer and Champy try to superimpose on BPR hardly overcomes the incipient limits of functional organization. The positive organizational change and redesign that BPR can bring about are annihilated, with most desirable benefits lost in the fabric of intermediate strata of Fig. 1. Hammer and Champy both describe and prescribe roles for the reengineering czar, process
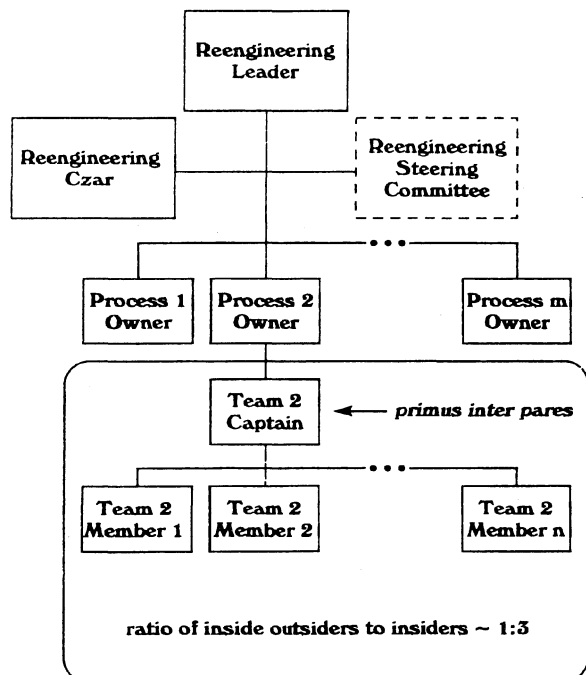
Fig. 1. Business Process Reengineering (BPR) organization.

owner, and team captain (*primus inter pares*) despite their own evidence that 50 to 70 percent of the organizations that undertake a BPR fail to reconcile its positive process orientation with the negative fragmentation effects of hierarchical strata within various business functions.

Have we not been to this neck of the woods before, when the drawbacks of *adhocracy* had the innovative, dynamic nature of TQM (total quality management) and QCCs (quality control circles) transposed into static, rigid, problem-creating rather than problem-solving temporal illusions? Multiple hierarchical strata always deter the flow of information, firm-specific knowledge, and employee-management rapport – all those aspects of human systems that enable new management technologies to flourish [2].

3. Making BreakPoint BPR and Taking it Global

When the reader proceeds from the too-appeasing-for-a-manifesto sales pitch of Hammer and Champy to the work of the C&L team, (s)he may wonder (as I did) whether Johansson et al. write about the same topic. The Coopers & Lybrand

team presents its refreshingly broad perspective on BPR – broad enough to encompass strategic implications – against a conceptual backdrop of modern management technology. To the C&L team, business process reengineering is not, as Hammer and Champy seem to think, *anti-theoretical* but portrays the kind of practical theory that would avoid the simplifying reduction of BPR to story telling. The particular nature of the rigor that the C&L team is developing can be clearly seen in its 'Understanding Processes' chapter and 'Global Reengineering' section of Chapter 7. There, Johansson et al. tell us that the BPR transformation incorporates an essentially creative component, namely that of striking a healthy balance between functional expertise and BPR's process orientation.

Although Johansson et al. are willing to go along with Hammer and Champy's BPR organization (Fig. 1), much like other BPR proponents this C&L team wants to invent new heuristic objects that will help firms achieve, at once, a higher level of customer satisfaction, a healthy rate of productivity growth, and higher levels of employee knowledge and involvement. Unlike other BPR authors, however, Johansson et al. have met with success in inventing some heuristic objects – in fact quite a number of them.

For example, their dynamic analysis of an implementation-driven response to the strategy problem shows that the mere adoption of piecemeal tactics, even process-oriented ones, will not bring firms to the forefront of world-class performance. That is, firms must first think about what processes really are (i.e., strategy making) and how to improve them before they can become radical and work toward *BreakPoint BPR*. To break the old and to create those new rules that others will have to play by, a firm must first understand what the current rules and *performance metrics* are. This is how process technology knowledge becomes a firm's highly valued asset. The detailed process-improvement examples of Dun & Bradstreet, AT&T Power Systems, and the experience of a fiber company in the carpet industry help the C&L consulting team demonstrate the utilization of this highly valued asset.

Johansson et al. acknowledge individuals, groups, and operations (both locally and worldwide) but do

explain that processes operate in the invisible space between these entities. The C&L team's writing itself issues from this sort of interspace among the four authors' individual worldviews and is directed back again into the invisible space among business operations activities – not only within firms but also within whole markets. Gradually, like some of the firms they write about, the authors themselves begin to realize that the operations along an industry's *value-chain model* constitute a single process, and thereby coin the term *operations process* – the heuristic object that manufacturing and service firms alike should focus on and try to improve instead of haggardly improving their internal production and external market operations.

This realization leads Johansson et al. to view BreakPoint BPR as a natural extension of the improvement family of management technologies – such as JIT and TQM (or CWQC) – which *traditionally* (sic!) aimed at the continuous, incremental improvement of internal production operations. Its business process focus, however, as opposed to internal production and external market operations focus, is what makes BreakPoint BPR radically different from JIT and TQM. Does it?

Although conservative managers may welcome this positioning of BPR as a prudent one, its unidimensional – or linear, as Hammer and Champy might say – extension from internal production operations and processes to external market operations and processes implies that a firm's production and market performance might improve if its production and market operations – the small units of analysis – improve. Yet, like Hammer and Champy, Johansson et al. seem to share the even more obscure notion that, if a firm's production and market operations improved, then its production and market processes – the large units of analysis – would also improve. According to Shingo, this is wrong [7].

4. The Net View of Business Processes and Operations

Every business includes activity tasks or bundles leading from raw material to finished goods and

services. When a firm wants to satisfy the specific need of a specific customer within a specific market segment, then the firm can (re)design and manage a process by selecting and sequencing (in a serial or parallel configuration) the necessary operations in order to make it so. The process designers can pick and choose among four principal business operations, namely value added *work activity* (or machining or computing), *inspection* (or decision making), *transportation* (of people, material, or electronic signals), and *storage* (or inventory or delay). Fig. 2 shows the four business operations and the activity bundles they contain – sometimes called *therbligs* (from Gilbreth spelled backward).

Given that the conventional view of a business discounts the difference between *operations* and *processes* – Hammer and Champy treat them as synonyms, it is perfectly natural for the directly-observable motion of operational activities to capture the attention of business researchers, managers, and journalists – particularly those who are not sensitized to this difference. Some may even conclude that a business consists exclusively of operations. However, every business involves two distinct streams of activity: along the X_i axis of Fig. 2, operations depict the activity of workers and machines (and customers in a service business); along the Y_j axis, the interspace between business operations are the processes that invisibly link operations from raw material to finished goods and services. The intersecting X_is and Y_js of Fig. 2 depict a business as a well-specified net (or network) of operations and processes. To Shingo, this is self evident but many business researchers, managers, and journalists call for improvements in operations as the means to improving production and market efficiency and quality; only a few emphasize process improvements [7]. The idea that process redesign can greatly improve business performance, and to a much higher level than secondary operational improvements can, is far from being well understood.

The Appendix of the C&L team on process mapping and modeling attests to the lack of a clear understanding among BPR proponents of what the difference between processes and operations really is. Johansson et al. define a process as 'a set of
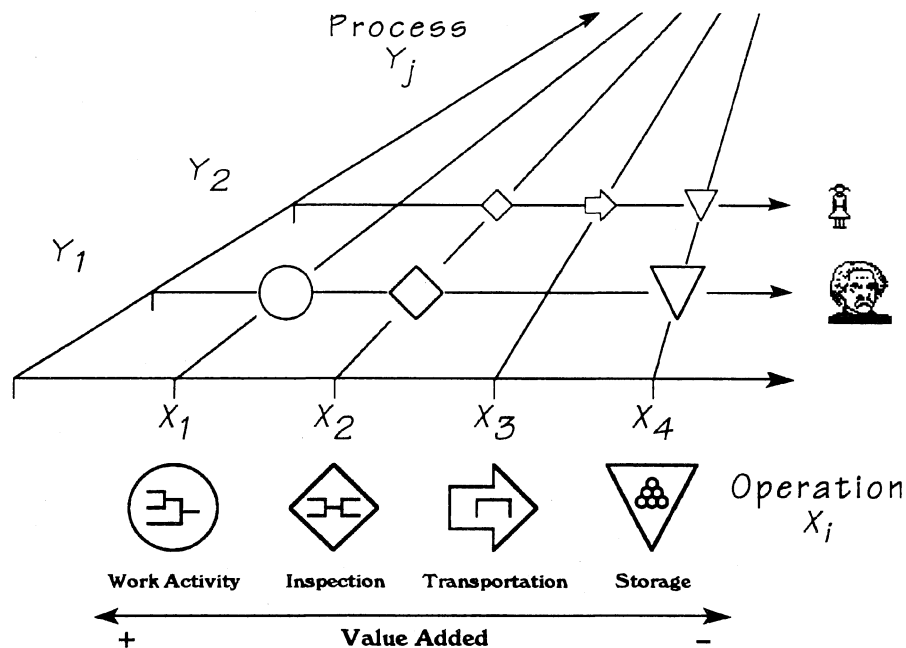
Fig. 2. The net view of bussiness processes and operations adapted from Shingo and Robinson [7].

linked activities that take an input and transform it to create an output' (p. 209). It sounds like an operation; does it not? They also define an operation as 'the main steps in a process method or procedure' (p. 213). This is where their sequence of definitions breaks off. How can firms possibly buy into and advance BreakPoint BPR to its full potential when its very proponents use something as complex as a *process method* – whatever that means – to define something as simple as an operation? This definition problematic may be a juicy assignment for an academic to trifle with but does explain why in practice, as Hammer and Champy argue, processes

> are often fragmented and obscured by organizational structures... are invisible and unnamed, [and] also tend to be unmanaged in that people are put in charge of departments or work units, but no one is given the responsibility for getting the whole job – the process – done (p. 118).

Extant formal definitions not withstanding, Fig. 2 shows that firms can meet customer-driven production and market goals through process improvements; operations play a supplementary role. For example, a conveyor improves a transportation operation rather than transportation. Similarly, a fully-automated warehouse – a multimillion-dollar investment – improves an inventory operation rather than inventory. The redesign (or reengineering) of a business process that incorporates transportation and inventory operations would eliminate the need for conveyors and automated warehouses altogether.

In summary, the directly observable motion of operational activity makes business operations visible and thereby simple enough to talk about and to manage. Yet operational control and improvement is not what business process reengineering (or redesign – for a more accurate term) deals with. The purpose of BPR is *first* to identify the invisible, unnamed, and fragmented processes that exist in a business and then, *if necessary*, to redesign these processes so that business managers can manage them to their customers' delight. W. Edwards Deming declared: 'Until you draw a flow diagram, you do not understand your business' [6, p. 21]. Because they occupy the invisible interspace between operational activities, business processes cannot be managed effectively, let alone reengineered, unless mapping or modeling is used to bring them out on paper or on the glass of a computer screen.

As long as BPR improves practitioner prospects and helps to offset the currently anemic academic market for a research-oriented Ph.D., management systems professionals will be forced to learn how to explain not only the semantics of BPR but also 'linear programming to [their] grandmother, without resorting to technobabble' [4, p. 20]. Consequently, one can expect to see more consulting books like the ones by Hammer and Champy and by Johansson et al., who try very hard to communicate what they know about BPR to persons who may have no idea who Hammer and Champy are or what they and the C&L consulting team are really selling. Just remember: it took Hammer and Champy over a year and many a question from a concerned reader to realize that the term *process* is the most important concept to grasp in BPR. How long will it take granny?

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L.E. Schultz, *Profiles in Quality: Learning from the Masters*, Quality Resources (A Division of The Kraus Organization Ltd.), White Plains, NY, 1994, US$29.95, Hardcover, 268 pp.

The model of a management system is always a simplification of the real system, an idealization of sorts. Consequently, all management system models are falsifications, even those built to profile quality. The falsification masters like Ronald A. Fisher and John E. Karlin, who passed on the mystifying art of modeling to Walter A. Shewhart and W. Edwards Deming, had always been rather outspoken about this. Why then would anyone write a book about a bunch of guys who made a living out of falsifying reality?

'His Ego Wall did it', might Kay say, wife of Louis E. Schultz, referring to the photographs arrayed across a wall in his study, where he proudly poses next to quality masters like W. Edwards Deming, Joseph M. Juran, and Kaoru Ishikawa. Really though, what distinguishes conceptual, mathematical, and statistical models is the genuine interest of those who build them in framing important questions about the observed behavior of systems in foolproof ways.

What makes Schultz unique among expositions of contemporary quality ideas (or movements) is his depth of historical focus. He sees modern ideas in a perspective that goes back all the way to Sir Ronald A. Fisher, the Briton who inspired Shewhart to effectively debunk Taylorism and those who – like Taylor – still see business processes as straight lines. Walter A. Shewhart re-perceived business processes as continuous cycles, with each process and product (or service) intimately linked to past and successive generations. Understanding Shewhart's PDSA (Plan-Do-Study-Act) quality cycle (known as the Deming cycle in Japan) enables those who use it to manage a business process rather than to be managed by it.

This does not mean that the accounts which Schultz provides are only of interest to historians. On the contrary, his descriptions of developments in quality management are thoroughly modern and may be read with profit by managers who happen to agree with Henry Ford that history is bunk.

Reading the biographies of quality masters is not a prerequisite for understanding their quality improvement models. The book is self-contained and provides a splendidly clear explanation of such modern inventions as Shewhart's statistical process control (SPC), Deming's evolution of profound knowledge, Acao's quality function deployment (QFD), and Taguchi's quality loss function.

The menagerie of these strange objects that populate the literature of quality management is made intelligible by viewing them all as special cases of a single unifying concept. Inspired by Deming's theoretical base for improvement, the unifying concept attempts to group the contributions of the American and Japanese quality masters into a set of discrete topologies that Schultz calls the *rings of management*. The largest ring is the business *environment* which circumscribes the inner rings of *strategy, process,* and *person*. The purpose of the rings of management model is to help each firm 'synthesize all these [quality] concepts into a strong, uniform effort that can take it into the next century and – even more – into an everlasting pursuit of perfection' (p. 167). But the exploration of possible model structures that may be relevant to quality improvement is not yet at an end.

The lucid account of the modern quality movement zoo that Schultz provides can be understood by academics and practitioners who have no interest in the lives of American and Japanese quality masters, and his short and terse biographies of American and Japanese quality masters can be understood by those ignorant of modern quality management. Nevertheless, both classes of readers could profit enormously from studying that half of the book which is less familiar to them. The quality specialist could learn some history, and the historian could learn that modern quality management has very little to do with inspection. Its focus has become one of building good quality into products and services instead of inspecting poor quality out of them. Both quality specialists and historians could gain a deeper understanding of their own fields by seeing them as part of a broader vision, a vision combining historical scholarship with modeling expertise. Schultz has tried to build a bridge between the two cultures. The biographies of quality masters like Walter A. Shewhart, W. Edwards Deming, and Genichi Taguchi as well as the slow fruition of their ideas constitute a human and intellectual drama that must be seen as a whole in order to be fully understood.

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Steven R. Wilson, Robert Ballance and Janos Pogany, *Beyond Quality, An Agenda for Improving Manufacturing Capabilities in Developing Countries*, Edward Elgar Publishing, Aldershot, 1995.

'Beyond Quality' was written for the United Nations Industrial Development Organization (UNIDO), by three UNIDO staff members. The book delivers an important message. The changing nature of global markets and the development of new approaches to manufacturing management have created an opportunity for developing countries – the opportunity to achieve competitive advantage by improving their manufacturing capabilities.

The authors argue that competitive advantage in manufacturing now depends much more heavily on 'the way a factory is organized and managed' than on the use of expensive production technology and high volume 'economies of scale'. This makes the use of the newer manufacturing techniques especially appropriate for developing countries with limited resources, enabling even small companies to compete in global market niches that value 'economies of flexibility'.

The manufacturing management techniques proposed for use by firms in developing countries are described as 'methods of continuous improvement'. *Continuous Improvement* (CI) is normally defined as the ongoing process of making small, incremental improvements in products and processes by using ideas generated primarily by shop floor workers trained to use a variety of CI techniques. These small improvements enhance the

implementation of 'high value-added' product flow systems that are based primarily on the Toyota Production System and referred to variously as *Lean Production*, *Just-in-Time Production*, and *World Class Manufacturing*. In contrast to the small incremental changes of CI, these new production systems represent dramatic changes from traditional manufacturing and require an organization-wide, professionally designed implementation program. They do not evolve from shop floor incremental improvement programs.

The authors employ a seldom used, broader definition of *Continuous Improvement* that includes all forms of improvement – both the major improvements generated by the production system design and the incremental improvements of employee programs such as *Quality Circles*. Unfortunately this approach obscures the important distinctions between the two forms of improvement. The major manufacturing system redesign is normally a strategic exercise and must be driven by top management with the support of technical professionals. The new system is reinforced and enhanced by the bottom-up programs on the shop floor. The authors recognize the significance of the system redesign and the role of top management but this message tends to be lost in the strong emphasis in the book on incremental improvement techniques such as *Statistical Process Control* (SPC), *Pareto Analysis*, *Cause and Effect Diagrams*, and *Histograms*.

Despite this shortcoming, the book provides valuable information for manufacturing professionals and others interested in the industrial development of developing countries. The final two chapters are especially good. Chapter 6 presents some instructive case studies of CI programs sponsored by UNIDO in Mexico, Central Europe, Africa, and the Caribbean. The studies describe both generic challenges to the implementation of CI and challenges that are unique to the countries.

Chapter 7, on 'Problems and Prospects', provides a good summary of relevant issues such as implementation barriers in the firm, the impact of culture on management, education and training needs, and the role of Government and Public policy – issues that are critical to the successful pursuit of world class competitive manufacturing

in the developing countries. A book addressing these issues in depth, with recommendations for managers, educators and public officials would be a valuable sequel.

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Bos Benders, Job de Haan and David Bennett (Editors), *The Symbiosis of Work and Technology*, Taylor & Francis, London, 1995.

This book is about sociotechnical systems theory – its aims, content, issues and manifestations in Europe in general and Sweden, Holland, Germany and the United States in particular. A central theme is the limited diffusion of the approach in practice, an assessment of the strengths and weaknesses of the paradigm and thoughts and progress on providing approaches that may enhance its diffusion.

Unlike some books which are essentially collections of conference papers this one has structure. The editors begin with an overview of the content and issues of sociotechnical approaches, taking a critical perspective. This provides a stimulating start by posing questions like: Which organizations can afford the substantial resources required by lengthy symbiotic design processes? What is the economic pay off – what price satisfied workers? If symbiotic approaches are intended to help reconcile the technocentric bias of engineers with the sociocentric bias of social scientists why is it the engineer who, so often, stands accused? Are social scientists sufficiently capable of specifying the technical requirements that symbiotic systems must meet?

This is followed by chapters taking first a European-wide view (Wobbe), followed by Dutch (van Bijsterveld and Huijgen), Swedish (Karlsson) and German (Latniak) perspectives. These chapters review the separate national development and current status of symbiotic approaches and propose future research directions. Differences are mainly explained in terms of institutional and cultural factors though language may be another factor as a brief comparison of references seems to suggest.

Two of the common failings of current symbiotic approaches are partly addressed in the next two chapters. First is the lack of clearly defined methodologies for managing resultant change processes. Second is the time and resources necessary to balance and negotiate the large number of variables inherent in a sociotechnical system.

In the first part Badham describes early experiences with a configuration approach to technology implementation in the context of the implementation of team-based cellular manufacturing systems in Australia and Germany. This interesting chapter deals convincingly with the politics of the process of change using case study data and a process configuration model. The chapter provides a strong argument for symbiotic action researchers to both monitor the development of the sociotechnical system itself *and* collect and systematize their learning of the process of change. The second issue is addressed by Majchrzak and Finley but they begin with a review of the status of symbiotic approaches in the United States. They then describe the basis and application of an interactive computer tool for specifying sociotechnical requirements to achieve required organizational effectiveness. The tool helps to speed up the evaluation of the many potential options and the main focus is on the nature of the tool. A case study only describes its use by a manager and an industrial engineer, though the authors acknowledge the weaknesses of this limited perspective. However, one is motivated to wonder how the tool might work embedded in Badham's implementation approach where participation, roles and politics are explicitly thought through.

In the penultimate chapter Kirby raises the challenge of Artificial Intelligence and Knowledge Based Systems (AI/KBS) to symbiotic approaches. Choices are available – these systems may provide an answer, full stop, or help to provide an answer. The former smacks of a technocentric approach, the latter is a more human centred view and a user centred approach to the design of a medical AI/KBS system is described.

In the final chapter the editors ask whether symbiotic approaches will become mainstream. Drawing on previous chapters they structure the problems that face the diffusion of symbiotic approaches and conclude there is much to do. They identify three particular areas: more attention to the process of change and its political character; more effort in making the concepts more widely understood; and extending knowledge of the content of symbiotic approaches.

One is left with the feeling that increased diffusion may only occur when and if empirical studies show more tangible economic performance benefits from symbiotic approaches. It may be no coincidence that the most often quoted reference in the book is 'The Machine that Changed the World' (Womack, J.P., Jones, D.T., and Roos, D., 1990, Rawson Associates, New York). In a few short years the impact of Womack et al's 'lean' manufacturing recommendations, a set of sociotechnical practices, has been immense compared to many years of more generalised symbiotic approaches. Thus the book is timely and if increased diffusion is the aim it may also be time to think about marketing. 'Sociotechnical' and 'anthropocentric' hardly conjure up an impression of business effectiveness that might attract hard pressed practitioners (cf. 'lean'). To me 'symbiotic' is less value laden, promotes an image of mutuality between social, technical and business requirements and is potentially interesting to practitioners. So if the editors intended to promote the 'symbiotic' label I would support them.

I recommend this book to researchers for its timely re-assessment of the field and its self critical stance. It provides serious food for thought and I hope along with the editors it may 'nourish the flame of symbiotic approaches' (p. 147).

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Luc Hoebeke, *Making Work System Better: A Practitioner's Reflections*, John Wiley and Sons, 1994.

This may be a profound work! To system thinkers it will be, at once, obvious and embraced. It is a

serious contribution to systems thinking and deserves reading for that alone.

But there is more here than that. Hoebeke intentionally invades the mindspace of non-systems thinkers. He is intentionally intrusive so as to be socially obtrusive.

For example, in Chapter 8: starting to play with the framework, Hoebeke questions the role competition fulfills in free markets, In so doing, he clarifies many of the inconsistencies of the theory of free markets, and points to the need for a more electric approach. By introducing the importance of relative levels of collaboration in market systems, we see that freely chosen collaboration far more that competition is the self-regulating mechanism of efficiency in free markets.

Such discourse is designed to entangle a non-systems thinking economist in its web; and to jar his/her mind loose from its imprisonment.

Hoebeke is no less kind to other social scientists. Organization and Management scholars will find their paradigm besieged. Even Management Scientists come under attack.

This is the work of an activist. Its theory is clear. But it will be a profound work only if it can successfully jar open the closed minds of the disciplinarian it is designed to ensnare. And that is as much up to them as it is to the author, maybe even more so.

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D.A. De Cenzo and S.P. Robbins, *Human Resource Management. Concepts and Practices* (fourth edition), John Wiley and Sons, New York, 1994, 633 pp.

This introduction to Human Resource Management aims at addressing the 'most critical issues in Human Resource Management' (p.v). The volume is structured in accordance with what the authors perceive the main functions of HRM to be, namely the inception function, the development function, the motivation function and the maintenance function. In addition, the authors cover labour-management relations in the final two chapters.

The structure of each chapter is clearly intended to serve the student's needs, in that each chapter closes with a summary, a review of the key terms introduced in each chapter, questions for reviewing the newly acquired knowledge, questions for discussion, suggestions for class exercises as well as case applications and notes.

The fourth edition is characterised by an extensively updated bibliography, which covers the American research base. This is indicative of the whole volume, the authors concentrate solely on American HRM practice giving little or no attention to an international perspective. This may not constitute an adequate introduction to some of the subjects the authors cover (in particular labour law and trade union structures).

As the book is targeted at students, the authors have attempted to present the subject in a factual way. While such an attempt is laudable in principle, this approach has led to a generally uncritical presentation of the issues at the forefront of current debates. For instance, when discussing the strengths and weaknesses of a mentor system, De Cenzo and Robbins briefly mention potential difficulties women and minorities encounter with regards to mentoring systems. The psychological dimension underlying these difficulties, however, remains unexplored.

The authors clearly presuppose that Human Resource Management has established itself as an independent management function in its own right. This is not an uncontroversial claim and does require further discussion, which the authors have not included in their work.

One of the weakest sections of the volume is that on labour-management relations: the introduction to labour relations takes a chronological approach and is followed by a brief overview of international labour relations. This includes labour relations in the European Community, which the authors summarise by oversimplifying the status quo: the authors emphasise the diversity of current practices in the European member states, but fail to describe the increasing influence of the European Directives.

Similarly the authors' description of local unions does not give an adequate insight into unions'

operations. The authors equate unions' operations with that of a business, comparing the union executive with the management of a firm. While such an analogy may facilitate the student's understanding of trade union organisation, it should be followed by the limitations of such an analogy the greatest limitation being the fact that the ultimate control of local unions' operations lies in the hands of the members.

In summary, the volume offers students of HRM an overview of the current debates in the discipline, though with a strong US flavour. It is not suitable for those who wish to study HRM from a European perspective, since its discussion of labour law as well as its section on the role of trade unions in employment relations applies exclusively to the USA.

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A. Wilkinson and H. Wilmott, *Making Quality Critical: New Perspectives on Organisational Change.* Routledge, London, 1995, 247 pp.

Management fads and fashions have become something of a way of life amongst those who manage, research and observe the workings of organisations. A movement which has been with us for well over a decade now, the significance or otherwise of which will eventually be proved by history, is the so-called quality revolution. From the mid-1980s onwards, quality of products and services, and the need to satisfy customers have formed the content of many pictures, posters and mottos adorning the walls of Western managers' offices. Undoubtedly, much of this material is simplistic, prescriptive, and uncritical. Consequently, I looked forward to reading the Wilkinson and Wilmott volume, which promised to serve as an antidote to the hype which is normally dished up under the label of quality.

The volume consists of nine contributions, plus an introductory chapter by the editors. In the first few pages of the introduction, the general tone of

the book becomes quite clear. After some reasonably astute observations about how the subtle, nebulous but generally positive associations of quality explain its appeal as a campaign slogan for management, the main tone of the volume asserts itself. This book is essentially a collection of labour process pieces. With the possible exception of Stephen Hill's piece (discussed shortly) everyone agrees that total quality is a sinister phenomenon, and all that remains to be done is to demonstrate and assert this in as many different ways as possible. This is not to say that there is not some mileage in this argument, but academic progress comes from the process of debate; a bit of variety and difference within an edited volume is no bad thing. The editors cannot even resist making snide comments about their own contributors, for example: 'Hill argues that TQM, like Heineken Lager, is effective in reaching wider and deeper into organisations' (p. 19). Clearly the promoters of quality tend to form their own rather inward-looking community, with their own taboos and articles of faith. Those whose role is to criticise clearly face the same dangers.

Steven Hill's contribution is based on a study of four firms, and his main argument is that whilst bottom-up programmes of quality improvement (for example quality circles) were bound to fail due to their independence from existing power structures, total quality management initiatives might actually work. There is, of course, a whole debate about what one means by 'work' in this context, but that is another issue. Hill found that TQM was not generally experienced as coercive, although he acknowledges that there is the potential to increase stress by giving people more responsibility. He also points out that managers are not immune from the effects of total quality programmes a point which it is very easy to overlook.

Alan Tuckman's contribution is more representative of the volume as a whole. He argues that TQM is 'a central element of a wider project that serves to incorporate employees and citizens within the logic of capitalist society'. This is quite an interesting, though not particularly novel argument – see for example Du Gay and Salaman's 1992 piece in the *Journal of Management Studies*. The unconscious ideology of the market which

underlies TQM is explored in Tuckman's chapter.

Kieron Walsh considers the application of total quality management principles in the public sector. One difficulty here is that the relatively intangible nature of activities in the public sector make it more difficult to accurately specify what it is the 'customer' wants. One might also question the whole notion of the customer/provider relationship in the case of some public sector services, where the providers of the services are also the gatekeepers valued resources which they have to meter out to their 'customers'. Walsh concludes that in the public sector a clear core and periphery distinction is developing. Change is being pushed through as much by the threat of contracting-out as by attempts to get employees to 'buy-in' to the ethos of the organisation via internal cultural reform.

Janet Webb looks at the issue of total quality management and managers; a neglected area. She concludes that total quality management programmes are having a major impact on the nature of managerial work, particularly with the erosion of functionally based jobs and their replacement by process- or business-led jobs. She concludes that total quality management does not significantly affect existing power relationships either within or between organizations. Instead TQM is described as 'an object and medium of managerialist and immoral expediency'.

The other contributions go on in a similar vein. Munroe talks about quality being hijacked by managers and used to further their own careers. McArdle et al. conclude that TQM does not extend workers' rights, but that it introduces management by stress and forces workers to engage in their own

exploitation. Dawson looks at TQM in two plants in Australia, and concludes that cultural pluralism is an obstacle to its implementation. Roberts and Corcoran-Nants examine total quality training and industrial relations, and conclude that the developmental culture of total quality does not erode conflict. Despite the rhetoric, the relationship between unions and management was not a partnership; total quality did not dissolve existing divisions within the company, but rather just restructured them. Kerfoot and Knights examine the language of quality, and conclude that the language functions to reassert the legitimacy of capitalist organisations. They also point out the contradiction between the implicit ideas of employee commitment to the firm inherent in much of the total quality rhetoric and contrast this with the reality of continuing rationalisation and job losses in many organizations.

Overall, there are undoubtedly some useful ideas in this volume. There is no doubt that the uncritical and prescriptive nature of much of the material on quality needs to be challenged. My concern about this volume, however, is that it is insufficiently pluralistic in its outlook. This reviewer prefers edited volumes which capture and debate the tensions in a particular area. Although the Hill chapter represents something of a counter-point, it is completely swamped by the heavy labour process orientation of the other chapters.

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