

Book Reviews

Entrepreneurship in the Global Firm

Julian Birkinshaw

London, Sage Publications, 2000, xiv + 154 pp., £15.99, ISBN 0-7619-5809-6

As Birkinshaw asserts, research on management of Multi-National-Corporations (MNCs) has tended to concentrate on the central corporate management. Birkinshaw concentrates on the management of subsidiaries in countries other than that of the parent, and presents a refreshingly interesting study on aspects of the internal workings of MNCs which too often remain out of sight. Undoubtedly aiming at an academic audience, what Birkinshaw in fact presents from his research are a number of real lessons for the managers of subsidiaries, especially in locations outside the parent company's home country, and for corporate managers. The options and guidelines presented are far in advance of the standard bookstore offerings, but the academic mode of presentation and later theorising do not make it as accessible or readable as its content would warrant in an era of increasing dominance by MNCs.

In exploring the behaviour of subsidiaries, he does not follow the conventional approach that a subsidiary does what it is told. He focuses on what he considers to be the entrepreneurial behaviour of the managers of subsidiaries, as found in a series of case studies in Canada and northern Europe. His subjects are those subsidiaries that have made changes which have produced some significant change in the MNC as a whole. But are they all, or are any, entrepreneurs?

Let me be honest. The extent to which management school academics and management consultants have jumped on the concept of entrepreneurship and attempted to embrace it as a management norm has wearied me. To embrace Schumpeter's idea of the entrepreneurial function as being creative destruction is somewhat contradictory of the managerial function, which at its best is dynamic conservatism. As he cites from the literature, corporate entrepreneurs are proactive risk takers, using resources beyond their direct control and making a clear departure from existing practices. Undoubtedly, there is a tendency amongst managers to be higher risk takers. They take risks with others' resources but eschew independence. Entrepreneurs are different. Their primary function is to introduce some innovative development to the market by founding a new firm and their motivation is to take control of their own destiny. They do everything possible to minimise the risk and the resources at risk tend to be largely their own or their families or friends. In founding their new firm they create a new economic activity

through which net new economic wealth and net new employment are created in the economy, an aspect of which Birkinshaw is not unaware as he demonstrates in his later chapter on entrepreneurship. This is the creative destruction of Schumpeter—birth of the new and death of the weak.

His chapter on entrepreneurship is very theoretical and unconvincing in its attempt to link his subsidiary initiatives to Schumpeter's and Kirzner's theories of entrepreneurship. Fortunately, Birkinshaw at an earlier stage tempers my prejudice by making 'the creation of new business activities' albeit 'within the existing organisation' one of his three forms of corporate entrepreneurship, but generally attempting to link his case study initiatives to entrepreneurial endeavour obscures understanding of his managers of subsidiaries.

He demonstrates that pro-active subsidiary managers enter on what he terms initiatives, which result not only in an expanded and more autonomous future for the subsidiary but also expand the resources and capabilities of the MNC. These initiatives are essentially of two types, each divided into two sub-types: the internal market, local and global, and the local and global external markets. In the internal market type, that is the internal market of the MNC, local managers foresee a change coming. Their company, essentially a branch plant producing for a local or regional market, will be closed down or suffer a severe cutback. They propose rationalisations of a give and take character in which all plants produce product lines for a global market. Alternately, they identify that central management will have to decide in the not too distant future where to produce a product currently in the process of development and the local manager works hard to bring the product to his own plant. These managers seem, for the most part, not to be ex-pats but local since their motivation appears to be a concern for the future of their charges rooted in a complex of wanting to shape a successful company and of being loyal to employees and the community in which the company is located, the locality. This is a well-known phenomenon. Managers from the country or locality of the subsidiary are significantly more pro-active in moving a branch plant to a higher level in the production and development chain.

Success of the initiative depends on a more open central management and on the credibility of the subsidiary. Credibility comes from consistently reliable performance—and good personal relations between local and central managers. The lesson seems to be that to be successful in maintaining and expanding a subsidiary without actually creating new activities per se in the MNC, be a first class operating manager and develop good personal relations with the centre and, with your own managers, have good intelligence as to what is happening across the corporation.

In the external market initiatives we are much closer to the identification and launch of an innovative opportunity—but within the constraints of MNC strategy and resource control. Discussions with a customer or observation of trends in customer industries expose an opportunity which, once developed, proves to have a global as well as a local market. The global market initiative differs in that the subsidiary is already supplying to a global market, has a great deal of autonomy and can commit much greater resources. Its high level of skills and performance in a global market guarantee its virtual autonomy. The subsidiary taking a local market initiative, which eventually finds a global market, does need some autonomy and resources to initiate development but must then seek further decision and resources from the centre. For such a subsidiary, good relationships with the centre are again vital.

Perhaps all subsidiary managers should aim to become technically excellent in a specific segment of the global market, moving gradually from the branch plant operating level to becoming an autonomous global supplier. Birkinshaw, however, believes that those who are good at taking internal initiatives because they are well integrated with their parents and peers, are not good at local or global market initiatives and vice versa. Of course. People who take initiatives or innovate do so in the markets which they know and success is related to the closeness of their interaction with customers in that market. Hence, academics are successful in instrument markets and generally hopeless elsewhere.

Birkinshaw's cases led him to identify the corporate immune system, a wonderfully organic concept which encapsulates what happens in most organisations, whether private and public companies or national and EU administrations. Perhaps this is Birkinshaw's major contribution and caused me pleasure in hindsight analysis of experiences as a professional and as a senior manager. He defines the corporate immune system as 'a set of organisational forces that suppress the advancement of creation-oriented activities such as initiatives'. Breaking through the immune system is dependent on the power base of the championing individual as innovation studies long ago discovered. In one sense this means that the more peripheral, in terms of influence, the subsidiary, the less prospect it has of gaining approval for an initiative. What actually emerges is that influence is determined not merely by the power base as such. Determining factors are: credibility in performance, close personal relationships with the centre and other key managers, and watchful gathering of intelligence, knowing what is going on and who is playing.

Birkinshaw proposes that there are three rationales behind the move to eliminate or neuter the alien intrusion. Ethnocentricity is the belief in the superiority of the owner company know how and national culture over those of the subsidiary. Wal Mart has given a good example with its replacement of local managers by US ex-pats in its German acquisition, thereby losing market share. The second rationale is suspicion of the unknown—stick to what we know. The third is resistance to change—how would this initiative, if allowed, affect my position? These latter two are very common human failings, met at all levels and types of organisation. Ethnocentricity is more typical of large countries with more aggressive management styles such as the US and Japan.

The corporate immune system like the human is a very dispersed system. The actors lie in the vertical hierarchy above the proposing subsidiary manager, in competing divisions and in other corporate units, anywhere there is a feeling of threat or loss of advantage. The mode of reaction of the immune system manifests itself in rejection, delay and by requesting further justification. The latter is a response which characterises the indecision of many corporate managements, seeking somehow to find a publicisable reason for rejection or seeking delay because it does not know what to do because of its own fears or incompetence. Another manifestation is the lobbying and rival initiatives of competing divisions, one prevalent in corporations which have adopted internal market principles. Thus in one place, Birkinshaw marks an initiative in gaining the right to produce a new product as a success and in another place classifies it as a reaction of the immune system—an unanswered question. Overall, Birkinshaw finds the immune system to be a 'formidable barrier to most subsidiary managers' (p. 43). From the subsidiary managers' point of view the solution emerges at several points of Birkinshaw's discussion and is defined by one individual, 'To me the personal interface was the key' (p. 45).

Management techniques often emerge from some narrowly focused academic research in a management school and become a widely adopted fashionable technique for a time. Some vanish but some persist without justification and in spite of their negative impact. Benchmarking has persisted in spite of its evident disastrous influence on innovative thinking in Japanese companies. Birkinshaw, perhaps inadvertently, gives another example in a summary of his chapter on the immune system:

The corporate immune system is partly psychological and partly structural. The psychological element is the mind-set of HQ managers who are used to seeing good new ideas coming from the centre. The structural element is the formal review and reward systems that have become established over the years. These systems typically make it easy to veto new ideas, particularly when they come from less-well-known managers in the periphery of the corporation (p. 49).

Whilst laying down some ground rules for subsidiary managers on how to survive the attacks of the immune system, he also proposes that immune systems are necessary but must be effective, maintaining a proper balance between weakly letting through inappropriate initiatives and damping all initiatives by strongly rejecting promising ones. As throughout this work, Birkinshaw makes many useful points in his detailed discussion and in attempting to reach an understanding of the context in which initiatives take place.

Nevertheless, the first sentence of the last chapter exposes the author—'It is interesting to note that there appear to be no applied books written for the benefit of the subsidiary manager' (p. 124). Birkinshaw should have written one. His book is worth buying because it does have so much that is valuable in it for the subsidiary manager who wants to do more than what he is told and for corporate managers who want to create an environment for the foundation of new economic activities. He is, however, led by his own preoccupations with entrepreneurship, the theory of an MNC and so on down byways of academic theorising of little relevance to managers and to students destined to be managers. He might instead, for example, have explored the role of person-to-person interrelationships in all innovative and entrepreneurial activities as the context within which immune system reactions can be neutralised and initiatives implemented. Greater practicality of understanding could then have been given to his own findings.

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The Dynamics of International Competition: From Practice to Theory

Roland Calori, Tugrul Atamer, Pancho Nunes, with contributors

London, Thousand Oaks and New Delhi, Sage Publications, 2000, xv + 239 pp., £16.99, ISBN 0-7619-6166-6 (pbk)

According to the authors of this book, great managers are not always great thinkers. Nevertheless, they have an abundance of experiences and practical strategies in achieving economic success which the team of 12 European academics explores in order to provide a theoretical framework for understanding how international

competition and industry globalisation work. The publication is easy to read and contains numerous excerpts from interviews with 122 company executives of 117 companies conducted between June 1994 and June 1995. Managers from companies originating from several western European countries were represented as well as managers in charge of the European divisions of US multinationals. The citations from interviews probably make up around a third of the text. The research project sponsored by the European Commission was conducted by Ecole de Management in Lyon, France. The contributors were based in academic institutions in France, Italy, the UK, Sweden, Spain and Germany.

The first interesting feature of this study is the selection of industries. If you expect to read one more time about communications and information technologies or car manufacturing, you will be disappointed. But if you are looking for sectors which have not been so intensively researched in recent years, you can enjoy the discussion and getting familiar with the thoughts of company executives from paint, cables, footwear and chocolate and sugar confectionery. Some of the descriptions of the latter were so precise and good that I could almost taste in my mouth the different varieties of chocolate manufactured around the world.

Nevertheless, there was no explanation provided by the authors as to why such an industry selection was made. Also, the theory development is focussed on generalisations across all the four sectors while there are clearly more similarities between cables and paints, on the one hand, and footwear and chocolate and sugar confectionery, on the other.

The methodology of the study includes only qualitative content analysis on interview data and the interviews themselves were conducted on the basis of open discussion along five broad questions, namely: what is the geographic scope of your industry; what international developments have happened in the past 10 years; what developments do you expect in the next 10 years; what are your competitors' strategies; and finally, what are your company's strategies? The content analysis has allowed the authors to outline three types of strategies used in all four industry sectors, namely global, multidomestic and mixed. They have also identified specific subsectors within each industry for which the respective strategies are most dominant.

Although not entirely new and original, I found the main argument of the study that companies operate in an environment shaped by global integration and local responsiveness, quite well justified, not only through the managers' experience but also through the condensed literature reviews provided by the authors. The structure of the book is also organised along this argument. After defining how geographic scope is interpreted by representatives of the various industries, two chapters look at structural forces driving local responsiveness and global integration respectively and the remaining chapters analyse competitive actions and strategies.

The team of authors has taken on the ambitious task to build a bridge between practice and theory. Consequently, the targeted audiences are both business and academia, and my assessment is that the book will appeal to each of them. Managers will be in a position to have a refreshing perspective on the nature of their actions and competitive strategies. Researchers will find valuable inputs from the real world. However, have the authors achieved their goal?

There are a number of findings from the interviews which are common knowledge. For example, anybody who had tried to fit industry branches into SIC (Standard Industrial Classification) codes knows that it is difficult to go beyond the general level of the three digits. It is not surprising then that within such defined an industry, some segments will have global orientation, others will be predominantly domestic and there will also be segments which represent a mixture of global and domestic operations.

The study, however, has managed to identify, justify and clearly interpret the industry branches which fall within the respective categories. For example, within the cable industry, submarine wires and very high voltage power are global segments; low voltage power cables are local and car wiring and enamelled wires are mixed. Within the footwear industry, sports-leisure and women's luxury shoes are global, safety shoes are multidomestic and mass-market street shoes are mixed. The book also provides the recommendation that business strategies are better developed at the product level.

The forces driving globalisation described by the authors are also quite familiar: R&D and technological intensity; pressure from global clients; niche markets; economies of scale; cost of labour; capital and materials; marketing and advertising. Ideally I would have preferred this analysis to have more depth and some of the quoted figures in the interviews were lacking a point of reference. Much more revealing was the analysis of the factors fuelling domestic operations, such as distribution systems, relatively low added values and traditional customer preferences and loyalty.

For me, the most valuable concept, however, was that of the forces creating 'fracture lines' between regions and the dynamics of the whole notion of regions. According to the authors, regions are where the bulk of international competition occurs. For example, Eastern Europe is seen as part of the mainstream business interests only in the case of the paint industry; for chocolate and sugar confectionery it is a potential promising market and for cables it is an option with very low attractiveness. Let me cite one of the interviews in order to give you some flavour of the book: 'When a country opens economically it starts to paint houses. The look of Eastern Europe is starting to change, thanks to paint. Paint is symbolic: a touch of white paint in a town that has been torn apart by war is a symbol of revival...' (p. 112).

The book provides some valuable insight into the geographic distribution of the world in the mind of the chief executives, something that has always been a matter of interest not only to industry and academia, but also to policy makers. When powerful multinational companies start operating within certain geographic locations and adopt regional organisation, they reinforce the formation of regional markets and regional blocks. Consequently, their competitive actions shape the world.

The classification of international strategies deducted from the interview data is another contribution the book makes. It is well supported by examples from a range of companies, such as Nestlé, Mars and Hershey (chocolate and sugar confectionery); Nike, Reebok, Adidas and Bata (footwear); Alcatel Cables, Axon and BICC (cables); and Akzo Nobel and ICI (paints). The authors correctly emphasise that each company's strategy is unique and they have only tried to simplify the complexity. For example, the taxonomy of the global competition includes quasi-global players, transnational restructurers, worldwide technology specialists and global luxury niche players.

Most of the analysis in the book is industry specific which could be quite a good source of information for those interested in the four sectors. There are a number of useful tables which summarise the discussed concepts and findings. I was not

able to find any major discrepancies between the chapters written by so many different people, which is indicative of the good coordination and editorial skills of Calori, Atamer and Nunes. Nevertheless, I am tempted to share a factual inaccuracy as far as chocolate is concerned. Australia, which is the world leader on the basis of per capita consumption, is given as an example (on p. 79) of a country with a hot climate (true) where chocolate consumption is very low (false).

In conclusion, the book has achieved its main goal of linking theory and practical experience. It also provides interesting reading. At the same time it has some of the negative features of the majority of publications in the field of management. It does not challenge existing concepts and does not ask questions about values. For example, is globalisation only a positive phenomenon? Are the mechanisms for integration used by companies, namely concentration, centralisation and coordination, always beneficial for local and regional economies? Geographic location is perceived entirely as an economic variable and the concern about environmental issues comes across only through some of the interviews. The social implications from the search for lower costs of production and hence, exploitation, are not discussed. What effects do the power of advertising and associated billions of dollars have on the minds of consumers across the globe, including developing countries? The book translates the logic of the industry world into a nice theory leaving it up to the reader to accept or reject the accompanying business ethics and values.

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Teletext: Its Promise and Demise

Leonard R. Graziplene

Bethlehem, Lehigh University Press; London, Associated University Press, 2000, 184 pp., US\$38.50. ISBN 0-934223-64-5

New information technologies have complex diffusion patterns which depend on more than the technology. A successful market debut for any product or service requires an honest evaluation of the innovation's prospects in that particular market. It is not enough to select a technology which has achieved success in one market and expect it to achieve a best case scenario in a chosen new market.

Graziplene's book analyses the progress of one of the new information technologies developed in the late 1970s in the UK and adopted in North America in the 1980s. The book describes the ambitions of the Canadian Department of Communications Laboratories to introduce TELIDON, their own updated version of teletext, to the North American market. It also documents the US groups involved in trials of the technology and the presentation of the services. It shows the fragmentation of the market, which prevented the development of a critical mass of users, and demonstrates that innovations which flourish in one market environment may not survive in another. Teletext services still operate in many countries but failed in the North American information market. A more appropriate title for this book would have been *The Promise and Demise of North American Teletext*.

The book tells the saga of the ambition of a government-funded research institution to monopolise a promising market in the US by adapting a European communication innovation to suit the vastly different regulatory environment of North America. It shows the problems of governments aiming to pick market winners and the difficulties encountered when companies concentrate their attention 'on securing grants from the federal government' (p.39) instead of the creation of genuine markets. The author details his heavy involvement in the development of the American product and is honest enough to admit 'overevaluation of the worth of one's own technology' (p.101).

The Canadian Government promoted and financially supported teletext, but there was no such funding by government in the United States. This reviewer was in the US for most of 1982—a time of great confrontation in the information market between the industries of telecommunication and computing, and I judge this dearth of funding to support a foreign technology to have been more than a private versus public funding issue.

Large communication industries were at this time converging on the sacrosanct market territories of others as the new information technologies brought the industries of telecommunications, television, computing, cable and broadcasting into market overlap. Indeed, teletext was using this overlap to present its service.

In addition to the problems of convergence, the ambitions of electronic research laboratories were paramount and national pride was also at stake as the UK, France, and North America developed three competing teletext protocols. In his description of the problems of introducing teletext to America in these conditions, Graziplene shows the challenges presented by competing protocols, competing presentation standards and the general lack of knowledge of consumer

In the North American information market these problems of market boundaries were compounded by the legal challenge to the telecommunications company, AT&T, by the computing giant IBM. The subsequent break-up of AT&T may have been a contributing factor in the demise of teletext in North America.

Canadian TELIDON researchers boasted that their technology gave users better graphics than the UK and French services. This book, however, suffers from poor presentation of its graphics, especially in Appendix One. Enhancement of these graphics would have improved a publication written by one who was directly involved in the development of TELIDON in North America.

Teletext has had difficulties in its diffusion in other markets but it is not extinct. In the Australian market at the end of 2000 a phone call to the local electrical suppliers provides a choice of international brand TV sets with teletext. These range in size from 34cm to 68cm, and are available for immediate delivery. The teletext service is provided by the national television station Channel 7.

Graziplene presents a picture of high expectations of a new technology adoption which failed to eventuate in a specific market. Chapters 7-8 give a particularly bleak picture of how the market can deal with new technology and the expectations of those involved. This book is very important reading for the new information technology industries, government and business. It is also relevant for those investing in the information industries.

The Quest for a Unified Theory of Information

Wolfgang Hofkirchner (Ed.)

Amsterdam, Gordon and Breach, 1999, xxxiii + 590 pp., AU\$171.60, ISBN 90 5700 531X

The role of information of all kinds—scientific, technological, market, social—and recognition that information is a resource, a commodity, perception of pattern and a constitutive force in society¹ have been central to the editorial perceptions that created this journal. It is fitting therefore that we note this significant collection which first appeared as a special issue of *World Futures: The Journal of General Evolution*, 49 (3–4), 50 (1–4).

The papers are grouped in the following sections: Approaches to Unification; Concepts of Information; Self-Organizing Systems; Life and Consciousness; Society and Technology. While some attention is given to the 'information society', the main thrust aims to clarify information as a message understood by an information processing system. The Foreword by Klaus Haefner ends: 'A unified theory of information will give a much better understanding of nature and society than our present independent, fragmented, discipline-oriented theoretical constructs' (p. xvii).

As an economist who has for long years deplored the profession's lack of attention to information, I welcome these efforts. This book will find a place on my shelves alongside Fritz Machlup's *Interdisciplinary Messages*.² Two illustrations of problem areas in economics are suggestive of the merits of this wider approach. First, the recent efforts to estimate the world's information output.³ This has been done by converting all the books, media, photos, x-rays, e-mail messages, telephone calls into bytes and condensing the statistics by means of a new measure, the exabyte—a billion times a billion bytes or the equivalent of some 20 billion copies of *The Economist*. We are told 'unique information' has been measured but we might harbour concerns about what is duplicated and what is just plain wrong. But setting these aside, we might ask if such estimates will help with replacement of the present distorted images of the information economy given by official statistics. Might they throw new light on the exciting notion that information rather than energy plays the main propagating role in the evolution of economic systems.⁴

Or perhaps this more comprehensive treatment of information can help with another gap in the new information economics: the lack of progress with theory and empirical investigation of the demand for information. It has seemed possible to adopt the Lancastrian characteristics analysis to information but little has been done as yet. Efforts might be stimulated by a recent volume⁵ posing big questions about the rapid shifting of the boundary between humanity's manufactured and its flesh-and-blood bodily experience. Does it make a difference that information is acquired at a distance? Some observers think so. Jon Ippolito points out 'the messy philosophical and social problems that linger once the technological problems of global communication have been solved'. ⁶ Can this be the kind of challenge that will stimulate more new research on the demand for information?

I confess to a personal reason also for reading and reviewing this book. When Richard Taylor reviewed my book, *The Economics of Communication and Information*, he saw a 'grand unified theory' as a distant hope and dismissed efforts to create a taxonomy of information. He preferred 'a demand for a greater precision in articulation, and self-consciousness of the problem, among scholars in this field'.

He feared that in such a taxonomy 'nearly every example may be a "species" unto itself' but believed the information economics quest was 'a critical undertaking for anyone who has a sense that we are moving into an "information economy".

I hold to a different view. I see information economics as having advanced. We can now recognize that information economics is not so much an economics of a new information economy where everyone has a home computer and a mobile phone. Rather, for reasons that lie deep in our socio-economic and technological history, we are coming to understand that mainstream economics has never really had a central role for information. The consequences may be far-reaching.

The Quest for a Unified Theory of Information can help in this process, especially by challenging the notion that the Information Age is about 'IT'.

Notes and References

- 1. Sandra Braman, 'Defining information: an approach for policymakers', reprinted in D. M. Lamberton (ed.), The Economics of Communication and Information, Edward Elgar, Cheltenham, UK, 1996, pp. 3-12.
- 2. Fritz Machlup and Una Mansfield (eds), The Study of Information: Interdisciplinary Messages, Wiley, New York, 1983.
- 3. See a report of research by Peter Lyman and Hal Varian, 'Quantifying information: byte counters', The Economist, 21 October 2000, p. 108.
- As suggested by Norman Clark, 'Organization and information in the evolution of economic systems', in S. Metcalfe and P. Saviotti (eds), Evolutionary Theories of Economic and Technological Change: Present Status and Future Prospects, Harwood Academic, Reading, 1991, p. 102.
- 5. K. Goldberg (ed.), The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet, MIT Press, Cambridge, MA, 2000.
- 6. See the jacket, Goldberg, *Ibid*.
- 7. Prometheus, 16, 4, 1998, pp. 513-517.

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The Communication Superhighway: social and economic change in the digital age

Greg Hearn, Tom Mandeville and David Anthony

St Leonards, Australia, Allen and Unwin, 1998, xxvii + 212 pp., AU\$30.00, ISBN 1 86448 746 1

There are now many books on the market that deal with the broader impact of change in a networked or information society. The claim is made on the back cover of this book that it is the first Australian text to analyze the social and economic dimensions of the superhighway. Irrespective of whether this is true or not, this book makes a valuable contribution to our understanding of the enormous changes occurring in society due to the impact of new communications technology. The Australian emphasis in this book does not, however, detract from its international appeal. The issues that are dealt with and the way they are theoretically developed are sufficiently broad to make the book appealing to a truly international audience.

The structure of the book is in three parts. Part 1 (Chapters 1-4) lays the foundation for describing technological change. The authors' aim is to demystify the process of technological change and they do so, in part, by describing the changes that have occurred in the economy over the past several decades. They draw on long-wave theory to highlight new technologies and the importance of innovation in the information economy. Part 1 examines the communications superhighway from the perspective of an individual user and also reviews the range of social issues that may face this user. There is a valuable discussion in Chapter 2 of the tensions between using technological determinism or social constructivism theories that explain the relationship between technology and society. The limitations and advantages of both extremes are discussed and the authors foreshadow that they will pursue a multidisciplinary approach, which they feel is more revealing. Complexity theory is introduced and this resurfaces again in Part 3 of the book. Complexity is a scientific framework which is dedicated to explaining how complex systems change over time (p. 135). The benefits of complexity theory in explaining social change related to the communications superhighway are that it embraces indeterminacy, discontinuity and complicated interdependencies. These are all features that characterize the present predicament of the communications superhighway. The authors explain why they prefer a complexity theory approach:

The beauty of the technological determinist and social constructivist arguments is that they provide an elegant and simple starting point. Both the functional and ideological viewpoints are well accepted in argument. Their one-dimensional character however limits their ultimate utility. The challenge for a complex view is to build a long-term educative approach to the problem of technology deployment. An educative approach encompasses different interest groups and perspectives in a dialogue that may create a wiser, equitable and profitable use of technology in society (pp. 35–36).

Part 2 (Chapters 5 and 6) deals with impact. Here two areas of impact are developed: the world of work (organization) and consumption (buying and selling). These two areas are chosen since they are regarded as the most significant areas of impact. By discussing new technologies and their application, the authors paint a picture of how new ways of doing business are developing and sometimes overtaking traditional ways.

Part 3 (Chapters 7–9) is devoted to developing responses to the challenges of the communications superhighway. In these chapters, greater attention is devoted to complexity and its relevance to understanding new systems and learning. The final chapter is devoted to applying these insights to a policy framework, in which Australian policy problems are discussed.

Some of the most telling insights into the authors' thinking were contained in the Introduction (pp. xx-xxvii). There they declare what the book is about and what it is not about. This is all very revealing. For example, the term 'information superhighway' is only a partial vision—a concept under construction. What the book is about is 'that idea and alternative ideas about the same phenomenon, as much as it is about the current attempts to develop technologies which begin to approximate the idea' (p. xx). So technology is put in its place in this book. Likewise, 'communications superhighway' is preferred over 'information superhighway'. The reason is that 'the notion of information connotes static repositories

of data whose meaning is unproblematic. Instead we regard the emerging technologies as potentially moving us into a new era of information technology where the focus will be on communication—interactive and dynamic—and where the use of meaning of information is increasingly of central concern' (p. xxi). There are also some interesting remarks about the future in the Introduction. Since the communications superhighway is primarily an idea that shapes our expectation of the future, the emphasis in the book is not to predict future technologies but rather 'provide framework of understanding what these technologies might mean' (p. xxii). In short the book 'provides tools for understanding the communication superhighway that are interdependent of the exact features it will ultimately comprise' (p. xxiii).

While all the chapters in the book were interesting, Chapter 5 (The Communications Superhighway and Organizations) is worthy of special mention in the context of this journal. It is worth mentioning because this chapter expands on some of the ideas that have been well articulated in *Prometheus* over the years by Don Lamberton, Tom Mandeville and Stuart Macdonald. Anyone familiar with their work at the Information Research Unit at the University of Queensland in the early 1980s will instantly recognize the thematic development of the link between economics, information and organization developed not only in this chapter but others as well. There is much wisdom in this chapter.

Of all the themes in the book I found the complexity theme the most problematic. As a metaphor it is very powerful and certainly needed if we are to take the debate forward. The authors have done this very well and it is a credit to their ability that this unifying theme comes through so well. However, in reading the last chapter on the policy framework, I could not help feel that complexity had a tendency to be reified as a policy objective for its own sake. So we see that in order to be responsive to the innovative capacity of the system, 'opening the telecommunications regime to competition, including foreign competition, is essential to getting off the starting blocks towards the communications superhighway' (p. 166). The implication is that the good times will flow if we just pay attention to the needs of the system as it evolves. This all sounds like the neo-classical economist arguing that if we pursue efficiency to the limit we will all be better off. This criticism may be a little unfair on the authors since they do argue that 'vision and direction must be provided to set the agenda for specific issues around which self-organization will take place' (p. 164). Metaphors have to be kept in check, especially when making policy prescriptions. This perhaps brings me to my only real criticism of the book. There was not enough articulation by the authors of the social goals and values that constitute the 'good life' or 'happiness'. This lack was also reflected in a reticence about whose interests are being served by the communications superhighway and the role of power. More attention to these issues could have helped to put the complex systems metaphor a little in its place. It is hard to see that the policy prescriptions that may be good for Australia will do equally as well for say Indonesia or South Africa. Establishing conditions for happiness ought to be all embracing, and not just for a lucky few. While managing complex systems must be part of the process, questions of equity, power and control will not go away.

In sum, Hearn, Mandeville and Anthony have done an excellent job in throwing a unifying theme over the communications superhighway. The book is very easy to read and provides a wealth of information and useful references. It would be a good text for both undergraduates and postgraduates and is unlikely to date very

quickly because of its search for a long-term educative approach to technology deployment.

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Managing Knowledge: Critical Investigations of Work and Learning

Craig Pritchard, Richard Hull, Mike Chumer and Hugh Wilmott (Eds)

London, MacMillan, 2000, xxx + 255 pp., £18.99, ISBN 0-312-23363-9 (pbk)

This book is a collection of papers drawn from three different conferences, together with a symposium and a number of specially commissioned pieces. The introduction, written by Mike Churner, Richard Hull and Craig Prichard, explains that the collection aims to examine the emergence of knowledge management, as a theme within management discourse, by critically investigating aspects of knowledge work and management. The book discusses a number of reasons why knowledge management should have emerged as a focus for debate. The context they, I think correctly, highlight is the rising significance of Information Communication Technologies (ICTs) within modern organisations and a failure to capture knowledge by conventional means. Critical distance is developed from two dimensions; first, the use of empirical investigations to establish that knowledge management in practice does not do what knowledge management advocates say it does, and second, the utilisation of critical social theory. Foucault is central to much of the theorising, sometimes as hero sometimes as villain. There are brief walk-on parts for Marxism, feminism and reflexivity.

In the first paper, *Knowledge Managers: History and Challenges*, Clair McInerney and Darct LeFevre examine the tensions experienced by librarians, who are socialised into the sharing of knowledge, but faced with knowledge management practices that see knowledge as a commodity owned by management. They indicate that these tensions can be overcome and even managed. This is an interesting comment on the clash between professionals and organisations in the context of knowledge management, but I am not sure about its level of 'critical distance'.

Yakhlef and Morling in *Intellectual Capital: Managing by Numbers*, examine the emergence of accounting for intellectual capital. They argue, possibly as a means of conforming to the collection, that this is a subset of knowledge management, before moving on to their main focus of attempts to account for knowledge. They conclude that attempts to measure knowledge change behaviour; as, for example, in the way in which the Research Assessment Exercise changes attitudes to academic publishing.

Lyne Baxter's Bugged: the Software Development Process draws on a Science Technology Society framework to argue that Latour's Actor Network Theory enables an understanding of software development in the global company. Her contention is that software development, and any other technological development, should not be seen as a top down process, in which certain actors have power over others. Rather, it is a process of translation in which the momentum of development passes through many social actors who modify the direction and speed of change.

In Knowledge Management and the Conduct of Expert Labour, Richard Hull proposes that knowledge management should be seen as another case of expert labour. He argues that knowledge management has emerged as part of moves towards a knowledge society and from academia. In the latter case, academic influences include the rise of post-positivism and recognition that the processes by which we learn are driven by pre-conceptions. However, I seriously question the idea that academic discussions have a large impact on management. Although his discussion is interesting, I do not think that he achieves the task of relating the development of knowledge management practices to theories of expertise.

Hayes and Walsham's paper, Safe Enclaves, Political Enclaves and Knowledge Working, looks at the application of groupware in a company selling pharmaceuticals. This is preceded by a discussion of Foucault, but this does not appear relevant to their otherwise extremely interesting empirical evidence. In relation to this material, they argue that certain kinds of career-orientated sales reps used groupware in a political way, by posting information on bulletin boards and so on, to signal their presence and enthusiasm to senior managers; whereas other reps shared knowledge without engaging in overtly political behaviour. They refer to these different styles as political enclaves and safe enclaves. What Foucault would make of the idea of non-political safe enclaves is relatively easy to guess. Although the concept that orientations-to-work influence IT use and outcomes is helpful, the action perspective proposed by John Goldthorpe and others may be more relevant than Foucault.

Newell, Scarbourgh, Swan and Hislop's Intranets and Knowledge Management: De-Centred Technologies and the Limits of Technological Discourse continues the useful work of linking IT outcomes to organisational context. They make the useful point that Knowledge Management has emerged in the context of ICT developments where the provision of equipment has not led to expected gains. In the context of Intranet development, divisions within the organisation can be increased by knowledge management practices that are intended to have the opposite effect.

Alan McKinlay's *The Bearable Lightness of Control: Organisational Reflexivity and the Politics of Knowledge Management* visits, what he describes as, the wilder shores of Foucauldian scholarship. He combines a review of theory with a case study of a global pharmaceutical company. He considers the significance of creativity and is critical of the view that sees tacit knowledge as controllable. In any company, knowledge management practices have to recognise the significance of creativity and 'make control bearable' by recognising that certain things cannot be controlled.

The main thrust, in the context of this collection, of *Human Capital or Capitalising on Humanity? Knowledge, Skills and Competencies in Interactive Service work* by Paul Thompson, Chris Warhurst and George Callaghan is the rejection of the identification of service work with the stereotype of knowledge workers. They argue that most service work, even in person-to-person relations, is codified and regulated. They draw on studies of call centres and a survey of service work in Glasgow. This is a useful rejoinder to the tendency to over-emphasise the nature and extent of the new knowledge economy.

Dorothy Lander gives an autobiographical, or reflexive, account of her experiences as a contracts manager at a Canadian University in her paper *Re-Pairing Knowledge Worker and Service Worker: a Critical Autobiography of Stepping into the Shoes of My Other.* She argues that tacit knowledge is often unrecognised or regarded as unskilled and unrewarded. This is a useful point. She argues that much of women's

work remains tacit to avoid acknowledging its significance. Although the chapter contains effective points, I found the method of presentation distracting. The identification of the feminine as sharing and the masculine as commodifying is not related to the argument and the empirical material, even if it is plausible.

Deborah Jones in *Knowledge Workers 'R' Us: Academics, Practitioners, and 'Specific Intellectuals'* continues the reflexive vein by deliberating about the position of academic workers in the new knowledge economy. She elaborates the difficulty faced by critical management theorists of whether they are meant to offer practical advice or be critical. Her answer is to teach managers to reflect on their actions and for academics to reflect on what and how they teach and research.

Craig Pritchard's paper *Know, Learn and Share! The Knowledge Phenomena and the Construction of a Consumptive–Communicative Body* is theoretical and argues in favour of Foucault as the critical theorist to be used in studies of knowledge management and not Marx. He argues that the central concept to be used is power and not value. Consequently, the new knowledge society requires consumers of knowledge and knowledge management is part of the process by which these consumers of knowledge are brought into being.

The book's conclusion is in fact a paper, *Theorising Knowledge as Work: the Need for a 'Knowledge Theory of Value'*, by Roy Jacques along with a series of short discussion papers by each of the editors. Jacques argues for a knowledge theory of value. He sees Marx's conception of labour as an appropriate metaphor for understanding machine capitalism, but not for understanding knowledge capitalism. The editors are critical of his paper, mainly on the basis that he has misunderstood Marx's conception of labour.

Most of the papers in this book are interesting, but I have a number of reservations. While acknowledging that the collapse of academic Marxism makes it difficult to find a critical perspective, too many of the papers use Foucault in an uncritical, unreflexive and frankly irrelevant way. With regard to editorial policy: is the book intended to present a coherent story or not? Saying that the book is principally about the knowledge management phenomena seems to be engaging in the hype about which they are so critical. It is true that all the papers are about knowledge and about management, but a lot of the papers are not about the knowledge management phenomena. The editors have pre-empted this by inviting readers to appreciate that knowledge and its management have to be grasped pluralistically. This position does not sit well with Yakhlef and Saltzer-Morling's criticism of the incoherence of management thinking on knowledge. Also, whilst recognising that pluralism may be valid, it is somewhat disconcerting to have one of the editors, Richard Hull, in the conclusion dismissing the dichotomy explicit/ tacit knowledge as inherently contradictory whilst several of the contributors, for example Newell et al., Lander, give the distinction a central place.

There is also a difficulty with the critical thinking advocated by the book and a reluctance to develop alternative ways of discussing knowledge and management. In the Introduction, the editors state that it would be interesting to see what kind of knowledge management would emerge if knowledge was seen as liberating, creative and rebellious in the style of Paolo Freire. Although Jacques' paper at the end of the collection is intended to take the place of a conclusion, it does not relate to many issues raised in the rest of the book.

I think the book raises many interesting points and presents fascinating empirical material. My reservations lie with the extent to which it presents a coherent story and the lack of a critical stance based on alternatives to knowledge

management phenomena. This said, the book includes excellent contributions that point to ways in which a new knowledge management may be constructed.

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Women in Management: Current Research Issues, Volume II

Marilyn J. Davison and Ronald J. Burke (Eds)

London, Sage Publications, 2000, ix + 309 pp., £17.99, ISBN 0-7619-6603

I was pleased when asked to review this book as I am about to return to this research area, but must admit also to slight feelings of cynicism. Such a title can disguise the type of edited collection which consists of a miscellany of articles, some of which vaguely connect with its title theme, the type of book that you impulse buy in the bookshop but which sits on your shelves peacefully undisturbed as you can rarely find a use for most of its contents. I am pleased to report that this is definitely not such a book. All the articles are well worth reading, and the related themes around which they are organised provide a plausible structure. Further strengths of the book are that all the chapters are new, and its contributors are international in nature, although all hail from the developed world, as might be expected given the topic.

Part 1 is entitled 'Women Managers and Entrepreneurs: A Global Perspective'. A perceptive review and analysis of the European situation for women managers by Susan Vinnicombe (UK) makes a strong start. She sets out her stall in the first sentence, 'twenty years after the EU adopted equal opportunity laws, European management is still a man's enclave' and goes on to support this contention with a carefully researched, non-polemical review of the situation. This is valuable factual information for anyone still trying to persuade the unconvinced that there is a problem. Mattis (US), plus Richardsen (Norway) and Burke (Canada) in later chapters are generally more optimistic about the position of younger women entrepreneurs in their respective countries. The latter authors conclude that the economic power of woman-led small firms is an important area of research worldwide.

In Part 2, the theme of career development focuses on high fliers and behaviour such as leadership, the gender-related aspects of which are inherently controversial. Here, after a review of research on 'gender differences in managerial behaviour and effectiveness', Vinkenburg, Jansen and Koopman (Netherlands) conclude that there are few consistent gender differences in what they call feminine leadership. Despite the bland conclusion, this chapter contains some interesting results. This section also covers networking in different cultures, with some fascinating findings from Travers and Pemberton (UK) whose studies of women networkers identified groups they named 'assertive Americans', 'bashful Brits' and 'sociable Spaniards'. The chapter by Bilimoria and Wheeler (US) is particularly strong on the methodological problems of producing academic research on women corporate directors which can 'substantively generate useful implications for practice, increase corporate awareness, and catalyse positive change'. They make many constructive suggestions on how this can be achieved. White (UK) tackles

methodological issues by looking at the difficult issues involved in defining success for women managers, and then calling on quite old models of developmental career stages, which I was surprised to see still going strong, but which she and others have adapted for women. As this author does perhaps begin to acknowledge at the end of her piece, such an approach neglects the modern idea of a portfolio career in which knowledge workers' jobs change continuously, enabling and indeed requiring 'successful' individual managers, whether female or male, to improve their skills frequently through lifelong learning, while constantly renegotiating their work–life balances by becoming consultants or entrepreneurs, or taking very early retirement or career breaks.

Perhaps the most controversial, and in many ways the most interesting section is on occupational stress and black and ethnic minority issues as they affect women in management. I must admit to not being totally familiar with these issues, which are clearly part of an important growth area. They provide some of the most readable yet scholarly and thought-provoking chapters of the book. 'Refracted Lives: sources of disconnection between black and white women', describes Bell and Nkomo's (US) memorable paired study of black and white professional women. Their life history extracts vividly illustrate how class, race and gender affect the life experiences of professional women in profoundly different ways according to their starting points, and raise significant but uncomfortable questions about why women managers from different racial and class backgrounds do not always find it easy to understand and support each other.

Finally the look at future organizational and government initiatives is the most mixed and least cohesive set of chapters. Here the majority of authors are male: perhaps they prefer to work on policies? First Powell (US) undertakes an unusual task for a male academic in producing a review of reviews of glass ceiling research, intriguingly entitled 'Explaining the good and bad news'. The good news is the increase in women managers, while the bad news is the continuation of the glass ceiling preventing their ascent to the most senior positions in any substantial quantities. Cassell (UK) writes of the need to systematically evaluate programmes based on the diversity approach. Her pleas really belong with Bilimoria's earlier chapter on producing sound research that can catalyse change. Next is a very different, rather abstract theoretical article by Hearn and Collinson on getting men (re)involved in studies of gender and organizational analysis. This one is well worth the effort of digesting its language for those of us in mainstream management who do not engage regularly with such notions as 'hegemonic masculinities'. Rather lamely, this is followed by Hede's (Australia) dispiriting news on Aussie affirmative action programmes. The book ends with Cary Cooper's short chapter on the future impact on women managers of the short term contract culture, a topic rather neglected by earlier writers. Although Cooper tells us at one point that 'the future is female in the workplace', he points out the dangers inherent in any assumption by employers that women are the ideal flexible employees.

Having read this book you will be in no doubt that the glass ceiling still exists, despite progress, and you may feel, like me, that Volume 1 (published in 1994) should be worth a look. The main criticism of the present volume is that the rapid pace of change in organizations and their information and communications technologies is not really articulated in terms of possible effects on the success of female managers in breaking through the glass ceiling. What difference will it make if plenty of dot.coms started on shoestrings thrive in the medium- to long-term? Will women work differently from men in virtual organizations where much

communication is electronic? Will women managers be willing to update themselves regularly and try new roles? Will these scenarios (and many others not yet thought of) provide extra opportunities? None of these topics are addressed, and they could have justified at least one chapter. But the book has many strengths. Suitable for interested postgraduates or indeed any academic who is planning related research projects or teaching, this Anglo Canadian editorial collaboration genuinely covers a wide range of issues related to its title. It is academic, in that it is well written and extensively referenced, so it is no airport book, but it is certainly readable. Not to be read in one sitting, but well worth exploring in depth and deserving of a place on many people's bookshelves. A serious book on a serious subject, it will obviously attract many women academics, not only those from business faculties, but it will be a great pity if their male counterparts do not investigate its relevance to their teaching and research interests.

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