Reworking the World: Organisations, Technologies, and Cultures in Comparative Perspective *edited by Jane Marceau* (Walter de Gruyter, Berlin, 1992), pp. x+514, ISBN 3-11-013158-7.

Reworking the World, at first glance, appears a rather ambitious title for a book. But it is not that this book seeks to 'rework' the world, rather, it is *about* the world being reworked through the intersection of new technologies, changing organisational structures and innovative products and processes.

This 500 page volume is built around a collection of 18 papers presented to the Third International Colloquium of Asian and Pacific Researchers in Organisational Studies (APROS) held in Australia in 1989. Like many books prepared from conference proceedings, the focus of the book is broad - in the present case dauntingly so - making the title particularly apt. The collection of edited papers, however, is arranged into five principle sections with introductions to each; this arrangement together with the overall introduction by Jane Marceau provides the road-map through which the central themes in the collection can be followed, explored and considered. Each chapter describes a particular technological and organisational transformation taking place, at different levels, in a range of different countries in Europe, Asia and the Pacific.

The five sections begin with an introductory theoretical discussion ('Re-Analysing the World'), followed by a group of papers emphasising the increasing diffusion of products and production processes between the East and the West. A core argument developed in this first section is that the very breadth and scope of the changes described through the volume require a reassessment and change in the analytical perspectives that seek to understand them. This theme concerns the shift in boundaries between theoretical and methodological approaches, a 'reworking' of the disciplines themselves. All in all, the 'reworking' emerges as 'post-modern' in both scope and theory.

The second section ('Learning from the East') extends the logic of this position to an exploration of the cultural and technological adaptation taking place between (broadly speaking) the East and the West (and to a lesser extent between the 'North' and the 'South'). This makes more explicit the theme that although a multitude of paths to industrialisation have developed successfully, other than by simply following any particular (Western or 'scientific') model as in an earlier period, it is by looking to the East that many have been attempting to find the foundation for models to replace older versions. This broad historical reversal seems to point to a paradox perhaps under-explored, since the major emphasis in the book is the demonstrated lack of successful business 'recipes'.

The two sections that follow expand the theme of change and cultural adaptation into the wider organisational structures that make production possible. 'Technological Innovation: The Search for Control' deals with the management strategies in organisations and the struggle and counter-struggle for control over the production process *within* firms through strategies ranging from quality control to organisation restructuring. This is followed by a section that deals with the reorganisation of technology and production and the struggle for control *between* firms, through takeovers, mergers and the formation of inter-firm clashes and alliances ('Innovation and Disillusion: Firms at the Leading Edge'). These two sections provide the core and perhaps most interesting contributions because the chapters draw together the analysis of organisational cultures and structures into a broader debate about culture, power and control. As Palmer and Allan point out in their chapter on 'Quality Management', this is very much about the reorganisation of the means to gain/maintain control of both the material and social aspects of the production process. Thus the debate is not just about organisational adaptation to changing technological and economic environments but also

about organisational attempts to manipulate and maintain control *through* change.

The fifth section ('Reworking the World of Work') shifts the focus from the boundaries between firms and returns to the action and organisational forms within the 'world of work'. Five chapters in this section deal with boundaries and allegiances in industrial arrangements and agreements, and the different ways that industrial arrangements can set in place or reinforce technological trajectories. Cases as diverse as the familiar 'Volvo Experience', where production and industrial change was 'piecemeal and patchy' (p. 399) as Sandkill describes it, and the re-classification of job description in the Australian Public Service which rapidly and radically altered both the structure and the culture of 'Australia's largest firm' (p. 442), offer quite different perspectives on the section's general theme of practices and politics in the 'reworking' of the workplace.

The combination of empirical descriptions through the volume flow from the work of the humble artisan breadmaker, through small and medium sized firms and on to the 'search and destroy' tactics of some highly competitive international corporations engaged in takeover warfare. They present a perspective that emphasises the volatile structural shift in boundaries between firms and the organisational and cultural difference inherent in new and emerging organisational forms. The general introduction, the introductions to the sections and conclusions to the volume as a whole, provide an overall focus that is maintained and rescues the book from becoming a disparate collection of interesting essays on organisations and change. The reluctant reader can address the central issues to the book with only the occasional dip into the core papers. This is perhaps one of its strengths as it is an eminently readable book that provides a wide range of perspectives that stand alone as valuable source material for students of a variety of fields including management, sociology, economics, industrial relations and innovation (thus emphasising another shift in 'organising' boundaries). Through the chapters and editorial commentary there is an embedded critique of a range of theoretical and methodological perspectives. Unfortunately, however, the book's value as a text for students is somewhat tempered by a rather limited index.

The book can be read at two levels. First, it has a central task to describe and raise questions about the social boundaries throughout the world and the process of cultural adaptation. Is there a world 'order' or 'trajectory' that is emerging through the introduction of new technologies and their adoption? How can we integrate an analysis of change that takes into account the diversity of change in institutions, in the structures of the productive system itself and within nations? These changes are described within organisations, between organisations, between sectors, between technology and the organising structures in society and between nations. In this sense the book is ultimately a description if not a celebration of difference: the 'transience' of different organisational forms and their capacity to re-emerge in new and adaptive cultural forms. The reader is told in the introduction: "Convergence [assimiliation], however, is never complete and adoption of the particular technologies and organisational forms is mediated by cultures and strong social forces" (p. 17). This theme is pursued further through the introductions to each section and the conclusions that follows; it is in this sense also a celebration of *multi*culturalism.

Secondly, the book can be read simply as a collection of essays on changes that can be observed through the intersection of technology, culture and social action. Each provides a somewhat different perspective but essentially they all deal with the intersection of technology and organisations in various cultural settings. The inclusion of an Asian perspective (other than from Japan) is particularly important in the Australian context because it provides a backdrop to the current 'reworking' of Australia's own cultural adaptation to the region. Although the breadth of cultural and political differences between the countries discussed make the comparative task difficult, this is an important role in itself. These contributions suggest that the changes are part of a process that has been going on for some time,

but collectively do not quite come to grips with the question of whether the described re-working of the world is part of a continuum, or a transformation unique to our own particu-lar present.

Rather, the volume consistently raises these key questions: is there a paradigmatic shift, embedded in new technologies, toward a new world organisational trajectory; and, what are the shaping forces and cultural imperatives for organisational outcomes? These questions have a decided Bourdieuian ring to them and by their sheer complexity, present a daunting challenge. As Marceau points out:

The shapes of productive organisations will continue to be influenced and constrained by cultural factors, by greater or lesser degrees of technological advancement, lag or superior-ity, by differing local, national and international inter-organisational patterns in the distribu-tion of power, including the relative power of capital and labour, and by the activities of public instances, including states, regional and local governments (p. 465).

Ultimately these questions remain to be answered, but *Reworking the World*, provides plenty of food for thought.

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Management of Technological Change: Context and Case Studies *edited by Gerhard Rosegger* (Elsevier Advanced Technology, Oxford, 1991) pp. 190, ISBN 1856170764.

The complexity of the innovation process suggests that inter-disciplinary approaches could be a fruitful track towards its potential understanding. This excellent collection of repre-sentatives interdisciplinary papers from the journal *Technovation* is illustrative. The book is presented in three sections - the first deals with some broad aspects of the process of techno-logical change; the second covers issues in the management of technology, primarily at the firm level; while the third section provides some interestng case studies.

Papers in Section I illustrate and support the view that technology is endogenous within the socio-economic system. Rothwell and Wissema explicity examine the role of socio-cultural and institutional factors in the innovation process, and draw some conclusions for the role of government in shaping institutions conducive to innovation. In their view, the phenoma of technological discontinuities are said to arise because mutually reinforcing tech-nological clusters take time to mesh. Ayres' paper takes up the theme of technological life cycles and discontinuities from a different angle. He argues that technological discontinuities arise from discontinuities in the laws of nature which in turn create barriers to technical progress as well as opportunities for major breakthroughs. These two papers thus present an interesting contrast between social and physical scientists' perspectives on the same phe-nomenon.

De Gregori's paper attacks the limits to growth hypotheses based on natural resource constraints by arguing that resources are defined by the existing state of knowledge. This paper was written in 1985. Since then, global concerns over resource constraints may be fading, to be replaced by growing concern over the capacity of the planetary ecosystem to cope with the massive changes wrought by 20th century industrialisation such as large in-