great strides toward this end. Others barely pay lip service to the idea. The reader is left with the impression that the authors could not decide among themselves what exactly the book should be.

The book's strength as a vehicle for establishing a mediating discourse could have been greatly improved by providing a more careful and comprehensive inspection of the core beliefs and assumptions underwriting the modernist and postmodernist perspectives. Other writers have done so and concluded that the ontological, epistemological, and methodological premises of each are simply too divergent to permit any sort of paradigmatic unity (for example, see Burrell and Morgan, 1979). The contributors to *Rethinking Organization* contend that forging "mediating links" need not result in the "emasculation" of nascent paradigms and seek to prove their point by focusing on ideology instead. This approach is refreshing and well taken, but it does not relieve the authors of the burden of illustrating that such links are possible at all levels of understanding. A more convincing argument could be made by a systematic comparison of these links throughout the various chapters.

Overall, the book's conciliatory stance made it unusual and interesting reading. Perhaps more interesting will be the response it receives from each camp. The course of action suggested by the authors requires both to take a long, hard look at themselves as well as their scholarly opponents, and one must wonder whether the dominant forces in organization science are ready to engage in the necessary soul-searching. In the meantime, this work challenges all of us to look beyond our own preconceptions and join the search for common points of interest.

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The Strategic Management of Technological Innovation.
Ray Loveridge and Martyn Pitt, eds. Somerset, NJ: Wiley, 1990. 404 pp. $95.00.

This book brings together a broad variety of papers that address the need to incorporate technology into theories of strategic management. Because technology and strategy are two concepts that are, at best, broadly defined and, at worst, little understood, it is an onerous task to attempt to package 15 papers on the strategic management of technological innovation into one cogent volume. Although this book raises more questions than it answers, Loveridge

and Pitt succeed in delivering to the reader a solid conceptual understanding of how technology and strategy relate.

A distinctive quality of this volume is the explicit focus on the dynamics of the interaction between strategy and technology. Strategies are recognized as emergent, and firms are analyzed in the context of their evolving environments. Many of the papers marry empirical findings and theory to capture the nuances of the technology-strategy relationship. The fifteen papers are grouped under three headings, (1) strategies in context, (2) structures, boundaries, and alliances, and (3) crisis, learning, and adaptation.

The first five chapters evaluate the effectiveness of technology strategies used by a cross-section of French, Belgian, and British companies. The chapters by Calori and by Moenaert et al. discuss possible strategies for firms that want to delve into new technological areas. Calori uses two case studies to broadly outline the strategic options firms have for entering emerging industries. Moenaert et al. outline a preliminary model of the important factors for internalizing new technology into existing organizations. These chapters lay down conceptual groundwork that will be of interest only to scholars new to the fields of technology and strategy.

The chapters by Carr and Senker critique Porter's (1980) strategy framework for its lack of emphasis on technological content. Carr demonstrates that technological innovations may be sources of sustainable competitive advantage. Senker contends that technological strategy must be thought of in the long term, because it depends on cumulative technological knowledge. The chapter by Loveridge proposes that long-lasting innovative firms accumulate technological knowledge by continuously refining their knowledge of their initial expertise and developing competences in new areas. Poor integration of data and theory hinders Loveridge's attempt to support this argument with two firm histories. The concepts introduced in this first section of the book are quite basic, but they serve a useful dual purpose—strategy and technology scholars will both become more informed about the other.

The second of five papers address where firms choose to draw their boundaries, given that they want to control as much technological knowledge as possible. The chapter by Freeman and Barley is a lucid and informative synthesis of population ecology theory and social network theory that yields an analytical approach that is potentially a powerful means of explaining organizational strategy. Their preliminary data, from the U.S. biotechnology community, illustrates the significance of interorganizational resource flows in defining niches, which are in turn associated with particular strategies. The theoretical development in this chapter is well worth reading for organizational strategy scholars.

Saren is similarly interested in modifying strategy theory to reflect the interdependence of organizations. This chapter argues that collaborative prospects, in addition to competitive ones, should be considered in decisions about

future technology. Clark and DeBresson stress the importance of collaboration as a means to balance the competing demands of innovation and efficiency. They propose that firms participate in collaborative networks structured around innovation poles from which participants appropriate the benefits of technological innovation. Although the concept of innovative poles needs sharpening, this chapter provides a significant contribution in its clarification and extension of Utterback and Abernathy's (1975) model. The chapters by Koenig and Thietart and by Whittington are less successful in achieving a balanced integration of theory and pragmatics. Koenig and Thietart discuss a specific form of collaboration, the mutual organization, yet they provide little theoretical development that details what is distinctive about mutual organizations and why this particular form of collaboration might be better than others in different contexts. Whittington tells an interesting story of the decentralization of R&D laboratories in the U.K., but the story lacks theoretical grounding to convince the reader that it is more than just one of a number of possible explanations.

The final group of papers focuses on organizational change and the emergent nature of strategy. The explicit adaptive-learning orientation of this section is distinctive and is refreshing in a text on the strategic management of technology. The chapter by Pitt is an insightful analysis of how strategic technologically oriented transformations can be managed proactively and adaptively, while it recognizes that managers are never fully in control of fundamental organizational change. Clarke and Thomas present a contrasting perspective that highlights the constraints imposed on the decision-making capacity of managers by firm-specific culture and competencies. These two chapters are distinctive in their emphasis on the importance of understanding intrafirm processes for strategic management of technology.

Child and Smith's chapter, which appeared previously in 1987, is an unlikely fit with this volume. It is not clear how the description of Cadbury Ltd.'s transformation is relevant to scholars of technological innovation or strategy. Chapters by Jones and Loveridge consider the adoption of new technology by organizations more pragmatically than the earlier chapters by Calori and by Moenaert et al. on the same subject. Jones argues convincingly that the potential of a new technology is only fully realized when work roles are correspondingly altered. Loveridge's chapter is a well-crafted blend of empirical results from a study of the implementation of micro-electronics in several industries with the theoretical development of a managerial learning model of the introduction of a new technology into organizations.

This book provides a thorough explanation of the conceptual role of technology as a long-term strategic variable. The analyses of the effect on technology strategy of the interdependence of organizations are particularly insightful. The latter section of the book's concentration on adaptive within-firm processes that are needed for successful strategic technology transformations reflects an important

new direction in strategy-technology research. The need to adopt an adaptive-learning perspective is a central theme of this book.

The emphasis on adaptive learning is overdue, but the concentration on the process of strategic technologically oriented changes is premature. It is impossible to envision how this conceptual process manifests itself in actual management decisions when the concept of technology strategy is so poorly understood. A better understanding of the criteria that define technology strategy at the firm level is needed before the insightful concepts in this book can be applied. This book is an important step in the development of a lasting bond between technology and strategy theory. The onus is on future researchers to investigate the mechanics of this relationship to ensure that it becomes a viable marriage.

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Becoming a Manager: Mastery of a New Identity.
Linda A. Hill. Cambridge, MA: Harvard Business School Press, 1992. 331 pp. $22.95.

This book follows 19 newly appointed front-line managers in their first year on the job. It describes how bewilderingly difficult it is for people who were previously highly successful individual performers to assume managerial responsibilities. It details their initial expectations, their subsequent frustrations, and their changing views of themselves and their jobs as they confront the realities of managerial work. Ten of the managers work in a securities firm and the other nine in a computer company.

Hill bases her tale of the first-year journey of these managers on extensive fieldwork. She invested twelve days, on average, collecting data on each manager. Her effort included spending three to four days with each manager during her or his first month on the job, making follow-up visits about every four months, and conducting telephone interviews between visits. During her visits, in addition to interviewing the managers, she shadowed them through their workday and conducted interviews with their subordinates and superiors. Her research resulted in over 2,000 pages of transcriptions and field notes. Hill's account of the experiences and feelings of the new managers is told in their own words, which makes the book come alive and feel real.