mention of them is made throughout the rest of the book. In all, the book would be undoubtedly useful as a reference book.

Examples of parallel algorithms are presented in Modula-P and Parallaxis for synchronous and asynchronous programming respectively. The interested student can obtain a free copy of the compilers and simulation systems as well as a Petri net simulation tool via ftp to experiment with. The book also includes exercises and a supplementary booklet with solutions is available from the publisher.

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KATHY SPURR, PAUL LAYZELL, LESLIE JENNISON and NEIL RICHARDS (Eds)
Software Assistance for Business Re-Engineering. John Wiley, 1993, £26.95, 224 pp., hardbound, ISBN 0 471 94240 5

This book comprises the papers presented at the British Computer Society CASE specialist group seminar of 29th June 1993. Like all conference proceedings, it is a curate's egg. Business (Process) (Re-)engineering—its practitioners cannot agree on its syntax, let alone its semantics—takes up the baton of corporate data base and enterprise analysis. Not that B(P)(R)E is confined to IT, of course: it encompasses the entire enterprise and subsumes total quality management. It is nothing, many of the contributors tell us, if not holistic (so there's goodness for you).

Between three papers of introduction to the subject and two that address how the approach can be made to work, come six on proprietary methods and tools. However, the best introduction is probably the final paper, by Linda Hickman. The six central papers are much what we would expect: generally well written, with enough information to tempt and tease, but not enough to allow the reader any real understanding. They are, in a word, exercises in selling, some more blatant than others. One contributor lists seven selection criteria for process modelling tools and concludes: *Few process modelling tools in present use match up to these demanding requirements. The remainder of this paper discusses one tool ... which scores highly under every one of the issues discussed above.* Surprise surprise. The products range from mundane, but probably useful, tools for recording process analyses, to a process simulator that is object oriented (of course) and AI-based: just the sort of tool you would trust in a fundamental remodelling of your entire business.

The first of the selling exercises, by Julian Watts, briefly mentions the option of piecemeal process engineering—which cautious souls might favour—and gives a good account of the analysis of value streams (value-adding sequences of processes). Chris Haynes' introductory paper, the third and shortest, describes a somewhat different and rather promising value-based approach. But such nuggets are small, and few, and far between; the subject is new, its notions vague, and some of its verbiage makes one think that re-engineering has been applied to our mother tongue. Skip straight to Haynes' paper to avoid: *in the onrushing face of change ... Business Process Redesign as a concept is contained within the overall domain of change ... All this adds up to mean that the change is transformational ... New ways of working mean a change to the status quo ... rollout is the formal implementation and institutionalization of the innovation within the organizational mainstream.*

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NADA LAVRAČ and SAŠO DŽEROSKI
Inductive Logic Programming. Ellis Horwood, 1994, £39.95, 293 pp., hardbound, ISBN 0 13 45870 8

Inductive Logic Programming (ILP) combines techniques drawn from inductive machine learning and logic programming with the principle aim of designing programs that generate (or induce) a set of general rules (clauses) from a given set of observations (facts). ILP also offers a rigorous and well-understood theoretical foundation and encouraging practical results when applied to real-world domain problems. Examples of applications include, automated knowledge acquisition inductive program synthesis and knowledge discovery in databases.

ILP splits into empirical and interactive approaches. Empirical ILP is used where numerous examples of a single concept and comprehensive background knowledge are available to the user; in contrast, interactive ILP covers cases where multiple concepts need to be acquired and where little background knowledge is available. This book concentrates on the former approach. In use empirical ILP assumes (i) a set of stipulated facts covering both positive and negative cases involving some unknown predicate in question, (ii) a description language which specifies syntactic restrictions on the target predicate, and (iii) background knowledge defining other predicates used to describe the domain and which are related to the target predicate. The goal is to find a set of clauses yielding a definition for the target predicate which accounts for the input stipulated facts and background knowledge.

The book is divided into four well-balanced parts: Part 1 introduces ILP; Part 2 is a detailed description of empirical ILP techniques and systems used; Part 3 considers the problem posed when using imperfect data; and Part 4 is an overview of ILP applications.

The authors draw upon years of research into theoretical and practical work on machine learning and qualitative modelling in an ILP framework. This integration works well in a book of this nature. As with any relatively new subject, material normally found in confer-

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