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Book Reviews

D. MILLINGTON
Systems Analysis and Design for Computer Applications
Wiley, Chichester, 1981. 224 pp. £16.50.

The stated aim of the book is to meet the need for a sound introduction to the work of systems development with an intended readership including all students of computer science, business studies, management courses and computer programmers considering a career in systems analysis. Part 1, entitled Principles, is a 'general review of the tasks and nature of systems analysis'. Part 2 deals with a range of tools and techniques required for system development, and covers some topics such as fact finding and user participation in rather more detail than Part 1.

The book gives a useful introduction to conventional and established approaches to systems analysis. Each chapter has a useful list of references which are effectively used in the text. The chapter in Part 2 dealing with a hierarchically structured charting technique is illustrated by reference to an example system which is valuable although more use could have been made of this idea perhaps as an appendix illustrating the use of documentation at all stages of the project life cycle.

A major criticism of this, as of most books on system development, is that the section on planning assumes the linear development strategy and makes no mention of any alternatives such as the prototype strategy. Furthermore, while it is always a difficult balance to strike in an introductory work, I think that this book is a little short on the newer approaches to this subject (many of which are well established in other fields where development is important) such as quality assurance in its widest sense.

There is no glossary of terms, which one would normally expect in an introductory book, although to be fair the author takes care to explain terms when they occur in the text.

On balance I believe that this book achieves its stated purpose but at £16.50 it is rather expensive.

J. BRITTAN
Chertsey

JAMES MARTIN
Telematic Society
Prentice-Hall, Englewood Cliffs, New Jersey, 1981. 244 pp. £9.70.

I found this a book full of facts, figures and lists of possibilities/alternatives but lacking any interesting anecdotes and no attempt to place the technological data in any personal, historical or philosophical perspective. If we are to be able to choose whether we want a Telematic Society or not, then the options and the consequences have to be presented in a more attractive way than this indigestible lump. Incidentally we are informed, on the dust cover, that the book is 'mandatory reading for all Civil Servants' working with the Thatcher Government—serves them right.

The theme of the book is that cheap energy is running out and the way that we might prevail (let alone endure) is to create a 'wired society' in which we can all (and that seems to include computers) play, get educated, earn a living, make a fortune, etc. via links through television and satellites—all this without moving out of our houses. Just imagine how wonderful it will be—10 tons of sand in the living room, turn on the sun lamps and the holographic wall display and you're on holiday by the Mediterranean AND there is no pollution—nobody can afford to actually travel there anymore.

The book has no such ironic imagination. Another example—we are told that cars are obsolescent (which seems true enough) and that we will be able to work shorter, more efficient hours at home (via remote visual links) and retire earlier. Yet we are told that one use of our home-based visual link will be to select a second-hand car and one thing we might buy with our early retirement/redundancy payment is a motel. Mr Martin, like computers, deals with facts not contradictions.

However, back to our Civil Servants and their advisors. In the New Scientist (1 April 1982) there was a report that the Japanese intend to launch a manned communications satellite to replace their earth-bound telephone network—this was described as a blow particularly to the British (civil-service approved) cable network proposal—'Once again the Japanese have leapfrogged the rest of the world' said an expert on the Cabinet's Advisory Panel (who has probably read the book as well). However, does this expert really believe that the Japanese are going to put all their communication eggs in one vulnerable basket? 'I'm sorry sir, we can't ask Japan to surrender because we've just destroyed all their satellites.'

A. G. BELL
Sheffield

P. CALINGAERT
Operating System Elements—A User Perspective
Prentice-Hall, Englewood Cliffs, New Jersey, 1982. 240 pp. £17.95.

The author emphasizes resource management as the central function, and takes pains to distinguish management policies from the mechanisms used to implement them. The focus is on principles rather than on example systems, the approach is descriptive rather than analytic and practical rather than formal. This book is designed for third and fourth year undergraduates who wish to know what an operating system does rather than how to design one. Any other reader who knows something of hardware structure and is familiar with queues and stacks, and with reading ALGOL, will find this book helpful. Queueing theory is left entirely to the short description of books for further study that follows each chapter. These cover European and American sources up to 1980. Most chapters are followed by a set of exercises to stimulate deeper thought on the material. The book does not cover computer networks because communication subsystems need to be studied first. Their influence on control programs makes this essential.

The book is well produced and clearly laid out and is strongly recommended. Unfortunately its price will tend to discourage students from purchasing their own copy.

P. GILES
Stirling