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## Book Reviews

Continued from p. 396

R. S. HAYES AND C. R. BAKER  
**Simplified Accounting for the Computer Industry**  
Wiley, Chichester, 1981. 191 pp. £15.95.

The title of this book suggests a textbook capable of educating computer personnel only in the art of accounting principles. It certainly achieves this objective and indeed it also provides a valuable insight for the accountant on how the computer professional will design and implement a computer system. There is a great deal of information describing how the system designer goes about his job or how he should do so. How often we find the analyst to be a raw recruit learning his trade at the expense of others. The method of presenting the information is a refreshingly new approach to loading the human computer with facts. The book starts like any Ian Fleming novel. 'You could feel the sun, but it was not hot. The sky was the blue of lapis lazuli. Kimberly Rogers sat in the garden looking at its reflection in a pool of water . . .'. And if that is not enough to get any male accountant or systems analyst interested, it turns out that Kimberly is attractive, sophisticated and black and she has a passion . . . for knowledge. The story centres around the implementation of a computerized accounting system for Hero Manufacturing by Kimberly and her Egyptian boyfriend who is an accountant. Chapter by chapter she tells us how she approaches each assignment and then provides accounting details and principles of implementing such a system. It is interesting to note that the implied hardware is a mini or micro on-line system and not the expensive monster of the past. In order to provide the necessary accounting principles to back-up the computerized systems, Kimberly's boyfriend gives a series of lectures which are well-presented and easy to follow, and like any good lecturer allows time for questions at the end and a summary. The book explains the accounting terms to the computer man and computer terms to the accountant in a manner that will make the reader want to go on the next chapter like the storyteller in her search for knowledge. I believe this book will be invaluable to systems analysts and accountants who wish to know more about their brothers' skills.

T. M. BARNARD  
London

A. S. TANENBAUM  
**Computer Networks**  
Prentice-Hall, Englewood Cliffs, New Jersey, 1981. 517 pp. £18.20.

There is an ambiguity in the title of this book—is it a book about networks *for* computers, i.e. a book about data transmission networks? Or is it a book about networks *of* computers, that is a book about a collection of linked machines forming a distributed system? One suspects that the ambiguity may be deliberate. In any event, the book treats both aspects, although the principal emphasis is on data transmission networks, realized of course as a network of computers. The later chapters touch on the systems aspects of distributed systems, but cannot be regarded as a full treatment of the subject.

The main body of the material is a thorough treatment of the current situation on data transmission, based on the notions of the 150 'seven layer' system. This naturally, and properly, forces a highly structured approach to the subject, and the author uses this structure to map three major networking systems, the ARPA net, IBM's SNA, and Digital's DEC-NET on to the 150 model. As is cheerfully admitted, this mapping is at some points a little strained. Within this framework, the emphasis is on wide area networks, operating over noisy lines of limited bandwidth and high recurrent cost, but again with one chapter dealing with the rather different problems encountered for local area networks, especially those using Aloha-type broadcasting. For UK readers, the rather cursory treatment of ring-based systems may be rather disappointing.

Overall this book presents a well-balanced treatment of its subject area—I enjoyed reading it, and hope that my own students will find it as enjoyable when I recommend it to them.

M. WELLS  
Leeds

GIJSBERT VAN DER LINDEN (ED.)  
**APL80**  
North-Holland, Amsterdam, 1980. 370 pp. \$48.75.

This book is a 'must' for the devotees of APL. It consists of papers presented at an international conference on APL held in June 1980 in the Netherlands. After an introductory paper

by Iverson himself the remaining papers are grouped under the headings: Use of language, Methodology, Simulation, APL systems, Programming techniques, Design of language, Application, Database applications, Education, Data analysis and Special topics and also included are a handful of papers by invited speakers.

The reviewer has always been suspicious of APL enthusiasts about the use of APL in business computing, largely on the grounds that a key element in business data processing is the detection and handling of input errors, a topic which few APL specialists have seemed to find interesting. It was therefore salutary to find two papers (Mayforth on 'APL as a language for applications programmers' and Gardner and Swain on 'A group of input utility functions') specifically addressing this problem. My guess is that almost everyone with a knowledge of APL will find something of interest in this book.

P. G. RAYMONT  
Manchester

PATRICK D. T. O'CONNOR  
**Practical Reliability Engineering**  
Heyden, London, 1981. 300 pp. £12.00.

The area of the many aspects of reliability is hazy for many computer professionals and yet is one of which we are all going to become increasingly aware, as systems are used in ever-increasing numbers.

To those professionals who have not yet considered reliability or do not know where to begin, I can readily recommend this book due to its very easy style, step-by-step introduction and comprehensive coverage. The many references to published works also serve to aid those who, having read the book, wish to learn more.

Before anyone should reject the book on the grounds that it is concerned with 'engineering', I would like to refer them to Chapter 8, 'Software Reliability', which forms an extremely good starting point for the computer professional.

Overall the book is of a high quality, good presentation and contains few errors.

P. A. BENNETT  
Brigg