

R. E. BERRY

**Programming Language Translation**Ellis Horwood, Chichester, 1982. 175 pp.  
£15.00, £6.50 paper.

This is a pleasant little book, which I enjoyed reading. Its title might mislead people into thinking that it is about translating from one high-level language to another, but in fact it is about translating from high-level to low-level, i.e. compiling.

The first six chapters (lexical analysis, syntax definition and syntax analysis, symbol tables—structure and access, the run time environment, semantic processing, run time support) are concerned mainly with the high-level side of the fence; the next three (assemblers, macros, loaders) more with the low-level side. The final two (Pascal S compiler, Pascal S interpreter) are the real meat of the book, describing a compiler in detail with a complete listing of it, written in Pascal (but not in the Pascal S subset which it compiles).

Considerable prior knowledge of both computing in general, and Pascal in particular, are taken for granted, and detailed knowledge of the Pascal S compiler is also assumed before you reach it, particularly in the exercises at the end of each of the first eight chapters. For this reason it is rather a difficult book to read, as the King of Hearts' algorithm ('Begin at the beginning, and go on till you come to the end: then stop') certainly will not do, but no other order is suggested. Probably the only answer is to read it several times.

The Pascal S syntax is given in diagrammatic form, but with too many errors in the diagrams. Other misprints are not too bad: ('relativizer' is a nasty enough word without misprinting it 'relavitizer' though). The printing is unfortunate in that the typefaces of both the main text and the Pascal listings have virtually identical renderings of letter l and figure 1. In some places, I was actually misled by this and it is nasty even where not misleading.

Although there are references throughout the text to a bibliography, I came to the conclusion during my reading that the bibliography itself has been accidentally omitted. I finally came across it, nestling at the end of Chapter 9, but there is no indication anywhere else of where or how to find it.

Why is it that Pascal books so often give reserved words underlining, as here, or boldface, as if it were Algol? There are those, including myself, who believe that a language ought to distinguish such words from identifiers, and those who believe it to be disadvantageous. Whoever is right about this, the fact is that Pascal does not do it, and it is misleading (or unfair to Pascal) to pretend that it has this advantage (or disadvantage) when it does not.

I. D. HILL  
Harrow

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## Announcements

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9–12 JULY 1984

**1984 National Computer Conference**, Las Vegas Convention Center, Las Vegas, Nevada. The Twelfth Annual NCC has as its theme 'Enhancing Creativity' and will be chaired by Russel K. Brown, financial and management consultant. The Conference Program will focus on the changes in office, factory and home caused by the widespread availability of computing resources through cost reduction, ease of use and data communications and also on the latest technological developments responsible for these changes.

*Further information may be obtained from:*

Ann-Marie Bartels, telephone: 703-558-3613

20–22 FEBRUARY 1984

**Fifth Annual Office Automation Conference**, Los Angeles Convention Center, Los Angeles, California. The Conference theme is 'Office Automation and You' and it will comprise 45 sessions designed to be of interest to managers and administrators, technology managers and planners, users, consultants, analysts and implementors, and product designers and developers.

In addition to the Conference Program, a series of half and full-day Professional Development Seminars will be presented. These seminars will provide in-depth coverage of topics such as designing integrated systems, communications, integrating word and data processing, and personal computers.

*Further information may be obtained from:*

Ann-Marie Bartels, telephone: 703-558-3613

**IFIP, the International Federation for Information Processing**, has a Working Group on Computer Message Systems (IFIP WG6.5). A subgroup has been established to study the applications of computer message systems ('electronic mail', etc.) in assisting people with communication impairments (blindness, deafness, physical disabilities, etc.).

The subgroup has as goals: to promote contacts between people working in this area with different kinds of disabilities, and in different countries; also to examine the standards for interconnection of different devices and systems in order to promote international compatibility of interfaces. The subgroup also hopes to publish a low-cost newsletter in order to further these goals.

Organizations and individuals working in this area are invited to add their names to a mailing list for the prospective newsletter, and to supply descriptions of work in progress that relate to the focus of computer message systems for the communication impaired.

Any further information which may be helpful for instance notice of other resources available, or which could help avoid unnecessary duplication of effort is welcomed.

*Contributions should be sent to:*

Julian Davies, Department of Computer Sciences, Engineering and Mathematical Sciences Building, University of Western Ontario, London, Canada N6A 5B9.

**For an anthology**, I should welcome contributions of humor in the sciences, historic and contemporary, especially computer-related

science. The ordinary man's disquiet about computers has sometimes been expressed in contrived jokes which bring the resented superiority of the expert down to earth. How are jokes changing with the spread of personal minicomputers?

I should welcome anecdotes, biographical notes, witty accounts, cartoons, parodies, verse, self-deception and hoaxes. Especially sought are items which, while humorous, also have value in the history of a science, providing insight into changing attitudes or illuminating personalities. Please identify fully the sources of contributions.

*Contributions should be sent to:*

Robert J. Weber, 104 Davey Laboratory, University Park, Pennsylvania 16802, USA.

25–28 JUNE 1984

**Fourth Latin American Conference in Computer Science**, Santiago, Chile. Authors are invited to submit papers for this conference which is sponsored by the University of Chile. Suggested topics include Algorithms, Data Structures, Distributed Systems, Software Engineering, Performance Evaluation, Data Bases, Office Automation, Security, Data Communications, Computers and Education.

Four copies of the full paper (10 pages maximum) written in English, Spanish or Portuguese should be sent before 30 January 1984 to the Program Committee Chairman, Gaston Gonnet, Department of Computer Science, University of Waterloo, Ontario N2L 3G1, Canada.