

Book reviews

edited by Philip Bradley

Indexing and indexes

The art of indexing. Larry S. Bonura. New York, NY: Wiley, 1994. xxii, 233 pp. 22 cm. Index. ISBN 0-471-01449-4 (cased): £20.50; \$26.95.

Handbook of indexing techniques: a guide for beginning indexers. Linda K. Fetters. Fetters InfoManagement Co., 1994. vii, 72 pp. 23 cm. Bibliog, index. ISBN 0-929599-02-0 (pbk): \$20.00 (\$15.00 to ASI members). (Available from Publications Sales Office, American Society of Indexers, PO Box 386, Port Aransas, TX 78373.)

Larry S. Bonura is described as an editor of some standing (p. vii), but the first impression given by *The art of indexing* is that it has had no editing. In fact it reads like a series of uncoordinated oral presentations given to somewhat inattentive classes. While the personality of the speaker may make careless grammar negligible to a listening audience, a written text requires more controlled expression to inspire confidence.

Similarly, printers' errors do not concern a listening audience. Presumably discrepancies such as 'Good indexers try to give no more than 10-12 references for any one term, avoiding strings of page numbers' (pp. 27 and 137) and 'As a general rule, try to furnish at least one subentry if there are more than four or five references to any single heading' (p. 55) were discussed and resolved in the seminars, but no discussion appears in the book. And, surely, listeners were as baffled as I at the injunction on hyphenation: 'If you have to break a word, do it at the begin-

ning or end of the word, not in the middle' (p. 110).

There is much use of chapter headings and section headings, and more blank space than text on many pages. On the other hand, the nine sample indexes photographically reproduced on pp. 188-95 have been so much reduced in size as to be almost indecipherable.

The book is 'designed for technical writers who are responsible for developing indexes for documents, reports and other communications, technical editors who edit indexes, indexers who want to learn more about indexing techniques and method, managers of technical writers who must produce good indexes' (p. x). The usual instructions are given for choosing and presenting index entries, formatting and editing the index, together with a pertinent warning that users of the index to a technical document are likely to have turned to the index to resolve a problem that has arisen in their use of the product or system described, and such an approach must be anticipated in the choice of entries.

Appendices offer a bibliography of 77 items (which would have been more useful if arranged by topic rather than by author) and lists of organizations, seminars and indexing software.

There is much that is potentially useful in the book. It is a pity that the careless presentation makes it so difficult to assimilate.

Linda K. Fetters' *Handbook of indexing techniques* is a well-organized brief guide that conducts the beginner through all stages of learning to index. It begins with

lists of courses and of reference works, and goes on to explain what an index should be, how to choose subjects for the index and phrase them suitably, the purpose and form of references, alphabetization, choice of format, editing, and the indexing of selected special materials: biographies, magazines, and newspapers. There are many examples, and each chapter is followed by suggestions for further study. Instructions are addressed directly to the reader and are clear and readable. Supplemented by the suggested courses and further reading, they give an adequate grounding in indexing.

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Thesauri

NASA thesaurus, Vol. 1: Hierarchical listing; Vol. 2: Access vocabulary; Vol. 3: Definitions. (NASA SP-7096, vols 1-3). National Aeronautics and Space Administration, Linticum Heights, MD: NASA Center for AeroSpace Information, 1994. 3 vols. (1444 pp). 28 cm. ISSN 0899-5257. Pbk. (NASA scientific and technical information program.)
The National Aeronautics and Space Administration (NASA) Scientific and Technical Information (STI) Program established a system of acquisition, processing, publication, announcement, dissemination and exchange of aerospace information in response to the National Aeronautics and Space Act of 1958. The database contains NASA

reports, patents and other NASA-produced items, reports issued by government agencies, domestic and foreign institutions, universities and private firms, dissertations and theses, and also relevant journals, translations, books, meeting papers and conference proceedings. The European Space Agency (ESA) provides access to European aerospace grey literature and plays a vital role in the STI Program's acquisitions. Other countries, such as Australia, Canada, Israel and Japan, contribute in a similar way, as do individual aerospace-related research organizations and agencies worldwide. Citations to all this information are prepared using the *NASA thesaurus*, which was originally developed during the 1960s.

This thesaurus comprises three volumes: Volume 1—Hierarchical listing, Volume 2—Access vocabulary, Volume 3—Definitions.

The Hierarchical Listing (over 17,500 terms) differs from similar lists in that the Generic Structure (GS) terms include the complete hierarchy in which the term appears, and there may be more than one hierarchy. For example

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ALPHA JET AIRCRAFT
GS  ATTACK AIRCRAFT
    .FIGHTER AIRCRAFT
    ..ALPHA JET AIRCRAFT
    JET AIRCRAFT
    .ALPHA JET AIRCRAFT
    TRAINING AIRCRAFT
    ..ALPHA JET AIRCRAFT
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There are no broader terms (BT) or narrower terms (NT) in the usual sense, although there is profuse use of related terms (RT). As can be readily seen this leads to rather long entries particularly for terms such as ALLOYS (137 lines) and ANALYSIS (MATHEMATICS) (230 lines); there are more than 167,000 term entries in this volume. However, it does give at a glance the structure which surrounds the term you are investigating. The more general (too broad or vague) terms marked by an infinity symbol, e.g. AIRCRAFT,

include a scope note (SN) recommending the use of a more specific term under which there are considerable lists of related terms. The thickness of this volume (2.5 in/6.4 cm) precludes the usual to and fro consultation of a thesaurus. It would certainly be difficult to use this volume for everyday database indexing, but for a back-of-the-book index it would allow for the construction of a sound index infrastructure.

The Access Vocabulary (1.2 in/3.0 cm) is handier to consult and is an alphabetical listing of all terms used plus various non-postable terms. It is particularly useful for its USE references as synonym control, although the hierarchy would still need to be consulted for details of generic structure.

The Definitions volume (0.5 in/1.2 cm) is a useful tool as it contains succinct descriptions, explanations and physical data (3500). It is also a useful authority file for abbreviations, upper/lower case and also has USE references. An additional point of interest is the inclusion of the source of the definition and the year the term was added to the thesaurus.

Considerations for alphabetization were the letter-by-letter, word-by-word and computer sorting order methods. 'In the absence of any universal agreement on a standardized approach, a word-oriented modification of the computer sorting technique has been adopted . . . as the most useful and economic for this purpose.' This seems like the basis for a good essay question, but even after looking at the thesaurus it is not clear what is meant.

The previous edition of the *NASA thesaurus* was in 1988, so it seems a long time to wait for a new listing in subject areas that are developing at such a fast rate, e.g. space science, aeronautics, astronomy, mathematics, materials science, medicine and control technology. Consider what your computer

knowledge, experience and equipment were in 1988. Although updates are published biannually these are no substitute for a complete revision more frequently than after six years.

The aeronautics specialist at the local university library is interested in the online version of the thesaurus, having used extensively the previous edition of the thesaurus in hard copy. There is an experimental file available via the Internet but he has found this cumbersome. Also a thesaurus list-serve has been set up to announce new terms and changes to the thesaurus, for submitting candidate terms and for discussion on lexicographical issues (by subscription). This gives an opportunity for interactive communication with your thesaurus in good sci-fi tradition. If only I had the time!

CAROLINE BARLOW
freelance information scientist

Thesaurus of psychological index terms. 7th edn. Twentieth anniversary 1974–1994. Alvin Walker, Jr., editor. Washington, DC: American Psychological Association, 1994. xxv, 343 pp. 29 cm. ISBN 1-55798-225-2 (cased): \$75.00 (\$57.00 to APA members).

The 7th edition of this thesaurus very much follows the format of the 6th edition (reviewed in *The Indexer* 16 (4) Oct. 1991, 297) and has the same qualities of authority and comprehensiveness. The addition of 219 new postable (preferred) terms and 114 nonpostable (non-preferred) terms brings the total number to 7,311. The new terms are drawn from the areas of psychological and behavioural literature and also from some subject areas, such as sociology, which are peripheral to psychology. New terminology has also been developed for classical psychological concepts.

The three different listings within the thesaurus provide various routes of access to the terminology.

The first, The Relationship Section, gives a very full list of both postable and nonpostable terms with ample cross-references between the two and also to other broader, narrower and related terms. The scope notes are particularly useful, giving definitions where meanings may not be clear cut and also referral to outdated terms with relevant time spans, e.g. **Schiziform Disorder**—USE ACUTE SCHIZOPHRENIA to access references from 88–93.

The entries in this first section are direct and phrasal, so concepts are often scattered. For example, the only entry under 'Abuse' is the nonpostable 'Abuse Potential (Drugs)'. To find all terms involving 'abuse', it is necessary to consult the second listing, The Rotated Alphabetical Terms Section. Here we find among others

Alcohol Abuse
Child Abuse
Drug Abuse
Patient Abuse

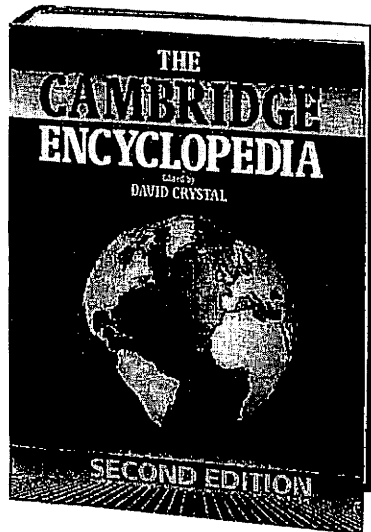
The third listing, The Clusters Section, is an alphabetical arrangement of topics under broad subject categories. In the 7th edition a new cluster, Neuropsychology and Neurology, has been added.

The British user needs to be aware of the variations between United Kingdom and United States terminology but this should have no impact on the general usefulness of the work.

ANNE MCCARTHY
freelance indexer

Dictionaries and encyclopaedias

The **Cambridge encyclopedia**. 2nd edn. Edited by David Crystal. Cambridge: Cambridge University Press, 1994. viii, 1347 pp. 30 cm. Illus, maps, tabs. ISBN 0-521-44429-2 (cased): £29.95.



The first edition of this encyclopedia was published in 1990 (see *The Indexer* 17 (3) April 1991, 227) and was well received. With the help of a team of contributors worldwide, the supply of information for two impressions of that edition in 1991 and 1992 and for this (1994) edition has been kept up to date and the use of computer technology has ensured that it is quickly incorporated. For instance, the death of John Smith, the leader of the Labour Party, in May 1994 is included. The 30,000 entries of the first edition have been expanded to 36,000 and there are again many cross-references.

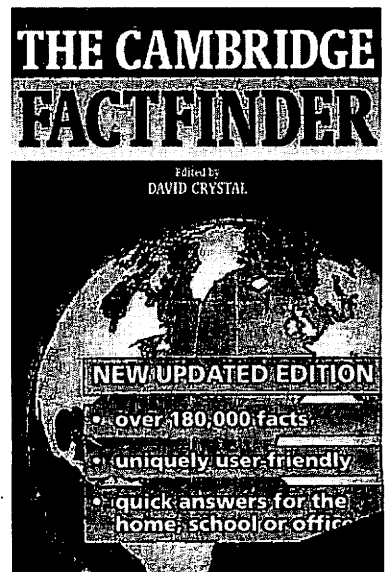
The preface deals with such matters as coverage and treatment, and one of the most interesting differences in the text between the first edition and this one is the alphabetization. Whereas the first edition was arranged word-by-word, this one is in letter-by-letter order because the editor finds from experience that in an encyclopedia of this kind this method causes less difficulty for users.

There is a ready-reference section with a subject 'Index' of eleven headings. An alphabetical index to this 128-page section would be useful but impracticable as it would require almost as much space as the section itself.

Looking through the national flags on the endpapers, approximately two hundred of them, including those for independent parts of the former Soviet Union, shows what a divided world we live in. Surprisingly, there is no flag for the European Union (presumably because it is not a nation) but there is one for the United Nations.

This work is the main one on which several others, including *The Cambridge factfinder* and *The Cambridge concise encyclopedia*, are based. Those who had the pleasure of hearing Professor Crystal speaking at two recent SI conferences about his work with the Cambridge University Press will know how much effort he and his editorial staff put into the production of them. [See also David Crystal's article on the subject in this journal, pages 177–83.]

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The **Cambridge factfinder**. Rev. edn. Edited by David Crystal. Cambridge: Cambridge University Press, 1994. xx, 843 pp.

23 cm. Illus, maps, tabs, index.
ISBN 0-521-47124-9 (cased):
£17.95; ISBN 0-521-46991-0 (pbk):
£9.95.

First published 1993—revised edition, 1994—edited by SI President David Crystal—from the Cambridge reference books stable—classified arrangement with A–Z index—presents bare facts in minimalist fashion—value for money—very good. In such spare and condensed style is this work presented—and that is no criticism! *The Cambridge factfinder* is a new type of reference book which aims to give the fastest, most accurate answers to the widest possible range of questions. Clearly designed tables, lists, maps and diagrams bring you facts from all areas of human knowledge—and all fully indexed so you can get the information you want *quickly!*—(back cover). Examination of the book leads eventually to an endorsement of this statement. *The Cambridge factfinder* contains more facts than any other book of its kind' (preface) and 'The index of *The Cambridge factfinder* is far and away the most comprehensive ever prepared for a book of this kind...' (preface) are bold statements and at first a little breathtaking but further inspection tends to disarm criticism.

The editor being who he is, we should not be surprised that he champions the cause of good indexing, as he does when, elsewhere in his preface, he presents the solution to the problem of finding information as '...proper indexing, with a preparedness to set aside sufficient space so that the project gets the index it deserves'. This proper index occupies 125 pages (out of a total of 843), a proportion which is even greater than it seems when one allows for the fact that it is set four columns to the page. By far the greater part of the index headings (and subheadings), consist of simple one- and two-word formulations so that the whole thing is as lean and spare as

the main body of the text—but, again, no criticism is implied. The index has a lengthy introductory note which ranges over the usual matters of alphabetization and arrangement. Overall arrangement is letter-by-letter, *St.* and *Mc.* are arranged as if spelt out; numerals sorted according to the spoken form; and so on. Unfortunately, the preface tries to illustrate the index's handling of cross-references by using Leonardo da Vinci as an example and promises 'cross-references from D and V'. Not only are there no cross-references to Leonardo but it seems that no name-with-prefix is cross-referenced. At least that has the virtue of consistency, but it is hard luck on those who look up Gaille, C. de, Quincey, T. de, van Beethoven, L. or von Goethe, J. W.—whilst searchers under Cid, El and Kapital, Das fare no better.

The preface goes to some trouble to define the scope of the book, trying to explain what is meant by a 'fact' and pointing out that it is neither dictionary nor encyclopedia. All in all it is a highly useful compendium of concentrated, well-indexed factual material, well worth its price and a prime candidate for the indexer's bookshelf.

GEOFFREY DIXON
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Chambers dictionary of world history. From the earliest times to the present day. Consultant editor Bruce P. Lenman, Managing editor Katharine Boyd. Edinburgh: Chambers, 1993. viii, 996 pp. 25 cm. Maps, tabs. ISBN 0-550-15005-6 (cased): £30.00.

A compact, well-produce dictionary of world history with '7500 A–Z entries from Earliest Times to the Present Day' sounds like a useful addition to an indexer's bookshelf. However, the title is something of a misnomer. The preface explains that, because of space limits, it was decided to concen-

trate on political, military and diplomatic history, to the exclusion of, for instance, religion, science, and the arts; a person famous in these fields is included only if he or she is also important in one of the three chosen categories.

Within these limitations the coverage is wide. Rather than being Eurocentric, the aim was 'to be even-handed between continents and cultures, giving as much or more coverage to matters American as, for example, British'. The coverage of Eastern as opposed to Western Europe is also extensive. The book is very up to date; entries are complete up to late 1992, and sometimes beyond. All entries have been either newly written or revised, and the Consultant Editor Bruce P. Lenman and Managing Editor Katharine Boyd have worked with an impressive team of more than forty historians from UK universities.

By far the largest number of entries are for persons, and it is interesting to compare these with Chambers' own *Biographical dictionary* (revised 1984). Most of the entries there for figures in the fields of political, military and diplomatic history are repeated in the *Dictionary of world history* (many almost word-for-word the same), with many more for the world beyond Western Europe. Other categories of entry in the new *Dictionary* include wars and battles, treaties, political events and parties, and definitions of terms such as fazenda ('a large plantation in Brazil') or métis ('Canadians of Indian and white stock'). Entries tend to be narrow and specific, and there are no general entries for countries. Portugal, for example, has only 'Portugal, Revolt of' with some cross-references; other information about Portugal must be searched for under other headings.

The dictionary is well laid out in a simple A–Z format, with useful cross-references, and includes 36 maps and over 40 information panels listing members of important

dynasties. Much thought has gone into the best way of arranging homonymous entries, and it generally works well, though where there are many monarchs with the same name the arrangement in *Chambers biographical dictionary*, where they are grouped by country, is perhaps preferable, rather than having, for instance, Charles I and Charles II of England separated by Charles I of Romania and Charles I of Austria-Hungary. (In a book which prides itself on its worldwide coverage, it seems odd to call the king of Romania Charles rather than Carol, though there is a cross-reference.) The use of letter-by-letter order causes some oddities, such as the sequence 'Abd ul-Hamid II; Abdullah, Sheikh Muhammed; Abdullah ibn Husayn; Abd ul-Majid I'. But, as indexers understand only too well, the alternative word-by-word order brings its own set of problems.

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A dictionary of British institutions: a student's guide. John Oakland. London and New York, NY: Routledge, 1993. vii, 237 pp. 22 cm. ISBN 0-415-07109-0 (cased): £35.00; ISBN 0-415-07110-0 (pbk): £9.99.

No two people would agree on what should be included in, or omitted from, a book setting out to give basic information on institutional aspects of British life, and how much detail to include for any one item. However, this book succeeds in short paragraphs in shedding light on a variety of institutional terms intended to give insight into these matters to students, especially from overseas, in a way which may prompt deeper investigation.

The alphabetical arrangement makes reference easy, but from an indexer's point of view the reader might not, in a few instances, find his way readily to the topic on which he needed information: e.g.,

'Age of criminal responsibility, the', 'Mode of trial enquiry', 'Opening (State), the (of Parliament)', 'Stand for Parliament'. (Parliament could almost do with a heading of its own, with several sub-headings.)

In some places the initials alone might be looked for instead of the full phrase, which might not be so well known: e.g., AA, EC (now EU), FT Index, ITV (we have BBC in the *Dictionary*), NATO, PSBR, RAC. In a few instances, cross-reference would be useful. The Social and Liberal Democratic Party has now become generally described as the Liberal Democrat Party and Scotland Yard is the name better known to most people than New Scotland Yard. Stratford-upon-Avon, Shakespeare's birthplace, is a British institution (with no entry) and is probably better known than the Memorial Theatre which has.

The Bank of Scotland is included but not the larger Royal Bank of Scotland. It is some years since Perth last had a Lord Provost. A better example of the Inter-City train could have been King's Cross-Edinburgh rather than Newcastle-Edinburgh. There are more than two ways of dismissing a batsman at cricket!

The book will be useful as a first reference book, to anyone seeking a topical account of British institutions.

BRITTON GOUDIE
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The encyclopedia of the environment. The René Dubos Center for Human Environments, Inc. Ruth A. Eblen and William R. Eblen, editors. Boston and New York: Houghton Mifflin 1994. xvii, 846 pp. 26 cm. Illus, index. ISBN 0-395-55041-6 (cased): \$49.95.

'Human ecology is an attempt to understand the inter-relationships between the human species and its environment, by whatever definition. The real origins of human

ecology are obscured in antiquity, but it is certain that all humans, of whatever species and whatever time, have of necessity tried to understand their surroundings.' This quotation from one of its more than 500 authoritative articles encapsulates the aim of this well-produced reference work, which serves as a definitive tool for fuller comprehension of our relationship to the environmental factors which condition our everyday lives.

Produced under the aegis of the René Dubos Center for Human Environments, an independent non-profit education and research organization in New York, it is a compilation of comprehensive contributions from almost 400 specialists, mostly, but by no means exclusively, associated with US institutions. The predominantly American input in no way reduces the global ecological perspective of these well-balanced essays, which faithfully reflect the socio-environmental philosophy of the French-born microbiologist, René Dubos (1901-82).

True to the best educational traditions, the editors have ensured that the general reader is spared excessive technical language. Specialist terminology used of necessity is lucidly defined where the meaning has general acceptance, and where any dubiety exists this is pointed out and often discussed at length. For example, the 2500-word dissertation on 'environment' amply illustrates how the meaning of the word has evolved in the three decades it has been part of everyday language, and how today its conceptualization varies considerably according to the context in which it is employed.

The full range of environmental problems and issues together with their humanistic and social aspects is addressed, specialist expertise being drawn from virtually all scientific disciplines and many fields which are not so scientific, including architecture, agriculture, medicine, biotechnology, climatology,

demography, religion, economics, risk management, language and communication. Also included are selected biographies of internationally known personalities who have significantly influenced and shaped environmental consciousness over the centuries.

Thorough cross-referencing and recommended reading lists are supplied for most topics. The subject index of some 1500 main entries and frequent sub-entries and cross-references is an invaluable tool for locating items of specific interest. A list of contributors with their associated institutions is inserted at the beginning of the book, with a separate index of contributors at the end. Illustrations are not a prominent feature but where tables, graphs, charts, and maps do occur they further enhance the clarity of the text.

For everyone, from general readers to professional educators and decision-makers, keen to acquire an up-to-date overview of ecology in general, and human ecology in particular, together with a clearer understanding of current terminology and concepts, this is a book worth more than a casual glance. For those stimulated to digest its contents it provides excellent value for money.

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Computers and information technology

Knowledge organization and quality management. Proceedings of the Third International ISKO Conference 20-24 June 1994 Copenhagen Denmark. Organized by the Royal School of Librarianship Copenhagen, Denmark in cooperation with The International Society for Knowledge Organization, Germany with support from Dan Fink's Foundation, Denmark. Edited

by Hanne Albrechtsen and Susanne Oernager. Frankfurt/Main: Indeks Verlag, 1994. 448 pp. 21 cm. ISBN 3-88672-023-3; ISSN 0938-5495. (Advances in knowledge organization, vol. 4.)

The International Society for Knowledge Organization (ISKO) is probably the sole body to devote its entire energies to the organization of knowledge apart from the Dewey Decimal Classification and the UDC. Most of its limited energies are devoted to the theoretical aspects of knowledge organization, and as a user of general classifications systems it may be tempting to postulate that there is an excess of theory and an absence of current practice. This lack is most acute in the absence of modern schedules in the UDC: much science and technology as portrayed there still languishes in the early twentieth century.

Fifty-two papers plus two abstracts are divided into twelve far from mutually exclusive sections. Some of the divisions are relatively watertight: linguistics in knowledge organization and online public access catalogues, for instance, but others are diffuse. It is ironic that such a volume suffers from an excessively abstract approach to its overall structure.

The keynote address by Pauline (Atherton) Cochrane is anecdotal rather than challenging and plays on her relationship to the Elsinore conference of thirty years before. It fails to make up for the series of keynote papers which would have been required to produce a sense of coherence. Unfortunately, keynote speakers tend to demand expenses and this was probably beyond the resources available.

Many of the papers are interesting as individual contributions, but few really gain from accidental juxtaposition with their neighbours. One suspects that most of these interesting contributions are likely to be accessed via traditional and online abstracting services, rather

than by casual browsing through the volume.

Only one paper is directly concerned with subject indexing; this is by Robert Fugmann, whose work should be already well known to most indexers. He argues that the most specific term must always be employed and cites Cutter to support this. An article on pesticides for insects should be indexed under insecticides, not pesticides. A fairly superficial case is made against automatic indexing.

Busch and Petersen give a highly interesting account of mapping subject headings onto faceted index strings using the *Art & Architecture thesaurus*. If one accepts that structured indexing offers advantages at least within some contexts (such as large libraries or large abstracting systems) then it is important to find ways in which the structure can be transferred. This is a problem which is now almost thirty years old. Indexing quality as monitored in the Russian State Library is described by Eduard Sukiasyan. This is a too rarely addressed topic and one of particular concern in very large organizations.

It must be emphasized that it was an amazing achievement to be able to produce a case-bound version of the proceedings in time for an international conference. The editors really deserve congratulating for this. It is a pity the standards demanded by this journal force the reviewer to observe that the index suffers considerably from its hurried birth; for instance, there have been few attempts to bring like headings together. This is where a really good automatic indexing program is required!

KEVIN JONES
*Malaysian Rubber Producers'
Research Association*

Editing, publishing, writing

From writing to computers. Julian Warner. London and New York: Routledge, 1994. ix, 159 pp. 22 cm. Illus, bibliog, index. ISBN 0-415-09612-X (cased): £30.00.

Seeking to articulate the 'unifying intellectual principle' connecting computing with books, Warner conducts a review of relevant issues in semiotics (the study of sign systems) and the history of philosophy, comparing the history of writing with the history of computing and comparing the 'intelligence' of written documents with that of computers.

An extended discussion of Plato's *Phaedrus*, with many examples from Homer and the Norse sagas, shows that, during the transition from oral to written cultures, intelligence was attributed to written documents in the same way—and on the basis of the same false assumptions about what constitutes intelligence—as it is attributed to computers today. There were strongly similar patterns of response to the novelty of written documents and to the novelty of computers.

A discussion of general automata theory and Turing machines circumvents the need to analyse specific programming languages and computing practices. Warner shows that computer programming is a form of writing 'never intended as a communicative substitute for speech', not unlike the notation systems that are used in formal logic or mathematics—the difference being that programs can execute logical operations rather than simply indicating them.

Claims for the 'literal intelligence of an appropriately programmed computer' have collapsed, and there is now a wide consensus that Searle was right to argue that 'without human understanding there can only be the appearance of intelligence, and not its literal presence'.

Attempts to 'reduce discourse about social and human affairs to symbolic logic for the purposes of computation' have failed.

Warner's discussion of computing illustrates well the ways in which the burgeoning power of computing technology was assimilated during the thirty years between Turing's 1950 paper 'Computing machinery and intelligence' and Searle's 'Minds, brains and programs' of 1980, and in the period since. His clearly written discussion of sometimes highly technical logical and philosophical material provides an excellent course book for students of philosophy and computing, but is also of broader interest as well.

Banish your fear of the machine: science-fiction visions of computer tyranny belong to a fading century. As human beings, we will go on conferring 'meaning on signs by interpreting them', but we will never be replaced or subdued by empty bits of binary code emanating from 'a site beyond humanity and dehumanized'.

MICHAEL ROBERTSON
freelance editor and indexer

Full marks: advice on punctuation for scientific and technical writing. 2nd edn. John Kirkman. Marlborough, Wilts: Ramsbury Books, 1993. xvi, 154 pp. 24 cm. Index. ISBN 0-9521762-0-3 (pbk): £5.95.

Unlike John McDermott's *Punctuation for now* (Macmillan, 1990), which is historical, discursive, and humanities-oriented in its approach, Kirkman's book is designed as a style handbook on punctuation policy for scientific and technical writers and editors. A 20-page introductory essay explains the reasoning behind the policies adopted, which are illustrated in detail in an 80-page 'guidelines' section, followed by appendices on paragraphing, word-division, and differences between American and British punctuation conventions.

Punctuation is a topic many writers think obvious to the point of irrelevancy, and Kirkman is particularly good at explaining to writers in a common-sense way how to communicate better. He shows how the eye reads lines of text, and he indicates the ways in which poor punctuation creates confusion, with plentiful examples of what happens when punctuation is omitted or incorrect. Particularly in scientific and technical writing, in which exact measurements and statistics often form the core of the message, misleading punctuation and inexact expression are bound to damage credibility by calling the writer's general professional standards into question.

In general, Kirkman's clearly stated, but undogmatic policy preferences follow those of the *Oxford dictionary for writers and editors* and *Hart's rules* (opposing 'open' or 'light' punctuation, and including the comma before 'and' in lists), and the book is sprinkled with quotations from Fowler's *The King's English*, Partridge's *You have a point there* and Carey's *Mind the stop*.

While keeping to the mainstream of British usage, therefore, it has the advantage of giving clear reasons and up-to-date examples showing *why* one form of punctuation is better than another, instead of merely listing rules. With its discussion of the logic of punctuation in various kinds of set-out lists following colons, and its detailing of the differences between British English and American English conventions in punctuation and word-division, Kirkman's well indexed book is already an indispensable source.

Kirkman has the potential to become a standard desktop reference work for writers and editors. In the present edition, however, the typography and design betray the fact that it is a self-publishing production. Hopefully, a future edition can be taken up by a commercial publisher capable of giving the

work a better appearance and the wide dissemination which it very much deserves.

MICHAEL ROBERTSON
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Units, symbols, and abbreviations: a guide for medical and scientific editors and authors. 5th edn. Editor, D. N. Baron. London: Royal Society of Medicine Press, 1994. 64 pp. 21 cm. ISBN 0-905958-78-0 (pbk): £10.00.

This useful book about the International System of Units (SI) sets out international and national standard practice and otherwise attempts to codify majority views. Medical and biological science and practice are continually changing, leading to new symbols, abbreviations, and conventions coming into use. Supplies of the 4th edition (1988) were becoming exhausted,

so it was decided to revise it.

Section I, an explanation of metrication and SI units, has needed changes neither in its listing nor in the explanatory notes—with the exception of the note on BS 5775 (Quantities, units and symbols), for which corresponding ISO standards have been updated to those published in 1993. The table giving examples of conversion factors from other units to SI units is representative rather than complete; those of us involved in the literature of biomedicine might want to supplement this with the *New England Journal of Medicine's* 1992 *SI Unit Conversion Guide*, which is aiming to convert the recalcitrant Americans to use of SI. It is available in England from NEJM Books, Saxon Way, Melbourn, Royston SG8 6NJ.

In section II—a useful, cross-disciplinary list of abbreviations, from

'about (used numerically)' to 'zoological nomenclature'—the 5th edition has added yocto-, yotta-, zepto-, and zetta-: all higher powers of 10. The reference list has been brought up to date.

Section III is substantially unchanged, though the sequential-numerical system has been renamed the citation-sequence system, and the name-and-year system designated by its better-known name, the Harvard system. The section, in six pages, clarifies these systems for authors typing up their papers for submission to journals. The final section, BSI symbols for proof corrections, has changed in appearance only because of slight changes in typesetting. A new standard is said to be in preparation.

MARGARET COOTER
British Medical Journal

Publications received and publications noted

The American Heritage concise dictionary. 3rd edn. Boston and New York: Houghton Mifflin, 1994. viii, 952 pp. 24 cm. Illus. ISBN 0-395-69187-7 (cased): \$10.95.

Authors in the electronic age. The Authors' Licensing and Collecting Society. London: Authors' Licensing and Collecting Society, 1994. 9 pp. 30 cm. Pbk. (Available from ALGS, 33-34 Alfred Place, London WC1E 7DP.)

College and undergraduate libraries. Editor Alice Harrison Bahr. Binghamton, NY: Haworth Press. Two issues per year. ISSN 1069-1316. Annual subscription: US individual \$28.00, institutions and libraries \$38.00; elsewhere price varies. First issue published 1994.

Directory of Booksellers Association members 1994/95. London: Booksellers Association, 1994. xvi, 438 pp. 23 cm. Indexes. ISBN 0-907972-86-1; ISSN 0068-1666 (pbk): £23.00.

The right word at the right time: a guide to the English language and how to use it. London: Reader's Digest Assoc.: 1985 (rep. with amendments, 1994). 688 pp. 24 cm. ISBN 0-276-42144-2 (cased): £21.95.

Serial publications: guidelines for good practice in publishing printed journals and other serial publications. Prepared by a Joint Working Group of Association of Learned and Professional Society Publishers, Association of Subscription Agents, Serial Publishers Executive of the Publishers Association, United Kingdom Serials Group. Witney,

Oxon: United Kingdom Serials Group, 1994. 48 pp. 30 cm. Illus. index. ISBN 0-906148-10-3 (pbk): £16.00. (Available from United Kingdom Serials Group, 114 Woodstock Road, Witney, Oxon OX8 6DY.)

William S. Heckscher. Art and literature: studies in relationship. 2nd edn, rev. and enlarged, edited by Egon Verheyen. Baden-Baden: Verlag Valentin Koerner, 1994. 651 pp. 24 cm. Illus. ISBN 3-87320-415-0; ISSN 0343-2009 (pbk): DM180.00. (Saecula spiritalia, Herausgegeben von Dieter Wuttke, vol. 17.) Three studies are added to the previous edition (see *The Indexer* 15 (1) April 1986, 55-6): Art and literature (1954); De betekenissen van G. I. Hoogewerff (1963); and Melancholia (1541): an essay in the rhetoric of description by Joachim Camerarius (1978).