

References and Notes:

- (1) Dewey Decimal Classification and Relative Index. Devised by Melvil Dewey. Ed.20 by John P. Comaromi. Vol.1-4. Albany, N.Y.: Forest Press/OCLC 1989.
- (2) Comaromi, J.P., Satija, M.P.: Introduction to the practice of Dewey Decimal Classification. New Delhi: Sterling Publ. 1987.
- (3) (cf. the presentation in pertinent textbooks, e.g.:) Foskett, A.C.: The subject approach to information. 4th ed. London: Bingley 1982. p.313-348 (or in various contributions, e.g.: Foskett, A.C.: Better dead than read: further studies in critical classification. *Libr.Resources & Techn.Serv.* 28(1984) p.346-359
- (4) Buchanan, B.: Theory of library classification. London: C.Bingley 1979. p.33
- (5) (with regard to this question, too, there is, interestingly, a parallel development among the users of the UDC at the library of the ETH Zürich, cf. for example:) Funk, H., Loth, K.: Subject retrieval in ETHICS on the basis of the UDC: an OPAC. (Orig. in German). In: *Wissensorganisation im Wandel*. Proc. 11th Annual Conf. of the Soc. for Classif., Aachen, 1987. Frankfurt: Indeks Verl. 1988. p.43-47.

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KEMP, D. Alasdair: **Computer-Based Knowledge Retrieval**. London: ASLIB 1988: X,399p. ISBN 0-85142-221-7

Methods of information storage and retrieval are no longer conceivable today without the use of computers. Nevertheless there is in the pertinent scientific literature a dearth of titles presenting in a competent and comprehensive way, and a way conforming to the present state of the art, both the methodical side of knowledge organization and the possibilities now existing in the field of data technology - hence of titles paying due attention both to the aspects of information retrieval by means of telecommunication with external literature data banks and to those of subject-oriented enquiries in library online catalogs for the general public. Precisely such an attempt is undertaken in the present book by D. Alasdair Kemp. As was only to be expected from such an attempt, the result achieved presents both strengths and weaknesses.

To start out right away with a few weaknesses: for several stretches on end the data-technological side is emphasized so much that the book might well also have been given the title of 'Knowledge-based information processing'. In itself this is not a shortcoming, but it becomes a weakness - and this regrettably must be noted with respect to the entire book when the demands imposed on the reader's prior knowledge vary widely: sometimes comparatively elementary matters are explained in great detail (e.g. when in a section entitled 'Data Organization and Retrieval Software' basic concepts of data technology down to *online* and *offline* are explained), while at other times something in the nature of a literature overview is presented which, for a proper fitting-in of the problems described, requires considerable prior knowledge (e.g. when on p.117-118 reference is made to special programming languages for Artificial Intelligence).

telligence). Both approaches can be justified; the mixture of them attempted here, however, falls just short of the mark: the text wavers between the level of an introductory textbook and that of a literature report, thus, depending on the reader's prior knowledge, boring him at times and overtaxing or disappointing him at other times.

After the introduction there follows a chapter on users which deserves to be put into relief. Focusing, in its analysis, on the requirements imposed by the ultimate users on a retrieval system, it contains on p.125 a presentation of an 'Ideal Information Retrieval System'. This analysis, still rather sketchy at this point, is later reverted to and presented in greater detail in chapter 11 'Ideal Systems', which fact possibly should have been brought out more clearly. In this early part of the book, some of the requirements are still left somewhat hanging in the air; thus, e.g., aspects of the shaping of user surfaces are introduced only in chapter 8 and cannot yet be included in the considerations at this point.

The book's predominant orientation to information *technology* finds expression in its further division into chapters. There follows a chapter on 'Data Organization and Retrieval Software' before attention is paid, in the next one, to 'Knowledge Representation'. This approach would be justifiable if in the discussion of the methodological questions the data-technological realization aspect were always and immediately treated as well. This, however, is not consistently the case, so that both chapters are too rigorously separated from each other.

In the ensuing chapters 'Expert Systems and Artificial Intelligence' and 'Database Management Systems' a number of tools and aids in the field of data technology are presented (causing this presentation to have a high value of its own, not being duplicated as it is in this form anywhere else in the literature). However, the intimate connection with the methodological problems of knowledge might well have been brought out more clearly; in particular one regrets the absence of more clear-cut statements on the use and usefulness of Artificial Intelligence procedures in the fields of information storage and retrieval. For another thing, even the presentation of the methodological questions is divided into two parts: while the aforementioned chapter 4 on Knowledge Representation is strongly oriented, in its contents, to the *Representation of Knowledge* in computers, problems of knowledge representation from viewpoints antedating the advent of data technology follow in a chapter 10 'Controlled Vocabularies for Computer-Based Retrieval', in which the well-known documentation languages are presented.

Both the placing of these subjects at so late a point in the book and the carrying-through of the discussion leave a few wishes open in this chapter, so that the desirable dovetailing of the factors: *properties* of documentation languages and their *suitability* for a *special* retrieval component form does not become clear, as can be seen e.g. on p.253 where instead of a differentiated discussion of terminology control measures merely one lone example and some literature references are given, or when, again on p.253, the problems of post-coordinating retrieval according to pre-combined structures are

treated by simply referring to the use of Boolean operators.

The emphasis placed on problems of information *technology* becomes visible, furthermore, through two chapters entitled 'Database Management Systems' and 'Computer and Communications Hardware'; chapters, again, which contain in themselves valuable information but which contribute to the overall impression that in this book *too much* is being offered in a sometimes less than transparent structuring framework.

The contents are completed by chapters entitled 'User Interface', 'Evaluation of Systems and Software' and 'Ideal Systems'. The perusal of these chapters is certainly valuable to anyone having to do with the shaping of Information Retrieval Systems. One obtains a rapid overview of the many things one must think of and, on the other hand, of the possibilities one has for realizing specific wishes.

The chapter on 'Ideal Systems' is certainly worthy of discussion. Yet one may well doubt whether at the present stage of developments the moment has already come to speak not only of desirable improvements but also, as if deciding on absolute values, of ideal systems. Such doubts are only increased by the fact that the emphasis in this chapter is placed, in the end, on the improvement, the optimization, of the *retrieval component*, with the fact tending to recede into the background that the real problem lies in achieving a proper balance between documentation language, indexing principle selected, data bank design and retrieval language used. Omissions in any one of these fields, - particularly in those of the documentation language and/or indexing principle used - can only to a very limited extent be compensated for by improvements in those of the other components. Specifically, as one knows, it has meanwhile been generally accepted by now that Boolean linkages, while admittedly constituting powerful retrieval instruments, fall far short of permitting a solution of any and all problems of precision and recall.

As to the formal presentation of the book there are a number of peculiar features to be noted. Thus, e.g., the table of contents contains no page numbers, and the alphabetic index likewise does not refer to pages but instead to chapter subdivisions. The text is supplemented by a glossary of close to 30 pages which gives brief definitions of the terms listed and points out the context in which they appear in the text in each case.

Of particular value, undoubtedly, is the nearly 50 pages long bibliography, access to which is furnished also by a name index and an alphabetic subject index, both all the more useful in view of the fact that the bibliography is subdivided into six sections not broken down according to any criteria that are discernible to this reviewer.

To make an attempt at an overall evaluation: this is beyond doubt a book that was written with a high degree of competence in the subject field concerned and that therefore has a great deal of valuable information to offer. To a teacher it can furnish, in addition, sound didactic suggestions at many points as to the manner in which various subjects can be presented in courses and/or classes. As particularly well done I regard e.g. the presen-

tation of p.50-58 of the processing of documents for indexing purposes, for their storage in data banks and for the generating of various inverted lists for retrieval purposes. Nevertheless the impression remains that the author has tried to present too much in one book and could not bring himself to decide, for the sake of brevity of presentation, to rather impose limits on himself at one point or another.

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WEINBERG, Bella Hass (Ed.): **Indexing – The State of the Art and the State of Our Ignorance**. Medford, NJ: Learned Inform., Inc. 1989. 134p. ISBN 0-938734-32-6

This book presents the papers read at the 20th annual convention of the American Society of Indexers on 13 May 1988 in New York City. Its title already strikingly indicates how acutely the situation prevailing in the indexing field is reflected here. The book claims to be a status report on the subject of indexing, particularly the indexing of books. To this claim it lives up one hundred percent. It can be recommended both to the novice in this field and to the oldtimer who frequently is forced to concentrate overly much on his or her daily work. It is recommendable not in the last place because of the valuable references to the latest literature usually given by the various authors.

The excellent index to this book, compiled by Bettie Jane THIRD, contributes a great deal to the book's value. In this index one finds practically everything realized which the authors of the book declare, at one point or another, to be desirable for an index.

The editor made an excellent choice by placing the contribution by Mr. WELLISCH – an appeal of well-nigh unsurpassable frankness to the conscience of the profession – at the beginning of the book, as it were as an introduction, admonition and overview. All too often, ignorance and a lack of self-criticism cause distrust and superciliousness to be sown against the indexer, whose work is alleged to be mechanizable or predicted to become so in the near future. A few authors in this book, too, must feel 'touché' by Wellisch's expostulations.

WELLISCH, Hans H: *Literature of Indexing*. Regrettably, indexing still is not yet recognized as a professional task that must be learned if good results are to be achieved. It is still widely assumed (as borne out by a quotation) that literacy and possession of a marker pencil suffice for preparing a book index: English is the dominating language in the modern literature on indexing and abstracting. Most procedures described here are based on word or word stem matching or on proximity and frequency measures, whereas German and Russian authors have a greater preference, in comparison, for the linguistic approach. The few genuine innovations are to be found in the field of truly scientific research on the fun-