

The first five chapters deal with the theory and practice of Ranganathan's facet formula for the book number, covering in the following order: language of the book, form of presentation of contents in the book, year of publication, accession part of the year number, volume number, supplement number, copy number, criticism number, and accession part of criticism number. Problems with Ranganathan's system are not ignored but are discussed openly, for instance, the problem of placing together the various editions of a book or translations in various languages or abridgements and adaptations of the same book. The appendices provide tables for the language isolate, foci in form and time isolate.

As book numbers are indispensable for any discrete book arrangement on shelves and for giving unique call numbers to library documents anyone with the responsibility of bringing order out of chaos will find this a useful reference.

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DYKSTRA, Mary: **PRECIS: A Primer**. Revised Reprint. Metuchen, NJ: Scarecrow Press 1987. IX,270p., ISBN 0-8108-2060-9

Further to the review of the *Primer*'s first edition in the previous issue of International Classification, a few remarks on the reprint will suffice. Due to the reduced format (close to a "King Penguin") and the handsome pink covers, the book looks different this time. The smaller format is more appropriate, since the type area covered only about 80% per page in the first edition.

What is more important, however, is the fact that the present edition is called a revised reprint. About two and a half sentences are added to the foreword. Yet the arrangement, headings, and length of chapters, subsections, and exercises are completely identical with the first edition. No revisions of the index were necessary. As Prof.Dykstra explains, "the text remains essentially the same in this edition" (p.III). Random comparisons of the texts did not show any revisions. The reprint has the same exercises, except for a minor change on p.50. The author's revisions did not include a correction of an error in the contents pages: as in the first edition, it is stated that exercises are to be found on p.80 (instead of p.79).

It seems very sensible, then, that the Library of Congress Cataloging-in-Publication Data bluntly describe the book a "reprint".

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CRAVEN, Timothy C.: **String Indexing**. Orlando, Fla.: Academic Press 1986. XI,246p., ISBN 0-12-195460-9

The preparation of alphabetic subject indexes, e.g. for books or bibliographies, is and remains an important topic, albeit one receiving far less attention than the problems involved in the preparation of keyword catalogs. This is due among other things to the fact that, for simplicity's sake, index entries have frequently

remained confined to single words - plus, at best, adjective+noun combinations - subjected to a certain terminology control.

Now, while this may still be an adequate method for preparing subject indexes of books, in the field of indexes for bibliographies it has been found - and this applies equally to keyword catalogs, so that to this extent there is, in the end, no difference between both problems - that one is increasingly confronted with complex document contents creating an inevitable need for precombined index entries, co-extensive with the contents of the given document. This has the effect, however, that one has to work with - co-extensive - multiple entries.

To generate such multiple entries, the wish has meanwhile made itself felt to make use of automated processes. Now here the special challenge presents itself of making only meaningful multiple entries - hence of both excluding certain words from the realm of those used for initiating a search, and of keeping the correct context for the given components of a precombined string intact - or having it generated from an input string. In the book reviewed this task is termed string indexing, an expression covering a broad spectrum of procedures, reaching from such methods as KWIC or KWOC, which have no terminology control or clearly defined syntax in the string at all, to the PRECIS system with its subtly differentiated expression possibilities.

Particular interest has meanwhile been acquired by the problem of having such automatic processes handled with the aid of small computers, as well as by the manifold problems connected with the display of index entries on a screen (e.g. in browsing through inverted lists) in an online retrieval. The book reviewed may be regarded as an important and useful contribution to this subject.

Consisting, on the one hand, of theoretical reflections and, on the other hand, of the description of individual systems, the book is divided into 9 chapters (each concluded by a brief summary), 4 annexes and a detailed bibliography<sup>1)</sup>.

The book's strength, which at the same time, however - from a reader's point of view - constitutes a certain weakness, lies in the fact that theory and practical application are not treated wholly separate from one another; the author always makes use of concrete examples in his discussion of the various theoretical problems. This approach does not always make it simple for the reader - especially where the less well-known string indexing procedures are discussed - to follow the author's train of thought. The presentation does, however, have the advantage that abstract considerations are always illustrated through comparing several procedures among one another, thus giving the reader a good opportunity to get acquainted with the strengths and weaknesses of each procedure.

In the introductory chapter the problem field to be treated is marked out, terminology is introduced and the task, purpose and usefulness of string indexing in the various fields of application are explained. The soundness of the presentation is reflected, among other things, by the use of network diagrams to illustrate the various contextual dependences of the individual components of a string.

To permit, in the further parts of the book, a discussion along the lines described above, the second chapter presents a brief characterization of each procedure, with the author distinguishing between 3 types of procedures: those based on the natural language of the given document; those using inputs from a controlled vocabulary, and those making use of codings for manipulating the strings. The brevity of the description does not always make the presentation readily understandable; in such cases one must, for a better understanding, have recourse to the more detailed literature referred to.

The next 5 chapters are devoted to the various problems of string indexing; questions of the input of strings, of their components and codings, if any; indexing aids such as manuals, data sheets, etc.; syntax and citation order; references and sorting, and special problems such as the suppression of entries in the leading position.

This presentation is rounded off by a chapter in which criteria for an evaluation and for the selection of string indexing procedures are discussed. This chapter is not only helpful for someone wishing to make a choice among the procedures treated in the book, but also for someone who may be wishing to develop such a procedure him- or herself or to modify it to suit his or her special application field.

The four annexes comprise: a glossary of the technical terms used most frequently in the book; a case study on the use of the NEPHIS procedure, developed by the author, for five-year indexes of the periodical "The Canadian Journal of Information Science"; a brief introduction to the NEPHIS system, and a list of addresses of institutions using the string indexing procedure, through which further information or software may, if necessary, be obtained.

On two pages the author has undertaken the attempt to furnish prognoses on the further development and application of string indexing. In this connection he would regard it as not too good a bet that "online string index displays will be introduced as an option in a commercial database search service" (p.188). The reviewer would like to give expression to this hope that this book may contribute to a development whereby this assessment by the author may be proved wrong. It would be most desirable if the problems of and insights yielded by string indexing were taken into account in online display. In addition one would wish that the syntactic qualities present in the more elaborate procedures such as NEPHIS or PRECIS could be utilized in online retrieval so that the author's assessment that "...the applicability of string indexing to online searching is not yet proved" (p.16) need not remain a valid description of the state of things.

In summing up one may conclude that this is a felicitous work - its formal presentation leaves nothing to be desired either - constituting a source of much information for and inspiration to the reader, no matter whether he reads it out of theoretical interest or whether he would like to make use of some string indexing procedure.

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<sup>1</sup> This bibliography may be supplemented by the following recent German contributions to the subject:

- (1) Riesthuis, G.J.A.: Alphabetische Sachregister und Klassifikation. (Alphabetic subject indexes and classification). In: Die Klassifikation und ihr Umfeld. Proc.10th Ann.Conf.German Classif. Soc., Münster, 18-21 June 1986. Frankfurt: Indeks Verl.1986.p.102-111
- (2) Weidmüller, H.U.: Die maschinelle Verarbeitung von RSWK-Ketten in der Deutschen Bibliothek - Datenstruktur und Permutationsverfahren (The machine processing of RSWK chains in the German Library). as in (1), p.95-101
- (3) Dreller, J.: Herstellung eines rotierten, vierstufig ausgedruckten Schlagwortregisters auf einem Personalcomputer mit Hilfe von Standardsoftware (dBASE III Plus, SuperSort, WordStar). Preparation on a personal computer with the aid of standard software of a rotated index printed out in four steps. Nachr.Dok. 38(1987)p.283-291

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JUDGE, A.J.N.(Ed.); Union of International Associations: **Encyclopedia of World Problems and Human Potential**. 2nd ed. München: K.G.Saur Verlag 1986. 1440p.(A4 size), ISBN 3-598-21864-8

The book under review is a revised edition of the "Yearbook of World Problems and Human Potential" published in 1976 on an experimental basis (It has been reviewed by I.Dahlberg in Int.Classif. 4(1977)No.2, p.114-115). In fact it has become a complement to the *Yearbook of International Organizations* in 3 volumes, an important publication of the UIA. As obvious from the title, its theme is the problems faced by the society and the resources and strategies available to solve them - this book though purports to identify and catalogue the problems, yet it has no intention to suggest their solutions.

A living and moving society is always confronted with and many a times besieged by problems. Problems and issues arise from time to time, and some are discovered, identified and in some cases invented. Research, a major activity of the presentday society, is nothing but a problem identifying and solving technique. The solutions to the problems are sought either conceptually or by organizational methods. Big and long-lingering problems are overpopulation, poverty, hunger, mutual distrust among nations, illiteracy, depletion of earth's natural resources, war, and now the fatal weapons endangering life on this planet. This encyclopedia deals with these and myriads of other problems ranging from loneliness to soil erosion, ignorance to maltreatment on the one hand, and human potentials such as human values, cultural heritage, and appropriate technology to solve these problems on the other hand. There are such 10,233 political, social, economic, judicial, racial and psychological problems, and 14,176 human potentials available to answer or tackle these problems. Thus there are a total of 24,409 entries in this source. The concept "problem" has not been defined nor the concept of "human potential", yet the scope of the encyclopedia extends far beyond these titular descriptors. There are also some concepts from science and technology directly concerning social or economic development. In all the encyclopedia identifies the multiplicity of dangers to society and also takes cognisance of the existing organizational, intellectual and personal resources to face and solve such problems.

The basis of selection of these 24,409 entries has not been explicitly disclosed, though the range of the topics