

Knowledge Organization

International Journal

Devoted to Concept Theory,
Classification, Indexing, and
Knowledge Representation



Vol. 24 (1997) No. 4

formerly International Classification

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 - 7444
International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

Contents

Articles

- Fugmann, R.: Bridging the Gap Between
Database Indexing and Book Indexing.205
- Maniez, J.: Database Merging and the
Compatibility of Indexing Languages213
- Veltmann, K. H.: Frontiers in Conceptual
Navigation225

Reports and Communications

- Conferences246
- Notable News.....246

ISKO News 30

- First conference of French ISKO chapter at
Lille, October 16-17 1997247
- ISKO-German Section, 5th conference at
Humboldt University, Berlin247
- New working group on 'Knowledge
Organization and Internet' constituted
at the German ISKO Conference.....248

FID/CR News 45

- In Memoriam: Phyllis Richmond249
- Universal Decimal Classification.....249
- Classification Research Group (CRG)249
- ASIS Annual Meeting250

Book Reviews

- Qu'est-ce qu'on ne sait pas ? Récit des
Rencontres philosophiques de l'UNESCO
(14 - 17 mars 95). Paris: Découvertes
Gallimard/Editions UNESCO 1995.
112 pp. (Herbert Eisele)..252
- (1) A. SCHREINEMAKERS, JOS. F. (ED.):
Knowledge Management. Organization
Competence and Methodology. Advances
in Knowledge Management Vol. 1. Würz-
burg: Ergon 1996. 307p. ISBN 3-932004-26-4;
ISSN 1432 3516
- (2) B. SCHNEIDER, URSULA (ED.):
Wissensmanagement. Die Aktivierung
des Intellektuellen Kapitals (Knowledge
Management. Activating Intellectual
Capital). Edition Blickpunkt Wirtschaft.
Frankfurt: Frankfurter Allgemeine Zei-
tung. 1997. 207p. ISBN 3-929368-53-6.
(Hellmut Löckenhoff)255
- SCOTT, MONA L.: Conversion Tables.
LC-Dewey, Dewey-LC. Englewood,
CO: Libraries Unlimited 1993. VIII, 365 p.
ISBN 1-56308-017-6 (Print version),
ISBN 1-56308-152-0 (Disk version)
(Ingetraut Dahlberg).....258
- FOSKETT, A. C.: The Subject Access to
Information, 5th Ed. London: The Library
Association Publishing, 1996. XV, 456 p.
ISBN 1-85604-048-8 (M. P. Satija).....259

Knowledge Organization Literature

- 24(1997)No.4.....261

Contents page

Fugmann, R. (1997). **Bridging the Gap between Database Indexing and Book Indexing.**

Knowledge Organization, 24(4), 205-212. 15 refs.

ABSTRACT: Traditionally, *database indexing* and *book indexing* have been looked upon as being quite distinct and have been kept apart in textbooks and teaching. The traditional borderline between both variations of indexing, however, should not conceal fundamental commonalities of the two approaches. For example, *thesaurus construction and usage*, quite common in databases, has hardly been encountered in book indexing so far. Database indexing, on the other hand, has hardly made use of *subheadings* of the syntax-displaying type, quite common in book indexing. Most database users also prefer *precombining vocabulary units* and reject *concept analysis*. However, insisting on precombining descriptors in a large database vocabulary may, in the long run, well be destructive to the quality of indexing and of the searches. A *complementary approach* is conceivable which provides both precombinations and analyzed subjects, both index language syntax and subheadings, and provides access to an information system via precombinations, without jeopardizing the manageability of the vocabulary. Such an approach causes considerable costs in input because it involves a great deal of intellectual work. On the other hand, much time and costs will be saved *in the use* of the system. In addition, such an approach would endow an information system with survival power. (Author)

Then, relying on the lessons of linguistics and automatic translating, he describes two types of viable solutions: the harmonization of several information languages (an uneasy and costly processing); and the automatic harmonization of the indexing formulas through prefabricated concordance tables, an easier solution which can however be hampered by structural discrepancies. Last he sketches a critical view of the concept of switching language. (Author)

Veltman, Kim H., (1997), **Frontiers in Conceptual Navigation.**

Knowledge Organization, 24(4), 225-245. 43 refs.

ABSTRACT: Recent advances in technology assume a separation of content and presentation with respect to data structures. In terms of access, however, there are important reasons for relating content and presentation (different views, perspectives). The paper outlines some fundamental concepts underlying a prototype for a System for Universal Media Searching (SUMS), namely, learning filters, and knowledge contexts, levels of knowledge, questions as strategy: purpose as orientation; media choices, quality, quantity, questions, space using maps and projections; multi-temporal views and integrating tools. It foresees how such a system, linked with the equivalent of a digital reference room, will provide the basis for a System for Universal Multimedia Access (SUMMA). The latter part of the paper addresses recent developments in three-dimensional interfaces. It claims that these are particularly suited for certain tasks such as visualising connections in conceptual spaces; seeing invisible differences as well as comprehension and prediction by seeing absence. It suggests also some ways in which two- and three-dimensional interfaces can be used in complementary ways. (This paper was prepared for a lecture at a recent meeting of the German Chapter of ISKO devoted to *Wissensorganisation mit Multimedialen Techniken [Knowledge Organization with Multimedia Techniques]*, (Berlin, October 1997), the proceedings of which will contain an abridged version.) (Author)

Maniez, J. (1997). **Database Merging and the Compatibility of Indexing Languages.**

Knowledge Organization, 24(4), 213-224, 10 refs

ABSTRACT: Compatibility is the paradise lost of information scientists, the dream of a universal communication between information languages. Paradoxically the information languages increase the difficulties of cooperation between the different information databases. This noxious side-effect has become flagrant for the latest decade since the shared cataloguing and the telecharging facilities have increased the exchanges. After defining the notion of information compatibility, the author shows that it meets the same care of semantic coherence as the information languages them-

This contents page may be reproduced without charge.

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

KNOWLEDGE ORGANIZATION

The journal is the organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANIZATION (General Secretariat: Prof. Hanne Albrechtsen, The Royal School of Librarianship, Birketinget 6, DK-2300 Copenhagen S)

Editors

Mr. Charles T. GILREATH (Editor-in-Chief), 217 NW 34th Drive, Gainesville, FL 32607 USA

Dr. Ingetraut DAHLBERG, Woogstr. 36a, D-60431 Frankfurt, Germany

Dr. Robert FUGMANN, Alte Poststrasse 13, D-65510 Idstein, Germany

Prof. Hanne ALBRECHTSEN (SKO News Editor), The Royal School of Librarianship, Birketinget 6, DK-2300 Copenhagen S, Denmark

Ms. Michelle M. FOSS (Assistant to the Editor-in-Chief; Reports & Communications Editor), 12020 Lake Ave. # 303, Lakewood, OH 44107 USA,
E-mail: FOSS@uhrainbow.com

Drs Gerhard RIESTHUIS (Literature Editor), Liendenhof 60, NL-1108 HB Amsterdam, Netherlands

Prof. Dr. Nancy WILLIAMSON (FID/CR News Editor), Faculty of Information Studies, University of Toronto, 140 St. George Street, Toronto, Ontario M5S 3G6 Canada

Consulting Editors

Prof. Dr. Ulf G. BARANOW, Rua Ubaldino do Amaral 580, Apto. 51, BR-80060-190, Curitiba - PR, Brazil

Dr. Gerhard BUDIN, Dept. of Philosophy of Science, University of Vienna, Sensengasse 8, A-1090 Wien, Austria

Mr. Christian GALINSKI, Director: Infotern, Simmeringer Hauptstr. 24, A-1110 Wien, Austria

Dr. Francisco Javier GARCIA MARCO, Area de Biblioteconomia y Documentacion, Facultad de Filosofia y Letras, Universidad de Zaragoza, E-50.009 Zaragoza, Spain

Prof. Dr. Winfried GÖDERT, Vice-Dean: FH Köln, Claudiusstr. 1, D-50678 Köln, Germany

Dr. M. A. GOPINATH, DRTC, Indian Statistical Inst., 8th Mile, Mysore Road, R.V. College P.O., Bangalore-560059, India

Dr. Rebecca GREEN, College of Library and Information Services, Hornbake Bldg. (So. Wing), Room 4105, University of Maryland, College Park, MD 20742-4345

Dr. Norbert HENRICHS, Im Luftfeld 80, D-40489 Düsseldorf, Germany

Dr. Roland HJERPPE, Dept. of Computer and Information Science, Linköping University, S-58183 Linköping, Sweden

Dr. Barbara H. KWASNIK, School of Information Studies, Syracuse University, 4-206 Ctr. for Science & Tech, Syracuse, NY 13244-4100

Dr. Jacques MANIEZ, 61 Rue de la Corve, F-21000 Dijon, France

Dr. Ia C. MCILWAINE, Director: School of Library, Archive & Information Studies, University College London, Gower Street, London, WC1E 6BT, U.K.

Dr. Francis MIKSA, Graduate School of Library and Information Science, University of Texas at Austin, SZB 564, Austin, TX 78712-1276

Ms. Joan S. MITCHELL, Editor: Dewey Decimal Classification, Library of Congress, Washington, D.C. 20540-4330

Dr. Giliola NEGRINI, Consiglio Nazionale della Ricerca, Ist. di Studi sulla Ricerca e Doc. Scientifica, Via Cesare De Lollis, 12, I-00185 Rome, Italy

Ms. Annelise Mark PEJTERSEN, Systems Analysis Dept., Risoe National Laboratory, P.O. Box 49, DK-4000 Roskilde, Denmark

Dr. Stephen A. POLLITT, CeDAR Centre for Database Access Research, School of Computing & Mathematics, The University of Huddersfield, Queensgate, Huddersfield HD1 3DH, U.K.

Dr. M. P. SATIJA, Guru Nanak Dev University, School of Library and Information Science, Amritsar-143 005, India

Dr. Jos SCHREINEMAKERS, Erasmus University Rotterdam, PO Box 1738, 3000 DR Rotterdam, Netherlands

Dr. Otto SECHSER, In der Ey 37, CH-8047 Zürich, Switzerland

Dr. Dagobert SOERGEL, College of Library and Information Services, Hornbake Bldg. (So. Wing), Room 4105, University of Maryland, College Park, MD 20742

Dr. Eduard R. SUKIASYAN, Chief Editor of the Library-Bibliographical Classification, Russian State Library, 3 Vozdvizhenka Str., Moscow, 101000 Russia

Dr. Elaine SVENONIUS, Graduate School of Education and Information Studies, UCLA, 5380 ½ Village Green, Los Angeles, CA 90016

Prof. Dr. Harald ZIMMERMANN, Softex, Schmollerstrasse 31, D-66111 Saarbrücken, Germany

KO

KNOWLEDGE ORGANIZATION

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

Publisher

ERGON-Verlag, Grombühlstr. 7, GER-97080 Würzburg,
Phone: +49 (931) 280084; FAX +49 (931) 282872; E-mail:
ERGON-Verlag@t-online.de

Editor-in-chief (Editorial office)

Mr. C. Gilreath, 217 NW 34th Drive, Gainesville, FL 32607
USA; Phone +1 (352) 373-6891; Fax: +1 (352) 373-6924;
E-mail: gilreath@grove.ufl.EDV

Instructions for Authors

Manuscripts should be submitted in English only to the editor-in-chief in two double-spaced copies and should be accompanied by an indicative abstract of 100 to 200 words. After manuscripts are accepted for publication in *Knowledge Organization*, they must be provided on a 3.5" diskette encoded in Word, WordPerfect, or ASCII text. Our preference is Word 6.0 (or later). Diskettes should not be sent until requested by the editor.

Criteria for acceptance will be appropriateness to the field of the journal (see Scope and Aims), taking into account the merit of the contents and presentation. The manuscript should be concise and should conform to professional standards of English usage and grammar. Manuscripts are received with the understanding that they have not been previously published, are not being submitted for publication elsewhere, and that if the work received official sponsorship, it has been duly released for publication. Submissions are refereed, and authors will usually be notified within 6 to 10 weeks. Unless specifically requested, manuscripts and illustrations will not be returned.

The text should be structured by numbered subheadings. It should contain (a) an *Introduction*, giving an overview and stating the purpose, (b) a *main body*, describing in sufficient detail the materials or methods used and the results or systems developed, and (c) a *conclusion* or *summary*.

Reference citations within the text should have the following form: (author, year). For example, (Jones, 1990). Specific page numbers are optional e.g. (Jones, 1990, p.100). A citation with two authors would read (Jones & Smith, 1990); three or more authors would be: (Jones et al., 1990). When the author is mentioned in the text, only the date and optional page number should appear in parenthesis – e.g. According to Jones (1990), ...

References should be listed alphabetically by author at the end of the article. Journal names should not be abbreviated. Multiple citations by the same author should be listed chronologically and should each spell out the author's name. Articles appearing in the same year should have the following format: Jones, T. (1990a) ... , Jones, T. (1990b) ...

Examples:

Dahlberg, I. (1978). A referent-oriented, analytical concept theory for INTERCONCEPT. *International Classification*, 5(3), 142-151.

Graesser, A., Person, N. & Huber, J. (1992). Mechanisms that generate questions. In T. W. Lauer, E. Peacock, & A. C. Graesser (Eds.), *Questions and Information Systems*. Hillsdale, NJ: Lawrence Erlbaum Associates, 167-187.

Sager, J.C. (1990). *A Practical Course in Terminology Processing*. Amsterdam: John Benjamins.

Sukiasyan, E. R. (1996). Change as a problem of classification system development. In R. Green (Ed.), *Knowledge Organization and Change: Proceedings of the 4th International ISKO Conference*. Frankfurt: Indeks Verlag, 119-122.

Footnotes should be kept to a minimum. They should be indicated in the text with numbered superscripts, and the corresponding notes should be collected at the end of the article, before the *references*, under the heading *Notes*.

Illustrations should be kept to the necessary minimum. Graphs and diagrams should be supplied as black and white drawings suitable for reproduction. Half-tone illustrations should be sharp, well-contrasted glossy prints. Illustrations should be numbered lightly with a soft pencil on the back, and a numbered legend should be attached on a separate sheet. Clear copies of the illustrations should accompany the submitted manuscript, but camera-ready originals should not be sent until requested by the editor. *Tables* should contain a number and a title at the top, and all columns and rows should have headings. All illustrations should be cited in the text as Figure 1, Figure 2, etc. or Table 1, Table 2, etc.

Upon acceptance of a manuscript for publication, authors must provide a wallet-sized photo and a one-paragraph biographical sketch. Authors will receive from the publisher 25 reprints of their articles free of charge. Additional reprints may be ordered before publication.

Advertising

Responsible for advertising: Dr. H.-J. Dietrich, ERGON-Verlag, Grombühlstr. 7, 97080 Würzburg (Germany).

© 1997 by ERGON-Verlag Dr. H.-J. Dietrich.

All Rights reserved.

Printed in the Federal Republic of Germany

by Offizin Hildburghausen GmbH Druckhaus.

KO is published quarterly by ERGON-Verlag.

The price is DM 158,-/ann. including airmail delivery.

KNOWLEDGE ORGANIZATION

KO

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 – 7444

International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

Scope

The more scientific data are generated in the impetuous present times, the more ordering energy needs to be expended to control these data in a retrievable fashion. With the abundance of knowledge now available the questions of new solutions to the ordering problem and thus of improved classification systems, methods and procedures have acquired unforeseen significance. For many years now they have been in the focus of interest of information scientists the world over.

Until recently, the special literature relevant to classification was published in piecemeal fashion, scattered over the numerous technical journals serving the experts of the various fields such as

philosophy and science of science
science policy and science organization
mathematics, statistics and computer science
library and information science
archivistics and museology
journalism and communication science
industrial products and commodity science
terminology, lexicography and linguistics

Beginning 1974, KNOWLEDGE ORGANIZATION (formerly INTERNATIONAL CLASSIFICATION) has been serving as a common platform for the discussion of both theoretical background questions and practical application problems in many areas of concern. In each issue experts from many countries comment on questions of an adequate structuring and construction of ordering systems and on the problems of their use in opening the information contents of new literature, of data collections and survey, of tabular works and of other objects of scientific interest. Their contributions have been concerned with

- (1) clarifying the theoretical foundations (general ordering theory/science theoretical bases of classification, data analysis and reduction)
- (2) describing practical operations connected with indexing/classification, as well as applications of classification systems and thesauri, manual and machine indexing
- (3) tracing the history of classification knowledge and methodology
- (4) discussing questions of education and training in classification
- (5) concerning themselves with the problems of terminology in general and with respect to special fields.

Aims

Thus, KNOWLEDGE ORGANIZATION is meant to be a programme for the improvement of classification methods and processes, a forum for discussion for all those interested in the organization of knowledge on a universal or a subject-field scale, using concept-analytical and/or concept-synthetical approaches as well as numerical procedures and comprising also the intellectual and automatic compilation and use of classification systems and thesauri in all fields of knowledge, with special attention being given to the problems of terminology.

KNOWLEDGE ORGANIZATION publishes original articles, reports on conferences and similar communications, the Newsletters of the International Society for Knowledge Organization (ISKO News) and the Committee on Classification Research of the International Federation for Information and Documentation (FID/CR News) as well as book reviews, letters to the editor, and an extensive annotated bibliography of recent classification and indexing literature, covering some 500 items in each issue.

KNOWLEDGE ORGANIZATION should therefore be available at every university and research library of every country, at every information center, at colleges and schools of library and information science, in the hands of everybody interested in the fields mentioned above and thus also at every office for updating information on any topic related to the problems of order in our information-flooded times.

KNOWLEDGE ORGANIZATION was founded in 1973 by an international group of scholars with a consulting board of editors representing the world's regions, the special classification fields, and the subject areas involved. From 1974-1980 it was published by K.G. Saur Verlag, München. Back issues of 1978-1992 are available from ERGON-Verlag, too. (The 14 volumes of 1978-1992 are offered now at the highly reduced price of DM 200,-)

As of 1989, KNOWLEDGE ORGANIZATION has become the official organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANIZATION (ISKO) and is included for every ISKO-member, personal or institutional in the membership fee (US \$ 50/US \$ 100).

Rates: From 1997 on for 4 issues/ann. (including indexes) DM 158,- (forwarding costs included). Membership rates see above. –

ERGON-Verlag, Grombühlstr. 7, GER-97080 Würzburg;
Phone: +49 (931) 280084; FAX +49 (931) 282872;
E-mail: ERGON-Verlag@t-online.de

The contents of this journal are indexed and abstracted in *Referativnyi Zhurnal Informatika* and in the following online databases: *Information Science Abstracts*, *INSPEC*, *Library and Information Science Abstracts (LISA)*, *Library Literature*, *PASCAL* and *Sociological Abstracts*.