

Knowledge Organization

Formerly *International Classification*

International Journal

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



Vol. 24 (1997) No. 3

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

Editorial 135

Articles

Albrechtsen, H. & Hjørland, B.: Information seeking and knowledge organization: The presentation of a new book.....	135
Hansson, J.: Why public libraries in Sweden did not choose Dewey	145
Rada, R., Liu, Z., & Zheng, M.: Connecting educational informational spaces.....	154
Kuznetsov, V.: On triplet classifications of concepts.....	163

Reports and Communications

Forthcoming Conferences and Meetings 1998.....	176
Call for Participation	176
10 th Annual Conference on Innovative Applications of Artificial Intelligence - AAAI'98.....	176
1998 ASIS Mid-Year Meeting, Collaboration Across Boundaries: Theories, Strategies & Technology	176
1998 ASIS Annual Meeting, Information Access in the Global Information Economy	177
Notable News	177
Reports & Newsletter Minutes	177

ISKO News 28

Wissensorganisation '97: 5 th Conference of the German ISKO Chapter in Berlin	178
------------------------------------------------------------------------------------------------	-----

1 st National Conference of the French ISKO Chapter in Lille	178
Papers on posters.....	179
Report from the 3 rd Russian ISKO Conference, 12 June 1997 at Sudak, Crimea, Ukraine.....	179

FID/CR News 43

Knowledge Organization for Information Retrieval: 6th International Study Conference on Classification Research, 16-18 June, 1997.....	182
FID/CR Meeting, June 17, 1997	188
Publication	188

Book Reviews

BUDIN, GERHARD (1996). Wissensorganisation und Terminologie: Die Komplexität und Dynamik wissenschaftlicher Informations- und Kommunikationsprozesse. [Knowledge Organization and Terminology: The Complexity and Dynamics of Scientific Information and Communication Processes] (Sue Ellen Wright).....	190
Dewey, Melvil. Dewey Decimal Classification (Edition 21) and relative index. Devised by Melvil Dewey. Editor, Joan S. Mitchell, et al. Albany, NY: Forest Press/OCLC, 1996. 4 Vols. ISBN 0-910-608-50-4. References: Chan, Lois Mai, et.al: Dewey Decimal Classification: A Practical Guide. 2 nd ed., revised for DDC-21. (M. P. Satija)	192

Knowledge Organization Literature

24(1997)No.3.....	194
-------------------	-----

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 page

Albrechtsen, H. & Hjørland, B. (1997). Information seeking and knowledge organization: The presentation of a new book.

Knowledge Organization, 24(3). 136-144. 9 refs.

ABSTRACT: Recently, a new book on knowledge organization has been published by Greenwood Press. The title is „Information seeking and subject representation: An activity-theoretical approach to information science“. This book presents a new general theory for information science and knowledge organization, based on a theory of information seeking. The author is Dr. Birger Hjørland, Royal School of Library and Information Science. In 1994, he presented his work on theory for KO at the 3rd International ISKO conference in Copenhagen (Hjørland, 1994). The book aims to provide both a new understanding for the foundations of information science and knowledge organization, and to provide new directions in research and teaching within these fields. KO (Hanne Albrechtsen) has interviewed Birger Hjørland in Copenhagen about his views on knowledge organization and subject representation. (Authors)

Hansson, J. (1997) Why public libraries in Sweden did not choose Dewey.

Knowledge Organization, 24 (3). 145-153. 30 refs.

Abstract: The article identifies two distinct sections, one within the public library sphere and one in academic libraries, relevant for the development of a unique Swedish classification system (the SAB-system) to be used in public libraries. These are used to analyse the social and discursive influences that led to a rejection of the DDC as the common classification system for the public libraries in Sweden. The author analyses the debate that took place in the 1910s in various publications and identifies theoretical as well as some practical reasons for rejecting the DDC. Reference is also made to the situation in Norway and Denmark at this time and their attempts to influence Sweden to accept the DDC as had been done in these countries. Conclusions are drawn that the reasons for rejection of the DDC not only is to be sought in theoretical or even practical problems regarding the system itself but in the academic library sector which, through the SAB-system, could create a lasting influence on the knowledge organisation in public libraries in order to uphold the national identity of the Swedish library system. (Author)

Rada, R., Liu, Z., & Zheng, M. (1997). Connecting educational information spaces.

Knowledge Organization, 24(3). 154-162. 20 refs

Abstract: Online textbooks can be connected to other sources of information to improve their educational value. We describe two case studies. One used a medical textbook and connected to medical journal abstracts via a thesaurus. The textbook, journal abstracts, and thesaurus were stored on a CD-ROM. The other case study shows a textbook on the World Wide Web that is connected to various other sources of information. About half the book references are to web sites, and the textbook is part of an online course that is connected to an online catalog and other courses. Such linkages among information spaces should help students navigate the information relevant to their studies. (Authors)

Kuznetsov, V. (1997). On triplet classifications of concepts.

Knowledge Organization, 24(3). 163-175. 14 refs.

ABSTRACT: This paper introduces a scheme for classifications of concepts. It is founded on the triplet model of concepts. This model depicts a concept by means of three kinds of knowledge: a concept base, a concept-representing part and the linkage between them. Informally, the concept base deals with entities subsumed under a concept and their properties and relations. The concept-representing part deals with tools and forms of representing these entities and their properties and relations in some intelligent system. The linkage deals with establishing the proper correspondences between components of the base and the representing part. Each of these knowledge kinds is associated with specific structures related to concepts (symbols, names, statements, images, texts, entities and their properties and relations, procedures of determination of property values, etc.) Various informal and formal (mainly set-theoretical) specifications of these structures serve as criteria for triplet classifications of concepts. (Author)

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

Dr. Werner BIES (Book Review Editor), Forststr. 52, D-12163 Berlin, Germany, E-mail: bies@golem.ub.fu-berlin.de

Ms. Michelle M. FOSS (Assistant to the Editor-in-Chief; Reports & Communications Editor), 12020 Lake Ave. # 303, Lakewood, OH 44107 USA, E-mail: rainbweb@primenet.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: Infoterm, 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, Claudiustr. 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 HENRICHES, Im Luftfeld 80, D-40489 Düsseldorf, Germany

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

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

Dr. Jaques 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 Vozdvizhenska 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. Christian Wacker, 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-synthetic 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*.