

Knowledge Organization

International Journal

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



Vol. 24 (1997) No. 2

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

Guest Editorial 61

Articles

Beghtol, Clare: Stories: Applications of Narrative
Discourse Analysis to Issues in Information
Storage and Retrieval 64

Green, Rebecca: The Role of Relational Structures
in Indexing for the Humanities 72

Hudon, Michèle: Multilingual Thesaurus Construc-
tion: Integrating the Views of Different Cultures in
One Gateway to Knowledge and Concepts 84

Burger, Henry G.: Kuhnian Discovery:
Its Way-Station and Choke-Points 92

Reports and Communications

Forthcoming Conferences and Meetings 1997 104

Forthcoming Workshops
2nd International Summer School on the
Digital Library 104

Conference Reports
308th Meeting, Classification Research Group 104

Newsletter Reports
International Federation of Library Association
and Institutions 105

12th Plenary Meeting of ISO/TC 37/SC 2 105

Notable News 105

Knowledge Management:
Gain a Lead Through Communication 106

ISKO News 28

5th International ISKO Conference in Lille,
August 1998 109

French ISKO Chapter Announces Its First
Conference 109

German Thesaurus Committee working on
Standards draft 109

3rd Spanish ISKO Conference in Madrid, November
1997 110

ISKO Discussion List on the Web 110

FID/CR News 43

Message from the FID/CR Chair 111

Ben Custer 112

Dewey Decimal Classification Activities 112

Infoterm 113

ALA Subject Analysis Committee 113

Recent Publications 113

Book Reviews

Holyoak, K.J., & Thagard, P.: Mental Leaps:
Analogy in Creative Thought
(Charles T. Gilreath). 116

Burkle-Young, Francis A., & Maley, Sandra
Rose: The Art of the Footnote: The Intelligent
Student's Guide to the Art and Science of
Annotating Texts – Grafton, Anthony: Die
tragischen Ursprünge der deutschen Fußnote
(The tragic origins of the German footnote) –
Lütkehaus, Ludger: Unfröhliche Wissenschaft:
Die Lage der Geisteswissenschaften aus der Sicht
der Fußnote. Eine längere Anmerkung (The state
of the humanities from the point of view of the
footnote. A longer note) (Ewald Kiel) 117

Buder, Marianne; Rehfeld, Werner; Seeger,
Thomas & Strauch, Dietmar (Eds.): Grundlagen
der praktischen Information und Dokumentation:
Ein Handbuch zur Einführung in die fachliche
Informationsarbeit (Fundamentals of Practical
Information and Documentation. A Manual
Serving as an Introduction to Professional
Information Work) (Bernd W. J. Lorenz) 119

Knowledge Organization Literature

24(1997)No.2 121

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

Contents page

Beghtol, Clare (1997). **Stories: Applications of narrative discourse analysis to issues in information storage and retrieval.**

Knowledge Organization, 24(2), 64-71. 40 refs.

The arts, humanities, and social sciences commonly borrow concepts and methods from the sciences, but interdisciplinary borrowing seldom occurs in the opposite direction. Research on narrative discourse is relevant to problems of documentary storage and retrieval, for the arts and humanities in particular, but also for other broad areas of knowledge. This paper views the potential application of narrative discourse analysis to information storage and retrieval problems from two perspectives: 1) analysis and comparison of narrative documents in all disciplines may be simplified if fundamental categories that occur in narrative documents can be isolated; and 2) the possibility of subdividing the world of knowledge initially into narrative and non-narrative documents is explored with particular attention to Werlich's work on text types. (Author)

Green, Rebecca (1997). **The role of relational structures in indexing for the humanities.**

Knowledge Organization, 24(2), 72-83. 28 refs.

The paper is divided into three parts. The first develops a framework for evaluating the indexing needs of the humanities with reference to four sets of contrasts: user (need)-oriented vs. document-oriented indexing; subject indexing vs. attribute indexing, scientific writing vs. humanistic writing; and topical relevance vs. logical relevance vs. evidential relevance vs. aesthetic relevance. The indexing needs of the humanities range broadly across these contrasts. The second part establishes the centrality of relationships to the communication of indexable matter and examines the advantages and disadvantages of means used for their expression in both natural languages and index languages. The use of a relational structure, such as a frame, is shown to represent perhaps the best available option. The last part illustrates where the use of relational structures in humanities indexing would help meet some of the needs previously identified. Although not a panacea, the adoption of frame-based indexing in the humanities might substantially improve the retrieval of its literature. (Author)

Hudon, Michèle (1997). **Multilingual thesaurus construction : Integrating the views of different cultures in one gateway to knowledge and concepts.**

Knowledge Organization, 24(2), 84-91. 11 refs.

General linguistic and specific semantic problems arising in multilingual thesaurus construction are well defined in the various textbooks and in the guidelines covering this area. Much details are provided on the "conceptual equivalence" issue, and various ways of dealing with conceptual divergence are described. But when discussing semantic solutions, display options, management issues, or use of technology, specialists and guidelines seldom, if ever, go as far as commenting on whether or not a particular option is truly respectful of a language and its speakers. This paper, based on the premise that in a multilingual thesaurus all languages are equal, reviews the options and solutions offered by the guidelines to the developer of specialized thesauri. It also introduces other problems of a sociocultural, and even of a truly political nature, a prominent feature in the daily life of the thesaurus designer with which the theory and the guidelines do not deal very well. (Author)

Burger, Henry G. (1997). **Kuhnian discovery: Its way-stations and choke-points.**

Knowledge Organization, 24(2), 92-103. 55 refs.

Thomas Kuhn differentiated normal scientific progression from the replacement of basic assumptions by a novel paradigm. With his recent death, it is time to sequence the innovation cycle, some of whose parts he had detailed. A Kuhnian discovery faces battle before it is can even be tried and evaluated. We enumerate over two dozen "way-stations," or phases, many heretofore vaguely differentiated in half a dozen academic disciplines. Each phase is illustrated with a vignette. Within that cycle, the mental awareness that one has found an anomaly is a distinct advantage, for which we propose the name of neocognition. Certain phases are especially vulnerable dead ends, choke-points, of the entire sequence. Particularly so are the 8th to 10th periods – the cultural reactions based on the perceived immediacy of benefit. Any requirement to obtain commercial support at this pre-development stage prevents the emergence of even farsighted latent support that could hurdle the remaining steps. The eventual acceptance of any Kuhnism activates forces that will likely evolve its own era of scientific / political correctness. – From a score of thumbnail histories, it becomes obvious that research organizations may accelerate basic discovery by pre-constituency dissemination. (Author)

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 (ISKO 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, 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, Linkping University, S-58183 Linkping, Sweden

Dr. Barbara H. KWASNIK, 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 Ricerche, 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, Deputy Director, 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.edu

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-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 in *Library Literature* and abstracted in *Referativnyi Zhurnal Informatika* and in the following online databases: *Information Science Abstracts*, *INSPEC*, *Library and Information Science Abstracts (LISA)*, *PASCAL* and *Sociological Abstracts*.