

# Knowledge Organization

## International Journal

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

Archiv

Vol. 31, issue 1, 2004

ERGON-VERLAG

ISSN 0943-7444 Knowl.Org.

# 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

Douglas John Foskett, 1918-2004, by Nancy Williamson.....	1
Introducing Richard P. Smiraglia .....	3

### Articles

Denner, Lise, and Marthinus S. van der Walt. The Organization of Electronic Information in Selected Small, Medium and Micro Enterprises (SMMEs) in South Africa.....	4
Van der Walt, Marthinus S. A Classification Scheme for the Organization of Electronic Documents in Small, Medium and Micro Enterprises (SMMEs) .....	26
Mai, Jens-Erik. Classification in Context: Relativity, Reality, and Representation.....	39
Zins, Chaim. Knowledge Organization: An Epistemological Perspective .....	49

### Discussion

Hjørland, Birger, and Jeppe Nicolaisen. Scientific and Scholarly Classifications are not “Naïve”: A Comment to Begthol (2003) .....	55
Begthol, Clare. Response to Hjørland and Nicolaisen.....	62

### Reports

Gnoli, Claudio. Knowledge Organization in Italy.....	64
Frâncu, Victoria. 14th National Conference of the Association of Librarians in Education - Romania (Asociatia Bibliotecarilor din Invatamant - Romania - ABIR) .....	66

Agenda for the 9th ISKO General Assembly, London, 15 July 2004 .....	68
---	----

Index to Volume 30 (2003) .....	69
---------------------------------	----

---

# 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

Denner, Lize and Marthinus van der Walt. (2004). **The Organization of Electronic Information in Selected Small, Medium and Micro Enterprises (SMMEs) in South Africa.** *Knowledge Organization*, 31(1). 4-25. 16 refs.

**ABSTRACT:** This article reports on an empirical investigation into the information needs and information organization practices of small business enterprises in South Africa. The purpose of the investigation was to determine what information should be taken into account when designing systems for organizing information in such businesses, and how these businesses actually organize their electronic documents. The investigation of the systems in use also presented the opportunity to gather business concepts that were used to construct a generic classification scheme for the purpose of information organization in small enterprises. Data were gathered from 24 small businesses located in three different provinces by means of personal interviews with owners/managers, guided by a questionnaire, and through on-site observation of the information organization systems used. The results of the survey show what information is regarded as critically important in small businesses, and give insight into the current situation with regard to information organization in the businesses. Recommendations are made for improving information organization in small businesses.

Van der Walt, Marthinus. (2004). **A Classification Scheme for the Organization of Electronic Documents in Small, Medium and Micro Enterprises (SMMEs).** *Knowledge Organization*, 31(1). 26-38. 17 refs.

**ABSTRACT:** This article proposes a generic classification scheme for the purpose of organizing electronic documents in business enterprises in the SMME sector. Data were gathered from literature on information organization, business information, competitive intelligence and information systems, as well as through an empirical study of information organization practices in a sample of 24 small businesses in three different provinces in South Africa. The concepts gathered from folder systems for documents, email and Internet favourites, augmented by concepts derived from the literature, were analyzed using the technique of facet analysis. Business processes feature prominently in the resultant scheme.

Mai, Jens-Erik. (2004). **Classification in Context: Relativity, Reality, and Representation.** *Knowledge Organization*, 31(1). 39-48. 49 refs.

**ABSTRACT:** This paper surveys classification research literature, discusses various classification theories, and shows that the focus has traditionally been on establishing a scientific foundation for classification research. This paper argues that a shift has taken place, and suggests that contemporary classification research focus on contextual information as the guide for the design and construction of classification schemes.

Zins, Chaim. (2004). **Knowledge Organization: An Epistemological Perspective.** *Knowledge Organization*, 31(1). 49-54. 11 refs.

**ABSTRACT:** This philosophical essay explores the epistemological foundations of knowledge organization and discusses implications for classification research. The study defines the concept of "knowledge," distinguishes between subjective knowledge (i.e., knowledge as a thought in the individual's mind) and objective knowledge (i.e., knowledge as an independent object), establishes the necessity of knowledge organization in the construction of knowledge and its key role in the creation, learning, and dissemination of knowledge, and concludes with implications for the development of classification schemes and knowledge maps.

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

This journal is the organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANIZATION (General Secretariat: Dr. Gerhard RIESTHUIS (Literature Editor), Liendenhof 60, NL-1108 HB Amsterdam, Netherlands).

### Editors

Dr. Hope A. OLSON (Editor-in-Chief), School of Information Studies, University of Wisconsin Milwaukee.  
Email: [olson@sois.uwm.edu](mailto:olson@sois.uwm.edu)

Dr. Michèle HUDON (Book Review Editor), School of Library and Information Science, University of Montréal, Québec, Canada

Prof. Dr. Jens-Erik MAI (Reports Editor), Information School, University of Washington, Mary Gates Hall, Box 352840, Seattle, WA 98195-2840, USA. Email: [jemai@u.washington.edu](mailto:jemai@u.washington.edu)

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

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

Hanne ALBRECHTSEN (Communications Editor), Risø National Laboratory, Roskilde, Denmark.  
E-mail: [hanne.albrechtsen@risoe.dk](mailto:hanne.albrechtsen@risoe.dk)

Joanne MILLEMANN (Editorial Assistant), School of Information Studies, University of Wisconsin Milwaukee.

### Consulting Editors

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

Prof. Clare BEGHTOL, Faculty of Information Studies, University of Toronto, 140 St. George Street, Toronto, Ontario M5S 3G6, Canada

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 Biblioteconomía y Documentación, Facultad de Filosofía y Letras, Universidad de Zaragoza, E-50.009 Zaragoza, Spain

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 Information Studies, 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.

Prof. 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. Widad MUSTAFA el HADI, URF IDIST, Université Charles de Gaulle Lille 3, BP 149, 59653 Villeneuve D'Ascq, France

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., Risø 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. Winfried SCHMITZ-ESSER, Rothenbaumchaussee 3, D – 20148 Hamburg, Germany

Dr. Dagobert SOERGEL, College of Information Studies, 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

Dr. M.S. van der WALT, Department of Information Science, University of Stellenbosch, Private Bag X1, Stellenbosch 7602, South Africa

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: service@ergon-verlag.de; <http://www.ergon-verlag.de>

## Editor-in-chief (Editorial office)

Dr. Hope A. OLSON (Editor-in-Chief), Joanne MILLEMAN (Editorial Assistant), School of Information Studies, University of Wisconsin Milwaukee, PO Box 413, Milwaukee, Wisconsin 53201, USA  
Fax: +1 (414) 229-4848; Email: [olson@sois.uwm.edu](mailto:olson@sois.uwm.edu)

## Instructions for Authors

*Manuscripts* should be submitted electronically (in Word, Wordperfect, or RTF format) in English only to the editor-in-chief and should be accompanied by an indicative abstract of 100 or 200 words. Submissions via email are preferred; submissions will also be accepted via post provided that four copies are submitted or that submissions are accompanied by a 3.5" diskette encoded in Word, Wordperfect, or RTF format.

A separate title page should include the article title and the author's name, postal address, and E-mail address, if available. Only the title of the article should appear on the first page of the text. To protect anonymity, the author's name *should not* appear on the manuscript, and all references in the body of the text and in footnotes that might identify the author to the reviewer should be removed and cited on a separate page. Articles that do not conform to these specifications will be returned to authors.

*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 as much as possible 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 an *Introduction*, giving an overview and stating the purpose, a *main body*, describing in sufficient detail the materials or methods used and the results or systems developed, and 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, but preferred when applicable, 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 4<sup>th</sup> 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 a necessary minimum and should be submitted electronically when possible. Photographs (including color and half-tone) should be scanned with a minimum resolution of 600 dpi and saved as tif files (Tagged Image File Format preferred). Tables and figures should be embedded within the document or, alternatively, saved as separate files with clear instructions indicating their placement in the text. Tables should contain a number and 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. Illustrations submitted in hard copy only should be marked to indicate their placement in the text.

Upon acceptance of a manuscript for publication, authors must provide a wallet-size photo and a one-paragraph biographical sketch. The photograph should be scanned with a minimum resolution of 600 dpi and saved as a tif file (Tagged Image File Format).

## Advertising

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

© 2004 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 € 103,00/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 is 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 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 in 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.

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 \$ 55/US \$ 110).

*Rates:* From 2004 on for 4 issues/ann. (including indexes) € 103,00 (forwarding costs included). Membership rates see above.

ERGON-Verlag, Grombühlstr. 7, GER-97080 Würzburg;  
Phone: +49 (931) 280084; FAX +49 (931) 282872; E-mail: service@ergon-verlag.de; <http://www.ergon-verlag.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*, *Sociological Abstracts*, and *Web Science & Social Sciences Citation Index*.