



KNOWLEDGE ORGANIZATION

Formerly INTERNATIONAL CLASSIFICATION

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

Thinking with the help of images:
On the metaphors of Knowledge Organization

Strategic correspondences:
Computer-aided insight scaffolding

HYPERJOSEPH: The hypertextual organization.
Epistemological considerations

Onomantics and Terminology. Pt. 1:
Their contributions to Knowledge Organization

INDEKS Verlag, Frankfurt
ISSN 0943 - 7444 Knowl.Org.
Vol. 23 (1996) No. 1

Contents

Editorial

Knowledge Organization and Change 1

Articles

Bies, W.: Thinking with the help of images: On the metaphors of Knowledge Organization.....	3
Judge, A.J.N.: Strategic correspondences: Computer-aided insight scaffolding	9
Nissan, E., Weiss, H., Yossef, A.: HYPERJOSEPH: The hypertextual organization. Epistemological considerations	16
Riggs, F.W.: Onomantics and Terminology. Pt. 1: Their contributions to Knowledge Organization	25

Reports and Communications

Forthcoming Conferences and Meetings (34) – Flourishing Assets: Indexers Today: 28th Annual Meeting of ASI (35) – Call for Participation: 7th ASIS SIG/CR Classification Research Workshop: An Interdisciplinary Meeting (35) – Electronic Access to Fiction: Research and Development in Subject Searching, Indexing, and Knowledge Transfer via OPACs and Networking (36) – 302nd Meeting, British Classification Research Group (36).

ISKO News 23

The 4th International ISKO Conference (37) – ISKO'96 on the INTERNET (37) – ISKO General Assembly (37) – Warsaw Seminar Proceedings (37) – 2nd Spanish ISKO Chapter Conference (37) – Explanation and Understanding: ERNSTSCHRÖDER COLLOQUIUM and Seminar, Darmstadt, Jan. 26-27, 1996 (38) – International Conference on Conceptual Knowledge Processing, Darmstadt, Feb. 28-March 1, 1996 (39).

FID/CR News 40

Universal Decimal Classification (UDC) (40) – The Dewey Decimal Classification Division at the Library of Congress (40) – ISKO 4th International Conference, Washington, D.C., July 15-19, 1996 (41) – ASIS Annual Meeting, Oct. 9-12, 1995. SIG/CR Workshop on Classification Research (41) – SIG/CR Participation in the General ASIS Meeting (43) – SIG/CR General Conference Programme (43) – Publications (44) – Publications: Library of Congress (44) – Electronic Products (45).

Book Reviews

Stancikova, P., Dahlberg, I.: Environmental Knowledge Organization and Information Management (Lei Zeng)	46
Garcia Marco, F.J.: Organization of Knowledge in Information and Documentation Systems (in Spanish) (M.J. Lopez-Huertas, in English) ..	47
Husain, Sh.: Library Classification: Facets and Analysis (M.P. Satija)	48
Thomas, A. (Ed.): Classification: Options and Opportunities (M.P. Satija)	49
Lepsky, K.: Maschine indexing of bibliographic data to improve subject analysis in OPACs (in German) (H. Schnelling, in English)	50

Knowledge Organization Literature 23(1996)No.1 51

KNOWLEDGE ORGANIZATION

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

The journal is the organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANIZATION (General Secretariat: Woogstr. 36a, D-60431 Frankfurt)

Editors

Dr. Ingridtraut DAHLBERG (Editor-in-Chief), Woogstr. 36a, D-60431 Frankfurt

Dr. Robert FUGMANN, Alte Poststr. 13, D-65510 Idstein

Prof. Jean M. PERREAULT, The Library, Univ. of Alabama at Huntsville, P.O. Box 2600, Huntsville, AL 35899, USA

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

Consulting Editors

Prof. Kenneth G.B. BAKEWELL, 9, Greenacre Road, Liverpool, L25 0LD, U.K.

Prof. Pauline A. COCHRANE, GSLIS, University of Illinois, 410 David Kinley Hall, 1407 West Gregory Drive, Urbana, IL 61801-3680, USA

Prof. Dr. Emilia CURRAS, Universidad Autonoma de Madrid, Dept. de Doc. Cient. Fac. de Ciencias, Canto Blanco, Madrid 34, Spain

Mr. Jens B. FRIIS-HANSEN, Hoesterkoebvej 7, DK-2970 Hoersholm, Denmark

Mr. Christian GALINSKI, INFOTERM, Heinestr.38, A-1021 Vienna

Mr. Alan GILCHRIST, 38 Ship Street, Brighton BN1 1AB, U.K.

Prof. Wilfried GÖDERT, FHBD, Claudiustr. 1, D-50678 Köln

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

Prof. Eric de GROLIER, ISSC, 1, rue Miollis, F-75015 Paris, France

Prof. Dr. Roland HJERPE, Linköping University, Dept. of Computer and Information Science, S-58183 Linköping

Prof. Krishan KUMAR, Dept. of Libr. & Inform. Sci., Univ. of Delhi, Delhi-110 007, India

Ms. Joan MITCHELL, Editor DDC, Library of Congress, Decimal Classification Division, Washington, DC 20540-4330, USA

Prof. Yukio NAKAMURA, 14-8, Nisikata-1, Bunkyo-ku, Tokyo 113, Japan

Dr. Giilia NEGRINI, Consiglio Nazionale delle Ricerche, ISRDS, Via Cesare de Lollis 12, I-00185 Roma, Italy

Prof. Dr. Roy RADA, Prof. of Software Engineering Virtual University Acad. Off., Washington State University, Pullman, WA 99164-2752, USA

Prof. Dr. Winfried SCHMITZ-ESSER, Oderfelderstr. 13, D-20149 Hamburg

Prof. Dr. Eugeniusz SCIBOR, JINTE, Broniewskiego 83-157, PL-01-876 Warszawa, Poland

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

Prof. Dr. Dagobert SOERGEL, College of Libr. & Inform. Serv., University of Maryland, College Park, MD, 20742, USA

Dr. Eduard SUKIASYAN, Russian State Library, Vozdvizhenska, 3, Moskva 10100, Russia

Dipl. Ing. Rudolf UNGVARY, Nyul u. 14, H-1026 Budapest, Hungary

Editors: Dr.I.Dahlberg, Frankfurt; Dr.R.Fugmann, Idstein, Prof.J.M.Perreault, Huntsville, AL, USA.

Editorial Office: c/o Dr.I.Dahlberg, Woogstr. 36a, D-60431 Frankfurt. Tel.069-52 36 90, FAX: 069-52 05 66

Issue frequency: 4x/ann. *Annual subscription rates:* Institutions per volume DM 128.-, Individuals per volume 20% less, if directly ordered from INDEKS Verlag. Single issues: DM 32.- Back issues available, ask for special offer. Subscription included in membership fee for members of the International Society for Knowledge Organization (ISKO). MwSt and postage are included; no Air Mail delivery possible.

Advertising rates: Advertising rate card No.3. Advertising factsheet with details of mechanical requirements and closing date available upon request.

Publisher: INDEKS Verlag, Woogstr.36a, D-60431 Frankfurt, Tel.069-52 36 90; FAX 069-52 05 66.

Bank Account Nos: INDEKS Verlag, Postgiro-Konto Frankfurt No.151208-608 (BLZ 500 100 60). Frankfurter Sparkasse No. 852082 (BLZ 500 502 01)

All Rights reserved. Printed in the Federal Republic of Germany 1996 by Druckerei H.Guntrum II KG, PF 180, D-36110 Schlitz/Hessen.

Contents page

Vol.23(1996)No.1

Bies, W.: **Thinking with the help of images: On the metaphors of knowledge organization.**

Knowl.Org. 23(1996)No.1, p.3-8, 28 refs.

In the literature of knowledge organization, metaphors and images such as 'tree of knowledge', 'map of knowledge' or the 'world as a network' play an important role. This imagery - although not yet thoroughly documented - should be examined from the various points of view of epistemology, the typology of metaphors, discourse analysis, metaphorology and iconography. The crucial point: Not only knowledge as such, but also its organization, is an essential part of our cultural heritage.

(Author)

Nissan, E., Weiss, H., Yossef, A.: **HYPERJOSEPH: The hypertextual organization. Epistemological considerations.**

Knowl.Org. 23 (1996)No.1, p.16-24, 56 refs.

HYPERJOSEPH combines hypertext, information retrieval, literary studies, Biblical scholarship, and linguistics. Dialectically, this paper contrasts hypertextual form (the extant tool) and AI-captured content (a desideratum), in the HYPERJOSEPH project. The discussion is more general and oriented to epistemology.

(Authors)

Judge, A.J.N.: **Strategic Correspondences: Computer-aided insight scaffolding**

Knowl.Org. 23(1996)No.1, p.9-15, 18 refs.

Building on the arguments of earlier papers, this paper advocates the use of centro-symmetric diagrams, controlled through suitable graphics software, to hold and re-configure concept sets — whether user initiated or supported by a library of such sets. It is emphasized that computer software features have evolved to such a high degree that it is worthwhile challenging any new approach to knowledge organization with the question: "what could that software feature offer to knowledge organization?". Often the software already available offers facilities superior to the needs articulated or envisaged by those concerned with knowledge organization.

(Author)

Riggs, F.W.: **Onomantics and Terminology.**

Knowl.Org. 23(1996)No.1, p.25-33, 28 refs.

Lexicography is the science that undergirds the preparation of dictionaries as lists of words and phrases whose meanings are defined on the basis of semantic analysis. By contrast, Onomantics reverses this paradigm: it identifies concepts that are related to each other and need to be represented as important tools in the production and organization of knowledge. Terminology bridges these two approaches: it draws heavily on the lexicographic model while moving stolidly toward an onomantic framework — from a semantic focus on the meanings of words to an onomasiological concern with the identification and representation of concepts. The article is the first of a Two Part sequence in which the basic concepts and the rationale of Onomantics are identified. They provide a framework for enhancing the ability of Terminology to contribute to Knowledge Organization. The essential logic of Onomantics as the science of concept representation is explained and its general relationship to Terminology as a growing but mixed field of applications is discussed.

(Author)

KNOWLEDGE ORGANIZATION



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 numerical taxonomy/ 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 now 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 IC was published by K.G. Saur Verlag, München. Back issues of 1978-1992 are available from INDEKS 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 (DM 60.-/DM 120.-).

Rates: From 1990 on for 4 issues/ann. (including indexes) DM 128.-. No airmail delivery any longer. Membership rates see above. — INDEKS Verlag, Woogstr. 36a, D-6043 Frankfurt.

Instructions for Authors

Manuscripts may be submitted in either English, German or French to the editor-in-chief in two sets (the original and one copy) typed in double space, comprising between 1500 to 3000 words. They should be accompanied by an English indicative abstract of 100-200 words. The contributions are refereed.

Criteria for acceptance will be appropriateness to the field of the journal (see Scope and Aims) taking into account the merit of the content and its presentation. Papers are accepted with the understanding that they have not been published, submitted or accepted for publication elsewhere and that, if the work received official sponsorship, it has been duly released for publication. Authors will usually be notified within 6 to 10 weeks. Unless specifically requested, manuscripts or illustrations will not be returned.

The text of the contributions should be structured by subheadings; it should contain (a) an introduction, stating the purpose, (b) a description of materials and methods in sufficient detail, (c) information on results or systems developed, and (d) a conclusion on and/or summarization.

References should be listed at the end of the paper with the numbers in brackets referring to such numbers in brackets within the text part.

Additional notes should be indicated in the text by lifted single numbers behind a word and equally collected with their texts at the end of the paper under the heading *Notes*.

Journal References should contain the names and initials of all authors, full titles of the publication, abbreviation of the journal according to the ISO Standard 4, volume number, year of

publication in brackets, issue number and first and last page numbers. *Monograph References* should give the name(s) of the author(s), full title, edition, place of publication, publisher, year and the number of pages.

Examples: Brandhorst, J.P.J.: Quantifiability in iconography. *Knowl.Org.* 20(1993) No.1, p.12-19, 11 refs.

Hunter, E.J.: Classification made simple. Aldershot, GB: Gower 1988. 115p.

Illustrations should be restricted 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. Numbered legends should be attached on a separate sheet.

Tables should be typed double-spaced on a separate sheet, contain a number and a title at the top and be cited in the text. Each column should have a heading.

Authors shall receive 25 *reprints* of their papers free of charge. Additional reprints may be ordered.

Corrections in galley proof exceeding 10% of the typesetting costs will be charged to the author.

Contributions on microflexible discs are welcome if delivered in DOS compatible standard software such as Word (DOS or Windows), WordStar, WordPerfect, DCA/RFT-files or plain ASCII code — our standard is Word/DOS (Word/Windows 6.0) and PageMaker 6.