



KNOWLEDGE ORGANIZATION

INTERNATIONAL CLASSIFICATION

erly

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

**Seven Fundamental Questions for the
Science of Library Classification**

**Further Education in Knowledge
Organization. Basic Didactic Considerations**

**Library-Bibliographical Classification:
On the Path of Renovation**

**Terms, Symbols, and Ordinals:
A Taxonomy of Designators**

INDEKS Verlag, Frankfurt
ISSN 0943 - 7444 Knowl.Org.
Vol. 20 (1993) No. 2

Contents

Editorial

- Do You Know Your Colleagues Knowledge Organization? 63
 Questionnaire for the Who's Who in Knowledge Organization 64

Articles

- Losee, R.M.: Seven fundamental questions for the science of Library Classification 65
 Kiel, E.: Further education in Knowledge Organization. Basic didactic considerations 71
 Goltvinskaya, T.S., Sukiasyan, E.S.: Library-Bibliographical Classification: On the path of renovation 77
 Gilreath, Ch.T.: Terms, symbols, and ordinals: A taxonomy of designators 80

Reports and Communications 87

- Knowledge Communication in an Era of Information Explosion (87) - Similarity, Clusters and Concepts. Conf.at TH Darmstadt, FB Mathematik (87) - Subject Indexing: Principles and Practices in the 90s (87) - TKE'93: Third International Congress on Terminology and Knowledge Engineering (88) - News on the Library Bibliographical Classification (89) - The Committee for Scientific Terminology, Russian Academy of Sciences (89) - Broad System of Ordering (89) - Information and Documentation - Vocabulary (90) - UN-EARTH: The United Nations - what it is and what it does (90) - Catalogue of Russian Information Resources (90) - DATALOG/R - A new form of data intelligence (90) - European Academy for Standardization e.V. (70) - Museum Computer Network (MCN) (70) - Macrothesaurus available on diskettes (76)

ISKO News 13 91

- 3rd International ISKO Conference. Call for Papers (91) - Who's Who in Knowledge Organization (91) - Bylaws Concerning Regional ISKO Chapters (91 and 93) - The Russian Regional ISKO Conference (91) - 3rd Biannual Conference, German ISKO Chapter (92) - Organization of Knowledge: Position opening in Philadelphia, PA (92) - The K.O. Antiquary (92) - Ranganathan Jubilee Meeting in China (92)

FID/CR News 94

- Dewey Decimal Classification (94) - I.C.McIlwaine: UDC administrative activities (94) - Restructuring UDC: A feasibility study (95) - C.Beghtol: ASIS/SIG/CR (95) - U.K. CRG 291 (95)

Book Reviews 96

- Satija, M.P.: S.R.Ranganathan and the method of science. (J.Maniez) (96) - Langridge, D.W.: Subject analysis: Principles and procedures (M.P.Satija) (98) - Corti, L.: Cultural heritage: Standards for representation, description and vocabulary, (G.Negrini, G.Spissu) (99) - Trigari, M.: How to construct a thesaurus (G.Negrini, G.Spissu) (99) - Weinberg, B.H.(Ed.): Cataloging Heresy: Challenging the standard bibliographic product (J.M.Perreault) (100) - Henzler, R.G.: Information and Documentation. The collecting, storage and retrieval of specialized information in databases (H.Haendler) (105) - Rada, R.: From text to expertext (R.Kuhlen) (In German) (106)

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-6000 Frankfurt 50)

Editors

Dr.IngeTrautDAHLBERG (Editor-in-Chief), Woogstr.36a, D-6000 Frankfurt 50

Dr.Robert FUGMANN, Alte Poststr.13, D-6270 Idstein

Prof.Jean M.PERREAULT, The Library, Univ. of Alabama at Huntsville, P.O.Box 2600, Huntsville, AL 35807, USA

Prof.Daniel Benediktsson (Book Review Editor), University of Iceland, Libr. & Inform.Science Studies, Oddi 101, Reykjavik, Iceland

Consulting Editors

Prof.Kenneth G.B.BAKEWELL, Liverpool Business School, Liverpool John Moores University, 98 Mount Pleasant, Liverpool L3 5UZ, U.K.

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

Mme.Nathalie DUSOULIER, INIST, 2, Allée du Parc de Brabois, F-54514 Vandoeuvre-lès-Nancy, France

Mr.Douglas FOSKETT, 1, Dale Side, Gerrards Cross, Bucks. SL9 7JF, U.K.

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

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

Prof.Wilfried GÖDERT, FHBD, Claudiusstr.1, D-5000 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.Krishan KUMAR, Dept.of Libr. & Inform.Sci., Univ.of Delhi, Delhi-110 007, India

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

Mr.Peter PAULSON, Forest Press OCLC, 85 Watervliet Ave., Albany, NY, 12206, USA

Prof.Dr.Roy RADA, Dept. of Computer Science, University of Liverpool, Liverpool L69 3BX, U.K.

Drs.Gerhard J.A.RIESTHUIS, Universiteitsbibliotheek, Singel 425, NL-1012 WP Amsterdam, Netherlands

Mr.LollROLLING, CEC, Dir.XIII, Jean-Monnet Centre, Kircheng, LU-Luxembourg

Dr.Winfried SCHMITZ-ESSER, Oderfelderstr.13, D-2000 Hamburg 13

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

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

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

Dr.Edouard SUKIASYAN, Russian State Library, Pr.Kalinina 3, Moskva 10100, Russia

Prof.Nancy WILLIAMSON, Fac.of Libr. & Inform.Sci., 140 St.George Str., Toronto M5S 1A1, Canada

UDC 025.4+168+001.4(05)

KNOWLEDGE ORGANIZATION

Devoted to Concept Theory, Systematic Terminology, and Organization of Knowledge

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-6000 Frankfurt 50. Tel.069-52 36 90, FAX: 069-52 05 66

Issue frequency: 4x/ann. *Annual subscription rates:* Institutions per volume DM 97.-, Individuals per volume 20% less, if directly ordered from INDEKS Verlag. Single issues: DM 28.- Back issues available, ask for special offer. Subscription included in membership fee for members of the International Society for Knowledge Organization (ISKO). MwSt (domestic only) and postage are not included; for Air Mail delivery an additional DM 4.- per issue is required.

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

Publisher: INDEKS Verlag, Woogstr.36a, D-6000 Frankfurt 50, 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). FrankfurterSparkasse No. 852082 (BLZ 500 502 01)

All Rights reserved. Printed in the Federal Republic of Germany 1993 by Druckerei H.Guntrum II KG, PF 180, D-6407 Schlitz/Hessen.

Contents page

Vol.20(1993)No.2

Losee, R.M.: **Seven fundamental questions for the science of library classification.**

Knowl.Org. 20(1993)No.1, p.65-70, 15 refs.

For classification to advance to the point where optimal systems may be developed for manual or automated use, it will be necessary for a science of document or library classification to be developed. Seven questions are posed which the author feels must be answered before such optimal systems can be developed. Suggestions are made as to the forms that answers to these questions might take. (Author)

Goltvinskaya, T.S., Sukiasyan, E.S.: **Library-Bibliographical Classification: On the path of renovation.**

Knowl.Org. 20(1993)No.2, p. 77-79, 2 refs.

The perspectives of reorganization of the Library-Bibliographical Classification (LBC) are described. The possibilities of a transformation of this classification system into a scientifically based "knowledge base" for traditional and electronic catalogues are shown. Difficulties and obstacles in pursuing the completion of LBC reconstruction are expounded. (Authors)

Kiel, E.: **Further education in knowledge organization. Basic didactic considerations.**

Knowl.Org. 20(1993)No.2, p. 71-76, 21 refs.

Knowledge organization in real world situations is a complex task relying on a vast body of knowledge from theories, disciplines, professions, and cultures. This diversity requires a particular instructional design for developing competence in this field. The main features of this design are: real world approach, critical incident analysis, the work on interdependent tasks as a problem-solving method, implementation of solutions, permanent evaluation. It is proposed that documentation of critical incidents, solutions and implementation results serve as a base for establishing knowledge organization as a new interdisciplinary field. (Author)

Gilreath, Ch.T.: **Terms, symbols, and ordinals: A taxonomy of designators.**

Knowl.Org. 20(1993)No.2, p. 80-86, 7 refs.

This article presents a new taxonomy of designators (a.k.a. *designations*), covering terms, symbols and ordinals. Although ordinals are widely used, they have not been conceptualized in terminology literature as designators per se. Each category is broken down according to the basic form of the designator. Term types are monomials, polynomials, and initialisms. Symbol types are alphabetic and graphic. And ordinal types are alphabetic and numeric. Combinations (hybrids) of these types are also discussed. The proposed terms and concepts are contrasted with those in ISO 1087 (*Terminology - Vocabulary*, 1990) and approximately 48 terms are defined. (Author)

Beilagenhinweis: Für die deutschen Bezieher liegt dieser Ausgabe das Programm der Deutschen ISKO-Konferenz in Weilburg, 26.-28.10.93 bei.

This contents page may be reproduced without charge.

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.

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

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 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 1978-1990 are available from INDEKS Verlag, too. (The 10 volumes of 1978-1987 are offered now at the highly reduced price of DM 350.-).

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 97.- + postage (DM 6.-). For air mail delivery add DM 4.- per issue. Membership rates see above. - INDEKS Verlag, Woogstr. 36a, D-6000 Frankfurt 50.

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 to 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 micro flexible discs are welcome if delivered in DOS compatible standard software such as Word (DOS or Windows), WordStar, WordPerfect, Euroscript, Multimate, In*vision, DCA/RFT-files or plain ASCII code - our standard is Word/DOS (Word/Windows) and PageMaker 3.1/4.0/5.0.