



KNOWLEDGE ORGANIZATION

INTERNATIONAL CLASSIFICATION

merly

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

**The Internationalization of Scholarship and Scholarly
Societies in the Humanities and Social Sciences**

**Medieval Faceted Knowledge Classification.
Ramon Llull's Trees of Science**

**Information as a Cognitive Construction:
A Communication-theoretic Model and
Consequences for Information Systems**

The Dewey Decimal Classification in China

**Onomastics and Terminology, Part III:
Formats, Borrowed Terms and Omissions**

INDEKS Verlag, Frankfurt
ISSN 0943 - 7444 Knowl.Org.
Vol. 23 (1996) No. 4

Contents

Editorial

Reminiscences and the One Big Hope 191

Articles

Bennet, D.C.: The Internationalization of Scholarship and Scholarly Societies in the Humanities and Social Sciences. 193
Walker, Th.D.: Medieval Faceted Knowledge Classification.
Ramon Llull's Trees of Science. 199
Gödert, W.: Information as a Cognitive Construction: A Communication-theoretic Model and Consequences for Information Systems 206
Yi, Hong; Jin, Zhang: The Dewey Decimal Classification in China 213
Riggs, Fred W.: Onomastics and Terminology.
Part III: Formats, Borrowed Terms and Omissions 216

Reports and Communications

ISMICK'96 (225) – Austrian Commission for Subject Cataloguing (225) – British Classification Research Group (225) – Infoterm - a Fresh Start (225) – European Association for Terminology founded at Southern Denmark Business School (226) – Ordinal and Symbolic Data Analysis (226) – Courses on Conceptual Data Analysis and Conceptual Knowledge Processing, Darmstadt 1997 (226) – Languages and the Media (198) – IFCS-96. Data Science, Classification and Related Methods, Japan, March 1996 (198) – Society of Indexers in Ireland, Sept. 1997 (205) – Search results also available at DIMDI via email (205).

ISKO News 26

The ISKO General Secretariat Moved from Frankfurt, Germany to Copenhagen, Denmark (227) – Changes in the Editorship of ISKO's Journal (227) – New Publisher of ISKO's Journal and its Series (227) – Calling for ISKO's New International WGs (227) – ISKO WG "Education and Training" (227) – ISKO WG "Knowledge Indexing and Supply" (227) – ISKO WG "Humanities/Fiction" (227) – Fiction, OPACs, Networks. A Research Seminar in Copenhagen, Nov. 1996 (228) – Compatibility and Integration of Order Systems (192) – SCIRE. Vol I (1995) Number 2 (192).

FID/CR News 41

Ranganathan Award for Classification Research (229) – New Chair of FID/CR (229) – Testimony of Gratitude (229) – Annual Report of FID/CR, 1996 (229) – IFLA Section on Classification and Indexing. Review of Activities, 1995-1996 (230).

Book Reviews

Steierwald, Ulrike: Wissen und System. Zu Gottfried Wilhelm Leibniz' Theorie einer Universalbibliothek. (Knowledge and system. On G. W. Leibniz' theory of a universal library). (Wilhelm Totok) 232
Holley, R.P.; McGarry, D.; Duncan, D.; Svenonius, E. (Eds.): Subject Indexing: Principles and Practices in the 90's. Proceedings of the IFLA Satellite Meeting held in Lissabon, Portugal, 17-18 August 1993. (Mira Micacic, Mima Willer) 233
Budín, Gerhard: Wie (un)verständlich ist das Soziologendeutsch? Begriffliche und textuelle Strukturen in den Sozialwissenschaften. (How (in)comprehensible is the German of sociologists? Conceptual and textual structures in the social sciences). (Heribert Picht) 237
Gerlach, Uwe; Gerlach, Gordona: Moderne Mentaltechniken. Neue Wege zu Tiefenentspannung und Wohlbefinden. (Modern mental techniques. New ways towards depth meditation and well-feeling). (Helmut Löckenhoff) 238

Knowledge Organization Literature 23(1996)No.4 239

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: Prof. Hanne Albrechtsen, The Royal School of Librarianship, Birketinget 6, DK-2300 Copenhagen S)

Editors

Dr. Ingetraut 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. SATHIA (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 Autónoma de Madrid, Dept. de Doc. Cient. Fac. de Ciencias, Canto Blanco, Madrid 34, Spain

Mr. Jens B. FRITS-HANSEN, Høsterkøbevej 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, Claudiusstr.1, D-50678 Köln

Dr. M.A. GOPINATH, DRTC, Indian Statistical Inst., 5th 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 HJERPPE, 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. Giliola 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, HINTE, Broniewskiego 83-157, PL-01-876 Warszawa, Poland

Dr. Otto SECHSER, In der Ey 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, Vozdvizhenka, 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.

Please take into account that the ERGON Verlag at Würzburg accepted the journal Knowledge Organization from the Indeks Verlag at Frankfurt. From Vol. 1/97 on the ERGON Verlag will deliver all titles, which were formerly available at the Indeks Verlag.

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.4

Bennett, D.C.: The internationalization of scholarship and scholarly societies in the humanities and social sciences.

Knowl.Org. 23(1996)No.4, p. 193-198

The paper focusses on the practical issues of institutions and resources relating to a conference held in November 1994 on the topic, organized by the American Council of Learned Societies (ACLS) which embraces the U.S. scholarly community in the humanities and social sciences. The results of statements of conference participants on the internationalization of its activities and on the internationalization of scholarship in their fields have been summarized here. (KO)

Walker, Th.D.: Medieval faceted knowledge classification: Ramon Llull's Trees of Science.

Knowl.Org. 23(1996)No.4, p.199 - 205, 27 refs.

Ramon Llull (1232-1316) wrote many didactic and theoretical works that demonstrate an exhaustive and creative approach to the organization of knowledge. His encyclopedic *Arbre de sciència* (1296) was a multi-volume summation of human knowledge, organized according to a plan that could be applied to other works. Set against a background of Llull's other tree-based works, including the *Libre del gentil e dels tres savis* (1274-89), and the *Arbre de filosofia desiderat* (1294), the *Arbre de sciència* is described and analyzed as a faceted classification system. (Author)

Gödert, W.: Information as a cognitive construction: A communication-theoretic model and consequences for information systems.

Knowl.Org. 23(1996)No.4, p. 206-212, 15 refs.

In this paper a model for understanding the concept of information is presented and how the processes of externalization and perception of information by human beings could be understood. This model is different from the standard information theoretic model. It combines the understanding of cognitive information processing as an act of information generation from sense impressions with communication theoretic considerations. This approach can be of value for any system that is regarded as a knowledge system with an in-built ordering structure. As an application some consequences will be drawn for the design of information systems which claims to handle information itself (c.g. multimedia information systems) instead of giving references to bibliographic entities. (Author)

Yi, Hong, Jin, Zhang: The Dewey Decimal Classification in China.

Knowl.Org. 23(1996)No.4, p. 213-215, 14 refs.

In China, the Dewey Decimal Classification (DDC) is one of the most influential classifications. It had a great impact on the development of Chinese classification. A comparison between DDC and three representative Chinese classifications corresponding to ancient, modern and contemporary times, illustrate the influence of DDC on Chinese classifications. The celebration of the 120th anniversary of the DDC is a good time to review its introduction, application, development and impact in China. (Authors)

Riggs, F.W.: Onomastics and Terminology. Pt.III: Formats, borrowed terms and omissions.

Knowl.Org. 23(1996)No.4, p. 216 -224, 29 refs.

Third part of a series of articles of which Pt. I was published in KO 23(1996)No.1, p.25-33, Pt.2 in No.3, p.157-168. Pt.4 will follow in KO 24(1997)No.1. In addition to the important distinctions between the fundamental concepts and terms (tags) used in Onomastics and Terminology, as reported in the first two parts of this essay, several other interesting comparisons can be made. First, with reference to *formats*, both the structure and nomenclature used for terminological entries (records) in *ISO 1087* parallel those found in dictionaries and suggest a semantic rather than an onomastic point of view. Second, a large number of *borrowed terms* taken from Lexicography and Linguistics can be found in this glossary for the terminology of Terminology. Sometimes the definitions for these terms identify them as borrowed concepts drawn from the vocabulary used by lexicographers. However, sometimes new meanings are stipulated for these terms without any markings to show that they are not borrowed concepts. Moreover, in all these cases, since the original and the newly stipulated concepts are similar, ambiguity is unavoidable. Third, some concepts that might be useful for terminologists are not included in *ISO 1087*: a few examples are explained. They are all concepts which lexicographers do not need and, consequently, they have no terms for them. It seems apparent that they have been omitted from the vocabulary of Terminology simply because they are new concepts without established terms. To explain the reasons for the formats, terms and omissions found in the leading glossary for the terminology of Terminology takes us into a realm of speculation that is too complicated for inclusion here, but I will discuss it in Part IV of this series, with a focus on the problems of neologisms. (Author)

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-60431 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 contribution 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 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, DCA/RFT-files or plain ASCII code - our standard is Word/DOS (Word/Windows 6.0) and PageMaker 6.