



KNOWLEDGE ORGANIZATION

Formerly INTERNATIONAL CLASSIFICATION

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

Categories and Relators: A new Schema

The Library of Congress Classification
in the USMARC Format

On the Establishment of Concordances between
Indexing Languages having a Universal or
Interdisciplinary Scope

Summarising Text for
Intelligent Communication

Technology Assessment - A Challenge to
Knowledge Organization?

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Editors

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

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

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

Prof.Daniel Benediktsson (Book Review Editor), Hollo
Janos u.4, VI.em 55, H-4024 Debrecen

Consulting Editors

Prof.Kenneth G.B.BAKEWELL, 9, Greenacre Road, Liver-
pool, L25 0LD, U.K.

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

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

Mr.Jens B.FRIIS-HANSEN, Hoesterkoebvej 7, DK-2970
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Mr.Alan GILCHRIST, 38 Ship Street, Brighton BN1 1AB,
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Prof.Wilfried GÖDERT, FHBD, Claudiustr.1, D-50678
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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, Universitetsbibliotheek, Singel
425, NL-1012 WP Amsterdam, Netherlands

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

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

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

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Inform.Serv., University of Maryland, College Park, MD,
20742, USA

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

Prof.Nancy WILLIAMSON, Fac.of Information Studies,
140 St.George Str., Toronto M5S 1A1, Canada

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

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Perreault, J.M.: **Categories and relators: A new schema**

Knowl.Org. 21(1994)No.4, p.189-198, 30 refs.

Reprint of an article which appeared in Rev.Int.Doc. 32(1965)No.4, p.136-144, also reprinted in the FID/CR Report No.4 and the author's book *Towards a Theory for UDC*. London: C.Bingley 1969. p.119-148, including the author's "emendations". Based on the works of Aristotle, Ramon Lull, I.Kant, and the experiences with relationships published in the works of S.R.Ranganathan, E.de Grolier, J.Mills, J.C.Costello, E.Wall, R.Pagès, A.Leroy, P.Braffort, M.Kervégant, J.C.Gardin and J.Farradane, categories and relationships were collected, analyzed, grouped and classified in a triadic way so that a scheme resulted by which 120 relationships could be defined and identified by their positions and their codes. The exercise was meant to create and supply a tool for the replacement of the non-significant relation symbol, the colon, in the UDC by a letter code which could express the actual relationship contained in a classificatory statement. Examples for their application illustrate different cases occurring. (KO)

Guenther, R.S.: **The Library of Congress Classification in the USMARC Format**

Knowl.Org. 21(1994)No.4, p.199-202, 9 refs.

The paper reviews the development of the USMARC Format for Classification Data, a standard for communication of classification data in machine-readable form. It considers the uses for online classification schedules, both for technical services and reference functions and gives an overview of the format specification details of data elements used and of the structure of the records. The paper describes an experiment conducted at the Library of Congress to test the format as well as the development of the classification database encompassing the Library of Congress Classification (LCC) schedules. Features of the classification system are given. The Library of Congress will complete its conversion of the LCC in mid-1995. (Author)

Scibor, E., Tomaszik-Beck, J.: **On the Establishment of concordances between indexing languages having a universal or interdisciplinarg scope (Polish experience)**

Knowl.Org. 21(1994)No.4, p.203-212, 10 refs.

Reports on investigations conducted at the Institute for Scientific, Technical and Economic Information (ISTEI) in Warsaw (Poland) in 1992-1993. These investigations aimed at a comparative analysis of four indexing languages (ILs) developed and/or used in Poland and at the establishment of concordances between them. These were the following ILs: Polish Thematic Classification (PTC) descriptor language based on the Thesaurus of Common Topics (TCT), Universal Decimal Classification (UDC), Subject-Heading Language of the National Library in Warsaw (SHL). When establishing concordances the PTC was chosen as the master language whereas the three other ILs

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served as target languages. The research in question comprised: a) pilot investigations; b) main investigations consisting in the elaboration of the Concordance Dictionary of Indexing Languages (CDIL). The pilot investigations comprised three approaches: a) use of a random sample of 144 PTC headings to which the equivalent lexical units of the target ILs were assigned; b) generation of alphabetical comparison matrices (M1) enumerating the lexical units of the ILs under investigation belonging to four selected subject-fields; c) establishment of concordance tables between the PTC and the three target ILs within the same four subject-fields. The elaboration of the CDIL consisted in the assignment of the (more or less) equivalent lexical units of the three target ILs to all 1330 headings comprised in the PTC main table. The coincidence rate of the ILs under comparison was computed in the framework of the pilot investigations as well as when analysing the results of the elaboration of the CDIL. The computed coincidence rate was very low when only the full (exact) equivalence of the lexical units belonging to the ILs under investigation was taken into consideration but it considerably increased when also the partial equivalence was taken into account. (Authors)

Endres-Niggemeyer, B.: **Summarising text for intelligent communication.** Results of the Dagstuhl Seminar.

Knowl.Org. 21(1994)No.4, p. 213-223

As a result of the transition to full-text storage, multimedia and networking, information systems are becoming more efficient but at the same time more difficult to use, in particular because users are confronted with information volumes that increasingly exceed individual processing capacities. Consequently, there is an increase in the demand for user aids such as summarising techniques. Against this background, the interdisciplinary Dagstuhl Seminar *Summarising Text for Intelligent Communication*, (Dec.1993) outlined the academic state of the art with regard to summarising (abstracting) and proposed future directions for research and system development. Research is currently shifting its attention from text summarising to summarising states of affairs. Recycling solutions are put forward in order to satisfy short-term needs for summarisation products. In the medium and long term, it is necessary to devise concepts and methods of intelligent summarising which have a better formal and empirical grounding and a more modular organisation. (Author)

Nohr, H.: **Technology Assessment - a challenge to knowledge organization.**

Knowl.Org. 21(1994)No.4, p. 224-226, 14 refs.

The increasing technicalization of knowledge calls for a school of thought in technology assessment which occupies itself with the cognitive foundations of knowledge technology and the consequences and effects of the technicalization of knowledge. The present contribution hopes to stimulate ISKO into taking an interest in this problem field. (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.

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.

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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

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 1978-1990 are available from INDEKS Verlag, too. (The 14 volumes of 1978-1991 are offered now at the highly reduced price of DM 400.-).

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.-/DM120.-).

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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.

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