

IC

CLASSIFICATION

INTERNATIONAL

Devoted to Concept Theory
Systematic Terminology &
Organization of Knowledge

Contents

Knowledge Structures Promoting Problem Solutions

A Theoretical Basis for the Accomodation of New
Subjects in Colon Classification Ed.7

Applicability of String Indexing to the Chinese
Language with Special Reference to NEPHIS

Subject Access in German-Language OPACs:
A Survey

INDEKS - Verlag, Frankfurt
ISSN 0340-0050 Int.Class.
Vol. 16 (1989) No. 2

Contents

Announcement

- The Founding of the „International Society for Knowledge Organization“,
Frankfurt, July 22, 1989 71

Articles

- Bauer, G.: Knowledge structures promoting problem solutions 73
Husain, Sh.: A theoretical basis for the accomodation of new subjects
in Colon Classification Edition 7 82
Qiu, L.: Applicability of string indexing to the Chinese language with
special reference to NEPHIS 89
Nohr, H.: Subject access in German-language OPACs: A survey 95

Reports and Communications

- Humphreys, B.: Unified Medical Language System: Progress report 101
Analyse des Données. Apprentissage de Connaissances Symboliques et Numériques
– British Classification Society – IFLA Section on Classification and Indexing – LC Ca-
taloging Distribution Service: Latest Products – Meetings 270 and 271 of the British
Classification Research Group, London – DGD-KTF again active – Colloquy on
the Subject Authority File (of the German Library), 5-6 Oct. 1989.

Infoterm News

- In Memoriam Edouard Natanson – Establishment of the International 104
Network for Terminology – The Terminology Committee of the American Translators
Association – Colloquy on „Terminologie et Industries de la Langue“, Paris, 19-20. Jan.
1989 – All-Union Scientific Conference on Problems of Unification and Standardization of
Technical Terminology held from 27 Febr. to 1st March 1989, Jurmala, Latvia – The
Japan Terminology Association – Nederlandstalige Terminologiedag, Eindhoven,
15 Dec. 1988 – Terminology and Knowledge Engineering, Vienna, 13-14 Jan. 1989
– International Conference on Terminology Standardization & Unification in Theory
and Practice, Tunis, 13-17 March 1989 – Establishment of ArabTerm – Workshop on
Teaching Aids in Terminology Standardization, Tunis, 6 March 1989 – Workshop
„Knowledge Transfer Centre based upon an Advanced Terminology Documentation“,
Tunis, 16 March 1989 – Workshop on the Preparation of Principles for Descriptive Ter-
minology Work, Tunis, 16 March 1989 – Terminology course held in the Republic of
China, Taipei, 17-21 April 1989 – Training opportunities for terminologists/translators
at the Centre Jacques Amyot – Meetings – New Publications – Hidden Glossaries 108

COCTA News 1989-2

- Endogenous Sociological Concepts: A critical problem in developing countries.
Call for papers for the COCTA sponsored INTERCOCTA Panel at the XII World
Congress of Sociology, Madrid, 9-13 July 1990 109
The overall program of COCTA Sessions, Madrid, 9-13 July 1990 110

Book Reviews

- Rajagopalan, T.S. (Ed.): Relevance of Ranganathan's contributions to
Libraryscience (K. G. B. Bakewell) 111
Dhyani, P.: Classification schemes and Indian libraries. 2nd ed. (M.P. Satija) 112
Rowley, J.E.: Abstracting and indexing, 2nd ed. (W. Bies) 113
Bock, H.H. (Ed.): Classification and Related Methods of Data Analysis.
Proceedings of the 1st Conf. of the IFCS, Aachen 1987 (P. Jaenecke) 114
Obituary: Jason Edward Louis Farradane, 1906-1989 116

Classification Literature 16(1989)No.2

- Author Index 132

INTERNATIONAL CLASSIFICATION

Devoted to Concept Theory, Systematic Terminology and Organization of Knowledge

Editors

Dr. phil. Ingetraut Dahlberg, D-6000 Frankfurt 50,
Woogstr. 36a, Editor-in-chief

Prof. Francis Miksa, Graduate School of Library
and Information Science, University of Texas at
Austin, Austin, TX, 78712-1276, USA

Prof. Jean M. Perreault, University Library, Univer-
sity of Alabama, P.O.B. 2600 Huntsville, Alabama
35807, USA

Prof. Arashanipalai Neclameghan, 70/3 4th Main
Road, Bangalore 560055, India

co-sponsored by

– FID/CR (Federation Internationale de Documen-
tation, Committee on Classification Research, Prof.
Nancy Williamson, Faculty of Library and Informa-
tion Science, University of Toronto, 140 St. George
Str., Toronto, Ont., M5S 1A1, Canada

Consulting Editors

Mrs. Jean Aitchison, 12, Sollershott West, Letch-
worth, Herts., SG6 3PC, England

Prof. Asterio T. Campos, Departamento de Bibliote-
conomia, Universidade de Brasilia, Brasilia DF,
Brazil

Dr. A.I. Chernyi, VINITI, Ul. Usievicha 20a,
Moskva 125219, UDSSR

Dr. R. Fugmann, Alte Poststr. 13, D-6270 Idstein

Dipl. Volksw. Otto Gekeler, Burgunderweg 9,
D-7900 Ulm

Prof. Eric de Grolier, Conseil International des
Sciences Sociales, 1, rue Miollis, F-75 Paris 15e

Prof. Dr. Norbert Henrichs, Forschungsabt. In-
form. und Dokum. des Philosophischen Instituts der
Universität Düsseldorf, D-4000 Düsseldorf, Univer-
sitätsstr. 1, FRG

Yukio Nakamura, Authorized Consulting Engineer,
14-8 Nisikata-1 Bunkyo Ku, Tokyo 113, Japan

Prof. Dr. F.W. Riggs, Department of Political
Science, Univ. of Hawaii at Manoa, Honolulu, HI,
96822, USA

Mr. Mohinder Partap Satija, Department of Library
and Information Science, Guru Nanak Dev Univer-
sity, Amritsar-143005, India

Dr. Eugen Scibor, Institut Informacji Naukowej.
Technicznej i Ekonomicznej (IINTE), Ul. Żurawia
3/5, 00-926 Warszawa, Poland

Prof. Alfredo Serrai, Università degli Studi, via
Stazione S. Pietro 22, Roma, Italy

Prof. Dr. Dagobert Soergel, College of Library and
Information Services, University of Maryland, Col-
lege Park, MD., 20742, USA

Infoterm, c/o öster. Normungsinstitut, Postfach
130, A-1021 Wien

UDC 025.4 + 168 + 001.5 (05)

INTERNATIONAL CLASSIFICATION

Devoted to Concept Theory, Systematic Terminology and Organization of Knowledge

Editors: Dr. I. Dahlberg, Frankfurt; Prof. F. Miksa, Austin, TX; Prof. A. Neelameghnan, Bangalore, India; Prof. J.M. Perreault, Huntsville, Ala., USA; co-sponsored by FID/CR

Editorial Office: c/o Dr. I. Dahlberg, Woogstr. 36a, D-6000 Frankfurt 50, Tel. 069/523690

Issue frequency: 3x/ann. *Annual subscription rates:* Institution per volume DM 84,-; Individuals per volume DM 67,20; Single issues: DM 28,-. Back issues, hard copy, per issue DM 18,-, microfiche, per issue DM 6,- (1974-1977). Institutions will be billed. Individuals must prepay. For Air Mail delivery an additional DM 4,- per issue. Postage and Mwst (domestic only) is not included.

Advertising rates: Advertising rate card No.1. Advertising fact sheet with details of mechanical requirements and closing date available upon request.

Publisher: INDEKS Verlag, Woogstr. 36a, D-6000 Frankfurt 50, Tel. 069/523690

Bank Account Nos.: INDEKS Verlag, Postgiro-Konto Frankfurt, No. 151208-608; Frankfurter Sparkasse, No. 852 082 (BLZ 500 502 01)

All rights reserved. Printed in the Federal Republic of Germany 1989 by Druckerei H. Guntrum II KG, Postfach 180, D-6407 Schlitz.

Contents page

I.C. Vol.16 (1989) No.2

Bauer, G.: Knowledge structures promoting problem solutions. Possibilities of graphic representation of knowledge in thesaurus-like fashion.

Int.Classif. 16(1989)No.2, p.73-81, 6 refs.

Knowledge to be processed for problem solving purposes can best be adapted to the human brain where it is stored in the form of „concept configurations“, by a representation in the manner of a structural diagram. The method discussed here for the graphic representation of knowledge in thesaurus-like fashion (TGW method) promotes the formation of the „internal problem representation“ by transforming the textually available knowledge into a structural diagram-like form. In such a structural diagram, the concepts of the statements relevant to the problem are pre-ordered with the aid of „ordering lines“ corresponding to the categories (facets) of the knowledge field concerned. In this way an open, discipline-independent ordering system for the knowledge available for the solution of the problem is established, into which even knowledge from quite different disciplines can be integrated. A sort of „dialogue“ between the graphically represented structural diagram of the knowledge available for problem solution and the knowledge stored in the problem solver's memory leads, as more and more knowledge is acquired, to optimization of the structural diagram and thus also to favorable preconditions for the problem-related activation of knowledge in the problem solver's working memory. These structural diagrams of knowledge can also be used as aids toward more effective interaction between man and computer. A typical multidisciplinary problem is used as an example to illustrate the application possibilities of the TGW method.

Author

Nohr, H.: Subject access in German-language OPACs: A survey.

Int.Classif. 16(1989)No.2, p.95-100, 35 refs.

In the German-speaking countries, in contrast with the USA, the development of Online Public Access Catalogues (OPACs) is still in a rudimentary stage. A discussion on theoretical foundations of online-adequate subject description has not taken place so far. The present report aims to present a survey of how, in the 14 systems of German university and public libraries, subject access is being applied in practice.

Author

Husain, A.: A theoretical basis for the accomodation of new subjects in Colon Classification, Edition 7.

Int.Classif. 16(1989)No.2, p.82-88, 13 refs.

As the universe of subjects is developing at an increasingly faster rate, the accomodation of new subjects has always been a problem for all classification schemes. Colon Classification, with its strong base provided by the 'Dynamic theory of ever-growing universe of subjects', of which the 7th ed. is a culmination, has tackled this problem at the conceptual level. The article seeks to describe how CC7 has tried to solve the problem on the Idea Plane and how the notational system could be made to admit an infinite number of newcomers without disturbing the infrastructure of the existing subjects. It is concluded that a theory-based scheme, like CC7, is more suited to cope with the accelerated proliferation of subjects than a non-theory-based scheme.

Author

Qiu, L.: Applicability of string indexing to the Chinese language with special reference to NEPHIS.

Int.Classif. 16(1989)No.2, p.89-94, 3 refs.

The applicability of the three types of string indexing, as defined by Tim Craven, to the Chinese language is investigated. It was found that KWIC and KWOC indexing cannot be used for the Chinese language. Termlist input string indexing is directly applicable to Chinese, but it has not been used. The applicability of coded input strings varies with different systems: the application of PRECIS to the Chinese language requires much effort while the adoption of NEPHIS to the Chinese language requires fewer changes.

Author

Beilagenhinweis:

Der Ausgabe liegt ein „Call for Papers“ der Internationalen Gesellschaft für Wissensorganisation bei sowie eine Einladung zum Erwerb der Mitgliedschaft in dieser Gesellschaft.

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 organisation
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, 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 surveys, 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 (e.g. text) and equally collected with their texts at the end of the paper under the heading *Notes*.

Aims

Thus, INTERNATIONAL CLASSIFICATION 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.

INTERNATIONAL CLASSIFICATION publishes original articles, reports on conferences and similar communications, the Newsletters of FID/CR (Committee on Classification Research of the International Federation for Documentation), and COCTA (Committee on Conceptual and Terminological Analysis), book reviews, letters to the editor, and an extensive annotated bibliography of recent classification and indexing literature, covering between 400 and 500 items in each issue.

INTERNATIONAL CLASSIFICATION 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.

INTERNATIONAL CLASSIFICATION 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 1978-1985 are available from INDEKS Verlag, too. (The 9 volumes of 1978-1986 are offered now at the highly reduced price of DM 300.-.)

As of August 1989, INTERNATIONAL CLASSIFICATION has become the official organ of the INTERNATIONAL SOCIETY FOR KNOWLEDGE ORGANISATION (ISKO) (founded on July 22, 1989) and is included for every ISKO-member, personal or institutional, in the membership fee (\$25/\$50).

Rates: From 1990 on for 4 issues/ann. (including indexes) DM 94.00 + postage (= DM 6.00). For air mail delivery add DM 4.00 per issue. Membership rates see above.

INDEKS Verlag, Woogstr. 36a, D-6000 Frankfurt 50.

Journal References should contain the names and initials of all authors, full title 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: Mater, E.: Human intelligence as a precondition for the machine processing of knowledge. *Int. Classif.* 15(1988)No.3, p.125-132

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 the ASCII code. Such contributions must be accompanied by their printouts on paper.