

INTERNATIONAL

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# CLASSIFICATION

Devoted to Concept Theory  
Systematic Terminology &  
Organization of Knowledge

Computers and a New Philosophy of Knowledge  
Focus on Links: A Holistic View of Hypertext  
Term Associations and Computational Linguistics  
Data Representation by Nested Line Diagrams  
Terminologist-Typical Frustrations

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## INTERNATIONAL CLASSIFICATION

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## Contents page

**Vol.18(1991)No.1**

Veltman, K.: **Computers and a new philosophy of knowledge.**  
Int.Classif. 18(1991)No.1, p. 2 - 12, 2 refs.

In the tradition of Marshall McLuhan it is shown how different media, i.e. speech, parchment, manuscript, printed book are determining factors in the limits of knowledge and communication thereof. New possibilities introduced by computers are considered: multilinear access, variants, new distinctions between verbal and visual, scale, integration of geometrical and algebraic methods, emphasis on process, and system. Computers are the first tool with multi-media capabilities, allowing output in the same medium as the input. The philosophical implications of these innovations are explored. (Author)

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Rada, R.: **Focus on links:a holistic view of hypertext.**  
Int.Classif. 18(1991)No.1, p. 13 - 18, 16 refs.

The disciplines of human-computer interaction, computer-supported collaborative work, information storage and retrieval, and artificial intelligence should complement one another in the new discipline of hypertext. This holistic view of hypertext focuses on links: links within a document (microtext), links among documents (macrotext), links among people (grouptext), and dynamic links (experttext). The principles and systems which are relevant to creating and accessing hypertext can be usefully presented under the headings of text, microtext, macrotext, grouptext, and experttext. From text to experttext, people consistently use hierarchical structures, particularly hierarchical semantic nets, to organize information. (Author)

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Ruge, G., Schwarz, Ch.: **Term associations and computational linguistics.**  
Int.Classif.18(1991)No.1, p.19 - 25, 20 refs.

Most systems for term associations are statistically based. In general they exploit term co-occurrences. A critical overview about statistical approaches in this field is given. A new approach on the basis of a linguistic analysis for large amounts of textual data is outlined. (Authors)

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Kollewe, W.: **Data representation by nested line diagrams illustrated by a survey of pensioners.**  
Int.Classif.18(1991)No.1, p.26-34, 12 refs.

With Formal Concept Analysis surveys are analyzable in the way that a meaningful picture of the answers of the interviewed persons is available. Line diagrams of large concept lattices might become less readable up to the point that it is impossible to pursue the line segments with the eyes. Nested line diagrams give the opportunity to overcome these difficulties. The main idea of nested line diagrams is to partition the line diagram into boxes so that line segments between two boxes are all parallel and may be replaced by one line segment. The possibility to draw line diagrams with more than two factors does allow it to describe concept lattices with many hundred or thousand concepts in a clear structure. In practice it has often been proven useful to take standardized scales for the single levels. (Author)

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Einem Teil der Ausgabe liegt eine Werbung des INDEKS Verlags bei.

The 1990 Index has been added to this issue.

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## 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, 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 concerning themselves with the problems of terminology in general and with respect to special fields.

## 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-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.

INTERNATIONAL CLASSIFICATION 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.

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 1978-1990 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, INTERNATIONAL CLASSIFICATION 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 50.-/DM 100.-).

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*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:* 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.

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