

INTERNATIONAL

IC

CLASSIFICATION

Devoted to Concept Theory
Systematic Terminology &
Organization of Knowledge

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Online Public Access Catalogs**

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in Free-Text Searching in a Full-Text
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Gödert, W., Horny, S.: **The design of subject access elements in Online Public Access Catalogs.**

Int. Classif. 17(1990) No.2, p.66-76, 73 refs.

Experiences with retrieval in OPACs suggest that there are major problems for the users of such systems, such as choosing the 'correct' subject access vocabulary, narrowing or broadening the set of items retrieved regarding the search interest. Such problems relate to two facts: (1) that in the early OPACs subject access has not been considered seriously enough and (2) that the complexity of the topic has not been really recognized. Using a typology of users' questions it is demonstrated which requirements must be met by a successful online subject access. Improvements of subject access tools are primarily aimed at, pinpointing the interplay between the different subcomponents of any subject facility: a) the features of the indexing languages used; b) the indexing principles used; c) the design and structuring of the database; and d) the possibilities of the technical retrieval facility, the search mode, and query languages. The contribution summarizes the manifold interactions between the four subcomponents listed. Any successful retrieval will heavily depend on the design of these components considering their interactions.

(Authors)

Furniss, P.: **A proposed methodology for examining the provision of subject access in the OPAC.**

Int. Classif. 17(1990) No.2, p.85-90, 22 refs.

The development of the OPAC has stimulated renewed interest in the provision of subject access in the catalogue. Significant differences between the new and earlier formats have prompted the suggestion that there should be a radical reappraisal of the provision made. A methodology for such a reappraisal is proposed, based on the proposition that a radical reappraisal will need to refer back to the theory on which subject access is based. The Five Axiom Theory developed by R. Fugmann is outlined, which is considered to provide a possible basis for the reappraisal. Some existing data derived from a cooperative cataloguing environment is described which is considered to be relevant to the axiom in Fugmann's theory which is concerned in part with the significance of consistency in indexing. The data is analysed in terms of consistency, with the objective of indicating what kind of results might be obtained from the application of the proposed methodology. The conclusion drawn from the results of the analysis is that the methodology may well be worth further exploration. Such exploration will need to examine a more extensive data sample than the limited one used for the analysis undertaken in the article, and will need also to examine the role other axioms of the theory might play in implementing a reappraisal of subject access.

(Author)

Kristensen, J., Järvelin, K.: **The effectiveness of a searching thesaurus in free-text searching in a full-text database.**

Int. Classif. 17(1990) No.2, p.77-84, 30 refs.

Synonyms, antonyms, quasi-synonyms and homonyms are typical features of natural language which cause difficulties in free-text searching in full-text databases. Searching thesauri which supply synonyms, antonyms and quasi-synonyms for given natural language terms have been suggested as a search aid to overcome these problems. To test these suggestions, a small searching thesaurus was constructed for Finnish newspaper articles on economic issues and a set of test searches were conducted and analyzed in a large Finnish newspaper article database. The original queries were elicited from journalists who also evaluated the relevance of the search results. Each query was searched in three distinct modes: basic search, synonym search and related term search. The basic searches contained only terms included in the journalists' original query statement. The logic of the basic search was developed by the researchers. In the synonym searches, the terms of the basic search were extended by disjunctions of the synonyms given by the searching thesaurus without modifying the overall logic of the basic search. In the related term searches, the disjunctions in the synonym searches were further extended by disjunctions of related terms (quasi-synonyms) given by the searching thesaurus again without modifying the overall logic of the synonym search. The searches in each mode were analyzed w.r.t. relative recall and precision by setting the relative recall of the third mode searches to 100 %. The average relative recall in the first mode searches was ca. 45 % and in the second ca. 82 %. The average precision values were for the modes one, two and three were 51 %, 41 % and 33 %, respectively. The substitution of synonyms shows a considerable increase in recall with a negligible decline in precision.

(Author)

Zeng, Lei: **Establishing a compatible general vocabulary in China: the capability.**

Int. Classif. 17(1990) No.2, p.91-98, 11 refs.

The study attempts to find an access to the establishment of compatibility among Chinese thesauri, that is, to build a general compatible Chinese vocabulary based on existing thesauri in China and abroad. After a general analysis of the factors influencing compatibility between thesauri, the compatible capabilities between special thesauri and general ones, as well as between Chinese thesauri and English ones are discussed.

(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 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, scientific 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 listed 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-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 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).

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Examples: Mater, E.: Human intelligence as a precondition for the machine processing of knowledge. Int. Clas. 15(1988) No. 3, p. 125-132

Hunter, E.J.: Classification made simple. Aldershot, GB: Gower 1988. 115p.

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