

IC

CLASSIFICATION

INTERNATIONAL

Devoted to Concept Theory  
Systematic Terminology &  
Organization of Knowledge

**An Essay on the Prehistory of  
General Categories (IS): T. Jefferson**

**New Approaches in  
Thesaurus Application**

**Conceptual Information Retrieval  
by Knowledge-Based  
Programming Techniques**

**The Training of Librarians in  
Content Analysis**

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Vol.18(1991)No.3

**Perreault, J.M.: An essay on the prehistory of general categories (I): T. Jefferson**

Int.Classif. 18(1991)No.3, p. 134-142, 5 refs.

Predictable subarrangement of entries within a lowest-order class, or of canonically arranged (alphabetical, chronological,...) subclasses within a broader class, produce operational results similar to those aimed at by general-category theory. Most histories of classification ignore such detail. But such subarrangement may be visible (even though not discussed thematically) in older general classifications.

Discovery of a volume belonging to Thomas Jefferson led to examination of Jefferson's recently published catalogue "in his own order", in the hope of seeing in it the manifestation of awareness of the need for such subarrangement. Subclasses analyzed are "Africa", and "Asia" in his Chapter 29: "Geography". The results are at best mixed. Bibliographical details of the discovered Jefferson volume are given: two of the 14 items in it are unique, one of them of unknown authorship. Analysis of items within the mentioned subclasses was hampered by the loss (due to a fire at the Library of Congress in 1851) of many of them, and because of the inexactness of Jefferson's bibliographical descriptions (in some cases the only remaining trace of the works' existence). (Author)

**Schmitz-Esser, W.: New approaches in thesaurus application.**

Int.Classif.18(1991)No.3, p. 143-147, 9 refs.

To show the difference and explain the move to a new kind of thesauri in the information science area, some of the main characteristics of conventional thesauri are pointed out as well as their side-effects. The new approaches for thesauri application are seen to exist in (1) expert systems, (2) interface systems, (3) object-oriented design and programming, (4) hypertext systems, (5) machine translation, and (6) machine abstracting. These areas are shortly described including also the new problems which they might create. A discussion of the limitations of the new thesaurus application areas finishes the article which challenges, finally, an awareness to meet the new possibilities of a thesaurus revival. (I.C.)

**Only, P: Conceptual information retrieval by knowledge-based programming techniques.**

Int.Classif. 18(1991)No.3, p. 148-152, 29 refs.

Information retrieval operates on the assumption that concepts can be recognized. This is only poorly supported by traditional document processing because documents are treated as separate units. Sophisticated retrieval techniques, such as bibliographic coupling or probabilistic retrieval, use statistical analyses of the context to improve retrieval results. However, extensive meta-analysis or control of the retrieval process requires knowledge-based programming techniques. The project AKCESS, which is discussed, aims to determine informants on social science topics, examining the relationships between documents, authors, institutions, and concepts, i.e. characteristics of a scientific community. (Author)

**Nohr, H.: The training of librarians in content analysis. Some thoughts on future necessities.**

Int.Classif.18(1991)No.3, p. 153-157, 12 refs.

The training of librarians in content analysis undergoes influences resulting both from the realities existing in the various application fields and from technological innovations. The present contribution attempts to identify components of such training that are necessary for a future-oriented instruction, and it stresses the importance of furnishing a sound theoretical basis, especially in the light of technological developments. Purpose of the training is to provide the foundation for 'action competence' on the part of the students. (Author)

**Beilagenhinweis:** Für die deutschen Empfänger der Zeitschrift liegt eine Einladung zur Teilnahme am DGD-KTF-Workshop "Thesauri in der Sprachtechnologie. Stand- Projekte - Perspektiven", Weilburg, 15.Okt.1991, bei.

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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
- (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*.

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### 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 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.-).

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