

IC

CLASSIFICATION

INTERNATIONAL

Devoted to Concept Theory  
Systematic Terminology &  
Organization of Knowledge

Contents

Computer Searching on PRECIS: An Exploration  
of Measuring Comparative Retrieval Effectiveness

Communicative Grammar and Machine-Assisted  
Text Contents Analysis

The Alphabet. Pattern, History and Perspective  
of the Earliest Classification System

On how to Find a Fundamental Classification of  
Human Knowledge

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## INTERNATIONAL CLASSIFICATION

Devoted to Concept Theory, Systematic Terminology and Organization of Knowledge

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## Contents page

I.C. Vol. 11 (1984) No. 1

DeHart, F.E., Glazier, J.: **Computer searching on PRECIS: An exploration of measuring comparative retrieval effectiveness.**

In: Int. Classif. 11 (1984) No. 1, p. 3–8, 8 refs.

Designing research on the retrieval effectiveness of computer searches on PRECIS (PREserved Context Index System) compared with retrieval effectiveness of searches on other types of subject analysis used in computer-based information sources is a complex process. This paper explores the complexity of measuring comparative retrieval effectiveness through a comparison of the subject analysis provided by the PRECIS system for fifty articles with the subject analysis provided for the same articles by three computer-based information sources: ERIC/CIJIE, LLBA/Online, and PsycINFO. Objectives are: (1) To discover factors that should be taken into account when designing this type of research; and (2) To identify extraneous variables that work against internal validity in research design. (Authors)

Dahlberg, W.: **The alphabet. Pattern, history and perspective of the earliest classification system.**

In: Int. Classif. 11 (1984) No. 1, p. 13–20, 14 refs.

Some theoretical considerations on the alphabet as a system of signs, including a new theory of the sign, its interdisciplinary localization, its historical unfoldment as a system of spoken sound and suggestions for future approaches. The paper argues that language-development is approaching the level of conceptual speech - passing through pictorial, sound and sign phases - and that investigations leading to a universal conceptual language as instrumentalization of a universal classification system most likely will have to focus on pictorial means of "verbalization" (this for reasons of internationalization and standardization of such a desirable concept language). - Although the paper does not explicitly deal with classification, most of its concern can easily be transcribed to fit e.g. the problem of concept clarification, and systematization and related terminological, semantical and notational areas. (Author)

Hoppe, A.: **Communicative grammar and machine-assisted text contents analysis.**

In: Int. Classif. 11 (1984) No. 1, p. 9–12, 7 refs.

None of the endeavors undertaken so far in the field of text contents analysis has proved satisfactory, since semantic implications were, in the end, merely superimposed onto traditional grammar, e.e. onto descriptions of the form domain of language. The approach of LIMAS, however, uses a semantic syntax which can be abstracted to such a degree as to permit it of being converted into an algorithm and made computer operable. For this the Communicative Grammar was introduced. Its procedures are outlined, its present state and possible applications in information banks, retrieval, translation, language courses and through the use of microprocessors are described. (I.C.)

Ballmer, Th.T.: **Zur Gewinnung einer Fundamentalklassifikation des menschlichen Wissens. (On how to find a fundamental classification of human knowledge, Pt. III)**

In: Int. Classif. 11 (1984) No. 1, p. 21–27, 52 refs.

The aim of this paper is to provide the fundamentals of a classification of human knowledge. It is demonstrated on this basis that human knowledge is not an incoherent patchwork of bits and pieces but rather a well structured system. The procedure to justify this claim is based on an analysis of linguistic expressions. The customary local approaches based upon numerical feature analyses of linguistic expressions are criticized. In contrast to these it is proposed a global procedure based upon an investigation of large scale lexical material. It is argued that the verbs of a language provide the basis to arrive at a fundamental classification of human knowledge. Using the two semantic relations similarity and presupposition a three dimensional space is found containing about 1,300 categories and about 45 larger units (called models). The first part contains an elaboration of the dimension and some major interpretations of the classification results: a numerical analysis of the data, the relation of linguistic categories such as "aktionsart" and transitivity, and the paraphrastically basic verbs. The 2nd and 3rd part contains furthergoing interpretations of the classification results with respect to the syntax, semantics, textlinguistics, psychology, sociology and also philosophy of natural language. In addition, the characteristics and aims of the classification are summarized. The methodologic parsimony, the completeness, the uniqueness, the robustness, the universality and contextrelatedness, and the linguistic adequacy of the results discussed. (Author)

# INTERNATIONAL CLASSIFICATION

## 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 and commodity classification  
terminology, lexicography, 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 analyses 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 TO 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.

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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), Infoterm and COCTA (Committee on Conceptual and Terminological Analysis), book reviews, letters to the editor and an extensive annotated bibliography of recent classification literature, covering between 300 to 400 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 I.C. was published by K.G. Saur Verlag, München. Back issues of 1974-1980 are now available from the new publisher.

### Rates:

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### Examples:

Fugmann, R.: The glamour and the misery of the thesaurus approach. In: Int. Classif. 1(1974)No.2, p.76-86, 20 refs.

Sartori, G., Riggs, F.W., Teune, H.: Tower of Babel. On the definition and analysis of concepts in the social sciences. Pittsburgh, Pa.: Int. Studies Assoc. 1975. 107 p. = Int. Studies Occ. Paper No.6.

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