

INTERNATIONAL

IC

CLASSIFICATION

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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Contents

Editorial

10 Years of International Classification – could you do without it? 1

Articles

DeHart, F., Glazier, J.: Computer searching on PRECIS: An exploration of measuring comparative retrieval effectiveness 3
 Hoppe, A.: Communicative Grammar and machine-assisted text contents analysis 9
 Dahlberg, W.: The Alphabet. Pattern, history and perspective of the earliest classification system 13
 Ballmer, T.T.: On how to find a fundamental classification of human knowledge (III). (In German) 21

Reports and Communications

Sanllorenti, A.M.: FID/CLA/LI: Compatibility experience of indexing languages in the education field 28
 Classificatie Stichting – EURALEX founded 30

FID/CR News

Calendar of Meetings 1984. – FRG: Applications in Classification 31
 Program of the 8th Annual Conference. – U.K.: CRG Meetings 245 and 246 29
 USA: ASIS/SIG/CR Plans – Cultural Development. Experts Meeting on Methods for Analysis and Evaluation of Thesauri, Zagreb, Sept. 1983 – ECSSID WG3 Meeting, Bonn, Oct. 1983 – Personal News 33
 Classification and Indexing Research. Current Bibliography 34

Infoterm News

Arabic telecommunications vocabulary – Medical terminology projects – 37
 Social sciences terminology in Latin America – Meetings – New Periodicals, Infoterm holdings

COCTA News

Graham, G.J.Jr.: Current developments in conceptual and terminological analysis. – Political Science Activities – COCTA Panels at APSA Washington Meeting 1984

Book Reviews

H.R.Simon: Research and Publication Trends in Systematic Zoology 1958-1970 (V.V.Nalimov) 41
 W.Gaus: Documentation and Classification Science. Textbook for Theory and Practice of Information Retrieval (In German) (R. Fugmann) 41
 R.Dobbener: Foundations of Numerical Taxonomy based on Mixed Variables. (In German, review in English) (J.Krauth) 43
 Gentle, J.E.(Ed.): Computer Science and Statistics: Proceedings of the 15th Symposium on the Interface. (R.Haux) 44
 R.Kittredge, J.Lehrberger: Sublanguage. Studies of Language in Restricted Semantic Domains (T.Bungarten) 44

Correction, Please! 47

Classification Literature 11 (1984) No.1 48

Author Index 61

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/CJE, 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 fundaments 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.

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-synthesical 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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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 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.

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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.

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 No.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 number of pages.

Examples:

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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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