# Knowledge Organization

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### KNOWLEDGE ORGANIZATION

Official Quarterly Journal of the International Society for Knowledge Organization ISSN 0943 – 7444 International Journal devoted to Concept Theory, Classification, Indexing and Knowledge Representation

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### Contents page

Mai, Jens-Erik. (2004). Classification of the Web: Challenges and Inquiries. *Knowledge Organization*, 31(2). 92-97. 33 refs.

**ABSTRACT:** This paper discusses the challenges faced by investigations into the classification of the Web and outlines inquiries that are needed to use principles for bibliographic classification to construct classifications of the Web. This paper suggests that the classification of the Web meets challenges that call for inquiries into the theoretical foundation of bibliographic classification theory.

Lima, Gercina Ângela Borém and Raghavan, K. S.. (2004). Information Retrieval and Cognitive Research. *Knowledge Organization*, *31*(2). 98-105. 22 refs.

ABSTRACT: Information Science, which attained the status of a discipline in the 1980s, has been enriched by inputs from a number of disciplines ranging from computer technology to psychology. A predominant characteristic of research in Information Retrieval in recent years has been the adoption of a 'user-centered' approach to the design of information systems. This shift in the emphasis began primarily after Belkin enunciated his ASK (Anomalous State of Knowledge) hypothesis. Research in the Cognitive Sciences has the potential to contribute substantially to enhancing all Information Retrieval processes. This paper emphasizes the importance of adopting a broad-based approach to cognitive research in IR and suggests that there is a need for exploring the relevance of analytico-synthetic approach and related research in the design of IR systems.

San Segundo, Rosa. (2004). A New Conception of Representation of Knowledge. Knowledge Organization, 31(2). 106-111. 18 refs.

**ABSTRACT:** The new term *Representation of knowledge*<sup>1</sup>, applied to the framework of electronic segments of information, with comprehension of new material support for information, and a review and total conceptualisation of the terminology which is being applied, entails a review of all traditional documentary practices. Therefore, a definition of the concept of Representation of knowledge is indispensable. The term representation has been used in western cultural and intellectual tradition to refer to the diverse ways that a subject comprehends an object. Representation is a process which requires the structure of natural language and human memory whereby it is interwoven in a subject and in conscience. However, at the present time, the term Representation of knowledge is applied to the processing of electronic information, combined with the aim of emulating the human mind in such a way that one has endeavoured to transfer, with great difficulty, the complex structurality of the conceptual representation of human knowledge to new digital information technologies. Thus, nowadays, representation of knowledge has taken on diverse meanings and it has focussed, for the moment, on certain structures and conceptual hierarchies which carry and transfer information, and has initially been based on the current representation of knowledge using artificial intelligence. The traditional languages of documentation, also referred to as languages of representation, offer a structured representation of conceptual fields, symbols and terms of natural and notational language, and they are the pillars for the necessary correspondence between the object or text and its representation. These correspondences, connections and symbolisations will be established within the electronic framework by means of different models and of the "goal" domain, which will give rise to organisations, structures, maps, networks and levels, as new electronic documents are not compact units but segments of information. Thus, the new representation of knowledge refers to data, images, figures and symbolised, treated, processed and structured ideas which replace or refer to documents within the framework of technical processing and the recuperation of electronic information.

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- Sager, J.C. (1990). A Practical Course in Terminology Processing. Amsterdam: John Benjamins.
- Sukiasyan, E. R. (1996). Change as a problem of classification system development. In R. Green (Ed.). Knowledge Organization and Change: Proceedings of the 4<sup>th</sup> International ISKO Conference. Frankfurt: Indeks Verlag. 119-122.

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#### Scope

The more scientific data is 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 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 in 1974, KNOWLEDGE ORGANIZATION (formerly 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

- clarifying the theoretical foundations (general ordering theory/science, theoretical bases of classification, data analysis and reduction)
- (2) describing practical operations connected with indexing/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, KNOWLEDGE ORGANIZATION 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 conceptsynthetical 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.

KNOWLEDGE ORGANIZATION 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 some 500 items in each issue.

KNOWLEDGE ORGANIZATION 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.

KNOWLEDGE ORGANIZATION 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 it was published by K.G. Saur Verlag, München. Back issues of 1978-1992 are available from ERGON-Verlag, too.

As of 1989, KNOWLEDGE ORGANIZATION has become the official organ of the INTERNATIONAL SOCI-ETY FOR KNOWLEDGE ORGANIZATION (ISKO) and is included for every ISKO-member, personal or institutional in the membership fee (US \$ 55/US \$ 110).

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