# Knowledge Organization

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# KNOWLEDGE ORGANIZATION

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## Contents

Articles	Classification Research Issues	
Charaf, Inaam. Conceptualisation and Organization of Knowledge Between the 10th and 14th Centuries	Williamson, Nancy	252
in Arabic Culture	Book Reviews	
Turner, James M. and Emmanuël Colinet. Using Audio Description for Indexing Moving Images	IFLA cataloguing principles: steps towards an international cataloguing code: report from the 1st IFLA Meeting of Experts on an International Cataloguing Code, Frankfurt, 2003. Edited by Barbara B. Tillett, Renate Gömpel and Susanne Oehlschläger. München: K.G. Saur, 2004. 186 p. (IFLA Series on Bibliographic Control; vol. 26) ISBN 3-598-24275-1	257
	Knowledge Organization Literature 31 (2004) No.4	261
	Personal Author Index	270

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## Contents page

Charaf, Inaam. Conceptualisation and Organization of Knowledge Between the 10th and 14th Centuries in Arabic Culture. *Knowledge Organization*, 31(4). 213-221. 14 refs.

ABSTRACT: I present a detailed philosophical study of three classification systems: Al-Farabi, Al-Ghazali and Ibn Khaldun. The primary aim of this study is to formulate the underlying philosophical basis of each classification and to relate this basis to certain principles contained in the Islamic revelation. I also give analytical treatment of the following questions: the major distinguishing features of each classification and the attitude of each thinker towards the philosophical and religious sciences and how they envisaged the distinction between the two fields.

Turner, James M. and Emmanuël Colinet. Using Audio Description for Indexing Moving Images. *Knowledge Organization*, 31(4). 222-230. 9 refs.

**ABSTRACT:** This paper includes some of the results of a study that looks at three types of text for automatically deriving shot-level indexing to moving images. Audio description is a voice added to the sound track of moving pictures to provide information for the visually impaired. We analyse two one-hour parts of a television production broadcast as a mini-series in 1997. We compare our results with those of a previous study, which identifies some of the characteristics of audio description and the associated moving image. We found close correspondence among some aspects studied and for other aspects much less correspondence, but for reasons we are able to explain. In addition, in the process of conducting the current study we further developed our methodology and now feel that it is a mature method for analysing audio description text as a source for generating indexing to the associated moving image.

Moreira, Alexandra, Lídia Alvarenga, and Alcione de Paiva Oliveira. "Thesaurus" and "Ontology:" A Study of the Definitions Found in the Computer and Information Science Literature, by Means of an Analytical Synthetic Method. *Knowledge Organization*, 31(4). 231-244. 44 refs.

ABSTRACT: This is a comparative analysis of the term ontology, used in the computer science domain, with the term thesaurus, used in the information science domain. The aim of the study is to establish the main convergence points of these two knowledge representation instruments and to point out their differences. In order to fulfill this goal an analytical-synthetic method was applied to extract the meaning underlying each of the selected definitions of the instruments. The definitions were obtained from texts well accepted by the research community from both areas. The definitions were applied to a KWIC system in order to rotate the terms that were examined qualitatively and quantitatively. We concluded that thesauri and ontologies operate at the same knowledge level, the epistemological level, in spite of different origins and purposes.

Losee, Robert. A Performance Model of the Length and Number of Subject Headings and Index Phrases. *Knowledge Organization*, 31(4). 245-251. 15 refs.

ABSTRACT: When assigning subject headings or index terms to a document, how many terms or phrases should be used to represent the document? The contribution of an indexing phrase to locating and ordering documents can be compared to the contribution of a full-text query to finding documents. The length and number of phrases needed to equal the contribution of a full-text query is the subject of this paper. The appropriate number of phrases is determined in part by the length of the phrases. We suggest several rules that may be used to determine how many subject headings should be assigned, given index phrase lengths, and provide a general model for this process. A difference between characteristics of indexing "hard" science and "social" science literature is suggested.

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A separate title page should include the article title and the author's name, postal address, and E-mail address, if available. Only the title of the article should appear on the first page of the text. To protect anonymity, the author's name *should not* appear on the manuscript, and all references in the body of the text and in footnotes that might identify the author to the reviewer should be removed and cited on a separate page. Articles that do not conform to these specifications will be returned to authors.

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Graesser, A., Person, N. & Huber, J. 1992. Mechanisms that generate questions. In T. W. Lauer, E. Peacock, & A. C. Graesser (Eds.). *Questions and Information Systems*. Hillsdale, NJ: Lawrence Erlbaum Associates. 167-187.

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 4th 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

- (1) 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 a forum for all those interested in the organization of knowledge on a universal or a domain-specific scale, using concept-analytical or concept-synthetical approaches, as well as quantitative and qualitative methodologies. KNOWLEDGE ORGANIZATION also addresses 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, 100

As of 1989, KNOWLEDGE ORGANIZATION has become the official organ of the INTERNATIONAL SOCIETY 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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