

Contents

13th International ISKO Conference (Krakow, Poland, May 2014)	103	Magali Rezende Gouvêa Meireles, Beatriz Valadares Cendón, and Paulo Eduardo Maciel de Almeida. Bibliometric Knowledge Organization: A Domain Analytic Method Using Artificial Neural Networks	145
International Society for Knowledge Organization General Assembly. Agenda.	104	Rick Szostak. Classifying for Social Diversity	160
Editorial		Papers from the 2nd ISKO-Brazil Conference, Rio de Janeiro, May, 2013	
Richard P. Smiraglia. II Congresso Brasileiro em Representação e Organização do Conhecimento: Knowledge Organization in Rio 2013—An Editorial.....	105	Renata Cristina Gutierrez Castanha and Maria Cláudia Cabrini Grácio. Bibliometrics Contribution to the Metatheoretical and Domain Analysis Studies	171
Articles		Marisa Bräscher. Semantic Relations in Knowledge Organization Systems	175
Elaine Ménard and Jonathan Dorey. TIIARA: A New Bilingual Taxonomy for Image Indexing	113	Rodrigo De Santis and Rosali Fernandez de Souza. Classifying Popular Songs: Possibilities and Challenges	181
Robert Losee. Combining High Metainformation with High Information Content: The Information-Metainformation Utility Hypothesis	123	Correction relating to the contribution: <i>What is Knowledge Organization?</i> by Ingetraut Dahlberg, Knowl.Org. 31(2014)No.1, p.87	188
Zhao Youlin, José Miguel Baptista Nunes, and Deng Zhonghua. Construction and Evolution of a Chinese Information Science and Information Service (CIS&IS) Onto-Thesaurus	131		

Contents pages

Smiraglia, Richard P. **II Congresso Brasileiro em Representação e Organização do Conhecimento: Knowledge Organization in Rio 2013—An Editorial.** *Knowledge Organization.* 42(2), 105-112. 2 references.

Abstract: The Second Brazilian Conference on Knowledge Organization and Representation took place in Rio de Janeiro, in May 2013. It was a lively gathering with international attendance through three days of presentations by keynote speakers as well as a large number of contributed research papers. The proceedings contain forty-three papers or extended abstracts from the speakers. Citation analysis, co-word analysis, and author co-citation analysis were employed to analyze the relationship between the domain of this conference and that of ISKO at large. The highly productive new ISKO chapter in Brazil is shown to be contributing to the further evolution of the core of knowledge organization as a science by both embracing and extending the application of core concept theory in the extension of the domain. Like their counterparts in other regions, they also are helping to refresh the intension of the domain with a large portion of local applied research, especially in bibliometrics analyses of scientific productivity, in the extension of knowledge representation and organization to archival practice, and in the integration of concepts of ontology along major epistemological trajectories.

Ménard, Elaine and Dorey, Jonathan. **TIARA: A New Bilingual Taxonomy for Image Indexing.** *Knowledge Organization.* 41(2), 113-122. 46 references.

Abstract: This paper presents the final phase of a research project that aims to develop a bilingual taxonomy (English and French) for the indexing of ordinary digital images. The objective of this last stage was to ask a representative sample of image searchers to complete retrieval tasks of images indexed using the new taxonomy TIARA to measure its degree of effectiveness and efficiency. During this experiment, a sample of 60 participants were asked to indicate where in the taxonomic structure they thought they would find each one of the 30 images shown. Respondents also completed a questionnaire intended to obtain their general opinion on TIARA and to report any difficulties encountered during the retrieval process. The quantitative data was analyzed according to statistical methods, while the content of the open-ended questions was analyzed and coded to identify emergent themes. The findings of this ultimate phase of the research project indicated that, despite the fact that some categories still need further refining, TIARA already constitutes a successful tool that provides access

to ordinary images. Furthermore, the bilingual taxonomy constitutes a definite benefit for image searchers who are not very familiar with images indexed in English, which is still the dominant language of the Web.

Losee, Robert. **Combining High Metainformation with High Information Content: The Information- Metainformation Utility Hypothesis.** *Knowledge Organization.* 41(2), 123-130. 30 references.

Abstract: Many documents and other informational objects carry both information and metainformation about the original informational object. There are general characteristics for documents or objects that possess either high levels of information and high levels of metainformation, or high levels of information and low levels of metainformation, or low levels of information and high amounts of metainformation, or low amounts of information and low amounts of metainformation. Each of these combinations represents a frequently occurring type of informative object. We suggest an Information-Metainformation Utility hypothesis that predicts that the expected economic value of information and its associated metainformation is proportional to the combined amounts of information and metainformation. The use of rules consistent with this hypothesis is discussed. This may be applied to any situation where there is either information or metainformation that may or may not be acquired or used, along with the expected value of the informative object. The idea of ideological segregation, where people tend to view media that represents their prior political beliefs, is examined in this context.

Youlin, Zhao, Baptista Nunes, José Miguel, and Zhonghua, Deng. **Construction and Evolution of a Chinese Information Science and Information Service (CIS&IS) Onto-Thesaurus.** *Knowledge Organization.* 41(2), 131-144. 51 references.

Abstract: Thesauri are the most important tools for information and knowledge organization, and they undergo regular improvements according to the rapid development of new requirements and affordances of emerging information techniques. This paper attempts to integrate ontology into the conceptual organization scheme of thesauri and proposes a new solution to extend the functionality of thesauri based on ontological features, which is termed here as an onto-thesaurus. In this study, a prototype system named the Chinese Information Sci-

ence and Information Service onto-thesaurus system (CIS&IS), was developed to analyze onto-thesaurus with the category of *information science and information service* in the *Chinese Topic Classification Dictionary* with a two-stage approach. The first stage aims to define and construct the onto-thesaurus. The second stage aims to realize the evolution function of onto-thesaurus. The main purpose of this system was to achieve the function of self-learning and auto-evolution and to enable a much more effective conceptual retrieval by the newly proposed onto-thesaurus.

Meireles, Magali Rezende Gouvêa, Cendón, Beatriz Valadares, Almeida, Paulo Eduardo Maciel de. **Bibliometric Knowledge Organization: A Domain Analytic Method Using Artificial Neural Networks.** *Knowledge Organization.* 41(2), 145-159. 35 references.

Abstract: The organization of large collections of documents has become more important with the increase in the amount of digital information available. In certain constricted domains of knowledge, keywords and subject descriptors tend to be similar and therefore insufficient to differentiate documents. In this context, instead of relying only on the presence of common terms, the identification of common cited references can be useful to define semantic relationship among documents. The purpose of this work is to add another instance on the research linking information retrieval and bibliometric techniques aided by information technology. A domain analytic method was developed to generate clusters of documents, which uses self-organizing maps, in the scope of artificial neural networks, to categorize documents. The results obtained show that this approach successfully identified clusters of authors and documents through their cited references. In addition, further qualitative analysis of these clusters demonstrates the existence of semantic relationships between the documents. This study can contribute to the development of the field of knowledge organization by evaluating the use of artificial neural networks in the automatic categorization of documents in a constricted knowledge domain based on the analysis of the references cited by these documents.

Szostak, Rick. **Classifying for Social Diversity.** *Knowledge Organization.* 41(2), 160-170. 32 references.

Abstract: This paper argues that a new approach to classification best supports and respects social diversity. We should want a classification that facilitates communication both within groups and across groups. We should also want no group to be privileged within the classification. These goals are best accomplished through a truly universal classification, grounded in basic concepts, that classifies works in terms of authorial perspective. Strategies for classifying perspective are discussed. The pa-

per then addresses issues of classification structure. It follows a feminist approach to classification, and shows how a web-of-relations approach can be instantiated in a classification. Finally the paper turns to classificatory process. The key argument here is that much (perhaps all) of the concern regarding the possibility that classes can be subdivided into subclasses in multiple ways, each favored by different groups or individuals, simply vanishes within a web-of-relations approach. The reason is that most of these supposed ways of subdividing classes are in fact ways of subdividing different relationships among classes.

Castanha, Renata Cristina Gutierrez and Grácio, Maria Cláudia Cabrini. **Bibliometrics Contribution to the Metatheoretical and Domain Analysis Studies.** *Knowledge Organization.* 41(2), 171-174. 18 references.

Abstract: Along with the growth of scientific production, the bibliometric studies have become essential, providing relevant information about any domain while identifying, highlighting and viewing the scientific knowledge constructed within a theme, subject or knowledge area. This article approaches the bibliometric studies under the light of metatheory and domain analysis within the knowledge organization in information science. domain analysis and metatheory are considered significant contribution to bibliometric studies when emphasizing the need for epistemological, sociological and historical analyzes, as well as other qualitative approaches, encouraging researchers to reflect on the whole composition of the research object, by means of different methodological, theoretical and epistemological approaches. This study aims at contributing to the discourse of the theoretical aspects of bibliometric studies by presenting considerations concerning Hjørland's domain analysis, as well as Ritzer's metatheoretical approach, featuring discussions on major theories of a study field, since these approaches together provide a more complete qualitative view upon an area, here, represented by the bibliometric studies.

Bräscher, Marisa. **Semantic Relations in Knowledge Organization Systems.** *Knowledge Organization.* 41(2), 175-180. 24 references.

Abstract: Semantic relations in knowledge organization systems (KOS) are discussed as well as the need to analyze and systematize the contributions from different areas of knowledge that are devoted to semantic studies in order to collaborate in the definition of a theoretical framework for the study of types of relations included in KOS. Partial results of a survey reveal that, in general, standards and guidelines for developing thesauri are limited to defining and exemplifying types of relationships without guidance concerning the theoretical underpinning of these definitions. The possibilities of a compositional approach to defining the meaning of syntagmatic relations is discussed.

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Studies on the theoretical foundations that guide the establishment of semantic relations and approaches to be adopted for the preparation of KOS certainly contribute to consolidating a theoretical framework for the area of knowledge organization.

De Santis, Rodrigo and Souza, Rosali Fernandez de. **Classifying Popular Songs: Possibilities and Challenges.** *Knowledge Organization.* 41(2), 181-187. 33 references.

Abstract: Classifying complex artistic objects, such as popular songs, raises important issues to knowledge organization studies. Historically, the popular song has been classified as a subcategory of other musical objects. However, recent researches

show that the popular song is a specific artistic form that is endowed with its own language and, therefore, demands specific techniques for analysis, representation and, consequently, classification. Considering the different approaches toward popular songs in catalogues and contemporary systems, this paper identifies possible solutions, such as the use of descriptive metadata, the use of collaborative tagging or the creation of an ontology. In discussing the construction of an epistemological foundation used specifically for classifying the popular song, we reflect on the remaining challenges for the knowledge organization of complex artistic documents.