## KO

# KNOWLEDGE ORGANIZATION

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Moulaison Sandy, Heather and Andrew Dillon. 2019. "Mapping the KO Community." *Knowledge Organization* 46(8): 578-589. 7 references. DOI:10.5771/0943-7444-2019-8-578.

Abstract: Knowledge organization (KO) is considered a distinctive disciplinary focus of information science, with strong connections to other intellectual domains such as philosophy, computer science, psychology, sociology, and more. Given its inherent interdisciplinarity, we ask what might a map of the physical, cultural, and intellectual geography of the KO community look like? Who is participating in this discipline's scholarly discussion, and from what locations, both geographically and intellectually? Using the unit of authorship in the journal Knowledge Organization, where is the nexus of KO activity and what patterns of authorship can be identified? Cultural characteristics were applied as a lens to explore who is and is not participating in the international conversation about KO. World Bank GNI per capita estimates were used to compare relative wealth of countries and Hofstede's Individualism dimension was identified as a way of understanding attributes of countries whose scholars are participating in this dialog. Descriptive statistics were generated through Excel, and data visualizations were rendered through Tableau Public and TagCrowd. The current project offers one method for examining an international and interdisciplinary field of study but also suggests potential for analyzing other interdisciplinary areas within the larger discipline of information science.

Hauser, Elliott and Joseph T. Tennis. 2019. "Episemantics: Aboutness as Aroundness." *Knowledge Organization* 46 (8): 590-595. 16 references. DOI:10.5771/0943-7444-2019-8-590.

Abstract: Aboutness ranks amongst our field's greatest bugbears. What is a work about? How can this be known? This mirrors debates within the philosophy of language, where the concept of representation has similarly evaded satisfactory definition. This paper proposes that we abandon the strong sense of the word aboutness, which seems to promise some inherent relationship between work and subject, or, in philosophical terms, between word and world. Instead, we seek an etymological reset to the older sense of aboutness as "in the vicinity, nearby; in some place or various places nearby; all over a surface." To distinguish this sense in the context of information studies, we introduce the term episemantics. The authors have each independently applied this term in slightly different contexts and scales (Hauser 2018a; Tennis 2016), and this article presents a unified definition of the term and guidelines for applying it at the scale of both words and works. The resulting weak concept of aboutness is pragmatic, in Star's sense of a focus on consequences over antecedents, while reserving space for the critique and improvement of aboutness determinations within various contexts and research programs. The paper finishes with a discussion of the implication of the concept of episemantics and methodological possibilities it offers for knowledge organization research and practice. We draw inspiration from Melvil Dewey's use of physical aroundness in his first classification system and ask how aroundness might be more effectively operationalized in digital environments.

Broughton, Vanda. 2019. "The Respective Roles of Intellectual Creativity and Automation in Representing Diversity: Human and Machine Generated Bias." *Knowledge Organization* 46(8): 596-606. 82 references. DOI:10.5771/0943-7444-2019-8-596.

Abstract: The paper traces the development of the discussion around ethical issues in artificial intelligence, and considers the way in which humans have affected the knowledge bases used in machine learning. The phenomenon of bias or discrimination in machine ethics is seen as inherited from humans, either through the use of biased data or through the semantics inherent in intellectually-built tools sourced by intelligent agents. The kind of biases observed in AI are compared with those identified in the field of knowledge organization, using religious adherents as an example of a community potentially marginalized by bias. A practical demonstration is given of apparent religious prejudice inherited from source material in a large database deployed widely in computational linguistics and automatic indexing. Methods to address the problem of bias are discussed, including the modelling of the moral process on neuroscientific understanding of brain function. The question is posed whether it is possible to model religious belief in a similar way, so that robots of the future may have both an ethical and a religious sense and themselves address the problem of prejudice.

Chen, Shu-Jiun. 2019. "Semantic Enrichment of Linked Personal Authority Data: A Case Study of Elites in Late Imperial China." *Knowledge Organization* 46(8): 607-614. 13 references. DOI:10. 5771/0943-7444-2019-8-607.

Abstract: The study uses the Database of Names and Biographies (DNB) as an example to explore how in the transformation of original data into linked data, semantic enrichment can enhance engagement in digital humanities. In the preliminary results, we have defined instance-based and schema-based categories of semantic enrichment. In the instance-based category, in which enrichment occurs by enhancing the content of entities, we further determined three types, including: 1) enriching the entities by linking to diverse external resources in order to provide additional data of multiple perspectives; 2) enriching the entities with missing data, which is needed to satisfy the semantic queries; and, 3) providing the entities with access to an extended knowledge base. In the schema-based categories that enrichment occurs by enhancing the relations between the properties, we

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have identified two types, including: 1) enriching the properties by defining the hierarchical relations between properties; and, 2) specifying properties' domain and range for data reasoning. In addition, the study implements the LOD dataset in a digital humanities platform to demonstrate how instances and entities can

Clavier, Viviane. 2019. "Knowledge Organization, Data and Algorithms: The New Era of Visual Representation." *Knowledge Organization* 46(8): 615-621. 35 references. DOI:10.5771/0943-7444-2019-8-615.

Abstract: This article shows how visual representations have progressively taken the lead over classical language-based models of knowledge organization (KO). The paper adopts a theoretical and historical perspective and focuses on the consequences of the changes in the volume of data generated by data production on the KO models. Until now, data visualization tools have been used mainly by researchers with expertise in textual data processing or in computational linguistics. But now, these tools are accessible to a greater number of users. Thus, there are new issues at stake for KO, other professions and institutions for gathering data that contribute to defining new standards and KO representations.

Schöpfel, Joachim, Dominic Farace, Hélène Prost and Antonella Zane. 2019. "Data Papers as a New Form of Knowledge Organization in the Field of Research Data." *Knowledge Organization* 46(8): 622-638. 27 references. DOI:10.5771/0943-7444-2019-8-622.

Abstract: Data papers have been defined as scholarly journal publications whose primary purpose is to describe research data. Our survey provides more insights about the environment of data papers, i.e., disciplines, publishers and business models, and about their structure, length, formats, metadata, and licensing. Data papers are a product of the emerging ecosystem of datadriven open science. They contribute to the FAIR principles for research data management. However, the boundaries with other categories of academic publishing are partly blurred. Data papers are (can be) generated automatically and are potentially machinereadable. Data papers are essentially information, i.e., description of data, but also partly contribute to the generation of knowledge and data on its own. Part of the new ecosystem of open and data-driven science, data papers and data journals are an interesting and relevant object for the assessment and understanding of the transition of the former system of academic publishing.

Gomes, Pablo and Maria Guiomar da Cunha Frota. 2019. "Knowledge Organization from a Social Perspective: Thesauri and the Commitment to Cultural Diversity." *Knowledge Organization* 46(8): 639-646. 19 references. DOI:10.5771/0943-7444-2019-8-639.

be applied in the full texts where the relationship between entities are highlighted in order to bring scholars more semantic details of the texts.

Abstract: Knowledge organization systems can have linguistic and conceptual formations of social oppression and exclusion. It is information science's role to be vigilant in perpetuating seditious discourses which end up reaffirming offenses, prejudices and humiliations to certain groups of people, especially those labeled as marginalized, that is, who are not part of the dominant group holding social power. In the quest for this diversity, this study reviews the literature of the area on how thesauri can become more inclusive and on the role of semantic warrant, specific to the philosophical, literary and cultural warrant. This research highlights the need to review thesaurus construction models so that they can be more open and inclusive to the cultural diversity of today's society, formed by social actors who claim their spaces and representations. To this end, guidelines are suggested for the construction of thesauri procedures that allow cultural warrant receptivity.

Barité, Mario. 2019. "Towards a General Conception of Warrants: First Notes." *Knowledge Organization* 46(8): 647-655. 49 references. DOI:10.5771/0943-7444-2019-8-647.

Abstract: The areas of knowledge are organized around the identification of their terms of reference and the relationships established between them. This is the rational basis of -among others- the methodology for the development of knowledge organization systems. The authority from which to select, evaluate or revise the terminology of these systems is established in relation to any of the twenty-one warrants (literary, cultural, etc.) that have been proposed and studied unequally and autonomously in the literature of the area. This paper intends to introduce initial notes and comments to advance towards an overall conception of the warrant notion. For this purpose, the expression "warrant" is studied as a word of the general language as well as a term of specialized languages. Then, the scope of application of the warrants is established. Next, each warrant is placed in one of the approaches proposed by Hjørland to categorize theories and methods (empiricism, rationalism, historicism and pragmatism). From the above, some lines of research problems are identified. A typological table that includes data on all the warrants established until now is proposed, and the first conclusions are drawn.

Kwaśnik, Barbara H. 2019. "Changing Perspectives on Classification as a Knowledge-Representation Process." *Knowledge Organization* 46(8): 656-667. 37 references. DOI:10.5771/0943-7444-2019-8-656.

**Abstract:** No matter how immutable a classification may seem, it is, after all, an artifact of the human imagination and functions

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in a particular place and time. The author describes her personal inquiry into classification as a knowledge-representation process. She traces her changing perspectives on how classifications should be viewed and evaluated by posing the following questions: 1) How does the classification process enable or constrain knowing about something or discovering something we did not already know?; 2) In what ways might we develop classifications that enhance our ability to discover meaningful information in the information stores that form a part of our scholarly as well as our everyday lives?; and 3) How might classifications mask or

distort knowledge, and how might they serve to disenfranchise people and ideas? These questions are considered through a discussion of classification structures, personal classification, the link of classification to theory, everyday working classifications, translation of classifications, cognitive aspects, browsing, genres, warrant, and the difficulties of navigating complex ontological commitments. The through thread is the importance of context, because classifications can only be seen with respect to the human endeavors that generate them.