

Contents

Knowledge Organization

Third Annual “Best Paper in KO Award”

for Volume 43 (2015)..... 489

Articles

Saara Packalén and Pekka Henttonen.

Ambiguous Labels: Facet Analysis of Class Names

in Finnish Public-Sector Functional Classification

Systems..... 490

James D. Smith.

A Human Experience Realist Ontology

in Basic Formal Ontology 502

XuanZhen Liu and Hui Fang

Performance of Reference Analysis on Papers

in Single Subject Category Journals 517

Maria da Graça Simões, M. Cristina V. de Freitas
and Blanca Rodríguez-Bravo.

Theory of Classification and Classification in

Libraries and Archives: Convergences and Divergences 530

Reviews of Concepts in Knowledge Organization

Martin Frické.

Logical Division 539

Research Trajectories in Knowledge Organization

Michèle Hudon.

Indexing Languages and Subject Representation:

A Fascinating and Inexhaustible Field of Research550

Reviews

Genre Theory in Information Studies (Studies in Information,

Volume 11). 2015. Edited by Jack Andersen Bingley,

England: Emerald Group Publishing Limited:

ISBN: 9781784412555, eISBN: 9781784412548.

201 pp. £66.95563

Smiraglia, Richard P. 2015. *Domain analysis for*

knowledge organization: Tools for ontology extraction.

Chandos Information Professional Series.

Waltham: Elsevier Chandos Pub. 105 pp.

ISBN 9780081001509. US\$78.95.....566

Books Recently Published569

Contents pages

Packalén, Saara and Pekka Henttonen. 2016. "Ambiguous Labels: Facet Analysis of Class Names in Finnish Public-Sector Functional Classification Systems." *Knowledge Organization* 43: 490-501. 44 references.

Abstract: Functional classifications are used internationally as a method for organization of records. However, understanding of functional concepts varies, different applications exist, and usability issues have been reported. A study was performed to address the contradiction between the need for contextual records classification and difficulties in their practical use, with an aim of prompting a focus on labels used in class names and their contribution to the understanding and usability issues faced with functional classifications. Facet analysis was used to analyze the verbal expressions used in class names. Results from the study reveal the use of ambiguous class names. Differences and inconsistency in the logic used in naming classes were detected both between and within organizations. It is clear that uniform, common, and functional classifications can hardly be achieved by combining existing systems. Instead, other measures are needed.

Smith, James. D. 2016. "A Human Experience Realist Ontology in Basic Formal Ontology." *Knowledge Organization* 43: 502-516. 42 references.

Abstract: A realist ontology of the modern human experience is built using the Basic Formal Ontology. Four measurable and observable entities are identified as upper-level and universal in the domain of human experience. All other entities and abstractions are shown to emerge from these. The universals are: material things, individual humans, money and energy. A four by four matrix of the universals creates ten phenomena-based categories that systematically map the domains codified in the *Dewey Decimal Classification*. The matrix is an example of the property of low-emergence in human development. A human research study using interview methodology linked the sufficiency of seven common instances of each universal to fully cover the subjective and present life experiences of twenty-five physically, educationally, economically and culturally diverse participants. To address the significant diversity of human experience, the universals and instances used in the human research are realistically mapped onto a Rubik's Cube. Applying the known properties of cube, mathematics implies the sufficiency of the upper-level universals to account for human diversity. Implications for rationally based ethical categorical imperatives in education are discussed.

Liu, XuanZhen and Hui Fang. 2016. "Performance of Reference Analysis on Papers in Single Subject Category Journals." *Knowledge Organization* 43: 517-529. 26 references.

Abstract: Reference analysis is a convenient method for classifying scientific papers into subject categories at publication level. When it is applied to a paper in a single subject category journal, it can recognize the paper's categories other than the journal category. We evaluate the performance of reference analysis with two existing threshold-setting methods for such papers in two physiology journals. The performances of reference analysis with the two threshold-setting methods are also analysed according to the citation distributions of the referenced categories. The numbers of citations to the referenced non-paper categories distribute around a baseline. Introducing a baseline factor into one of the two methods improves the performance of the reference analysis. Errors in the reference analysis come from the various citing behaviours of different authors. Although the two journals used in this study are labelled by the same category, they each have their own focus, which was determined from their topic distributions obtained using the proposed method. This finding matches the author guidelines of the two journals. The distribution of the number of subject categories of each paper is also given.

Simões, Maria da Graça, M. Cristina V. de Freitas and Blanca Rodríguez-Bravo. 2016. "Theory of Classification and Classification in Libraries and Archives: Convergences and Divergences." *Knowledge Organization* 43: 530-538. 42 references.

Abstract: Classification structures and systems are privileged resources for knowledge organization. Given this statement, the paper presented here refers to a study developed in the information representation and organization field, dedicated to the theory of classification, in general, and to the classification in libraries and archives, in particular. In this endeavor, we adopted an exploratory approach, performing a selective literature review of the subject, presenting and discussing theoretical and empirical considerations focused on backgrounds, influences, definitions, purposes, relevance, principles and characteristics of bibliographic and archives classifications, in order to identify points of convergence and/or divergence between them, thus contributing to a better understanding and application in a contemporary sense. Following this theoretical framework, we performed a comparative analysis of the relevant aspects of the mentioned classifications, having reached the following considerations: the two types of knowledge classifications considered have some points of convergence; in general aspects, regarding their backgrounds, influences, definitions, purposes and relevance; however, in what regards specific aspects, such as the principles that govern them

and their characteristics, they show differences which, in our opinion, are caused mainly by the specific characteristics of their objects, as well as by the constraints of their own context.

Frické, Martin. 2016. "Logical Division." *Knowledge Organization* 43: 539-549. 44 references.

Abstract: Logical division is a process which takes a class and creates a tree of classes from some subclasses of the class. The resulting tree of classes can be used for classification. The tree has a "root," a *summum genus*, which is the original class, and "leaves," *infima species*. The classification structure created by division has some admirable properties; any item to be classified has its own unique place in a leaf class and inherits attributes from the unique branch going from that leaf to the root. The structure embodies the maximum amount of general attribute information about the items being classified. Such classification structures have proved viable and useful both for classification of non-animate natural kinds and for classification of artificial kinds. Classification structures created by logical division seem unsuitable for living organisms. This is largely because classification of living organisms seems to require attention to ancestry and common ancestry and not just to shared characteristics. Logical division sheds no light on ancestry.

Hudon, Michèle. 2016. "Indexing Languages and Subject Representation: A Fascinating and Inexhaustible Field of Research." *Knowledge Organization* 43: 550-562. 42 references.

Abstract: The author looks back on three and a half decades of professional, teaching, and research work in the field of knowledge organization. As a researcher, she gave herself three objectives: 1) to make available to professionals and students, in the form of analyses and reviews, the results of research in the fields of subject analysis and indexing languages development and application; 2) to generate observations, questions, and results of immediate applicability; and, 3) to contribute to the discussion of important issues in knowledge organization and in library and information science more generally. This article is structured around seven themes, each corresponding to a project conducted as independent researcher or as part of a team.