

Contents

Articles

Bradley Wade Bishop, Heather Lea Moulaison,
and Christin Lee Burwell.
Geographic Knowledge Organization:
Critical Cartographic Cataloging and Place-Names
in the Geoweb..... 199

**Papers from the Fifth North American Symposium
on Knowledge Organization (NASKO 2015),
sponsored by ISKO-Canada/US, June 18-19, 2015,
Los Angeles, California**

Rebecca Green.
Indigenous Peoples in the U.S.,
Sovereign Nations, and the *DDC*..... 211

Yejun Wu and Li Yang.
Construction and Evaluation of an Oil Spill
Semantic Relation Taxonomy for Supporting
Knowledge Discovery..... 222

Murtha Baca and Melissa Gill.
Encoding Multilingual Knowledge Systems
in the Digital Age: the Getty Vocabularies232

Joseph T. Tennis.
Foundational, First-Order, and Second-Order
Classification Theory244

Gems from our Digitization Project

Henry G. Small.
Structural Dynamics of Scientific Literature.
In: *International Classification* 3 no.2 (1976): 67-74250

Books Recently Published260

Contents pages

Bishop, Bradley Wade, Moulaison, Heather Lea, and Burwell, Christin Lee. **Geographic Knowledge Organization: Critical Cartographic Cataloging and Place-Names in the Geoweb.** *Knowledge Organization.* 42(4), 199-210. 43 references.

Abstract: Providing subject access to cartographic resources is in many ways as fraught as providing access to any other human artifact, since places, spaces, and features on the land are conceptualized and named by people. Using critical cartographic cataloging, an approach comparable to critical cartography, we explore the potential of using multiple place-names in information systems to allow for multidimensional retrieval. Place-names are a social construct identifying and referencing locations. Cartographers and other geographic information professionals map these locations by encoding them into cartographic artifacts. In some instances the place-name metadata are created by knowledge workers; increasingly, they also can be created by non-expert end users on the Geoweb. Because queries begin with a place-name, personal lexicons of end-users have the potential to be used increasingly, both inside and out of traditional repository settings. We explore place-name biases and make recommendations to inform system design within the field of knowledge organization that accounts for the multitude of world-views in the emergent Geoweb.

Green, Rebecca. **Indigenous Peoples in the U.S., Sovereign Nations, and the DDC.** *Knowledge Organization.* 42(4), 211-221. 9 references.

Abstract: Claims of bias within the *Dewey Decimal Classification (DDC)* system in its treatment of indigenous peoples in the U.S. focus on marginalization through ghettoization, historicization, diasporization, and missing topics, such as the status of indigenous peoples as sovereign nations. Investigation into the treatment of indigenous peoples in the U.S. from *DDC 16* to *DDC 23* reveals that two of the most central concerns, ghettoization and historicization, are not borne out. Diasporization turns out to be a legitimate, but resolvable, concern. The current failure to recognize indigenous peoples as sovereign nations leads to a proposal for a series of expansions in Table 2 for the geographic areas over which indigenous peoples are sovereign; a mismatch between organization by the *DDC* and by indigenous peoples in the U.S. leads to the supplying of a Manual note table going from names of tribes (a Table 5 concept) to sovereign nations (a Table 2 concept).

Wu, Yejun and Yang, Li. **Construction and Evaluation of an Oil Spill Semantic Relation Taxonomy for Supporting Knowledge Discovery.** *Knowledge Organization.* 42(4), 222-231. 30 references.

Abstract: The paper presents the rationale, significance, method and procedure of building a taxonomy of semantic relations in the oil spill domain for supporting knowledge discovery through inference. Difficult problems during the development of the taxonomy are discussed and partial solutions are proposed. A preliminary functional evaluation of the taxonomy for supporting knowledge discovery was performed. Durability and expansibility of the taxonomy were evaluated by using the taxonomy to classifying the terms in a biomedical relation ontology. The taxonomy was found to have full expansibility and high degree of durability. The study proposes more research problems than solutions.

Baca, Murtha, and Gill, Melissa. **Encoding Multilingual Knowledge Systems in the Digital Age: the Getty Vocabularies.** *Knowledge Organization.* 42(4), 232-243. 18 references.

Abstract: This paper gives an overview of the history, development, and structure of the electronic thesauri produced and maintained by the Getty Research Institute (GRI). We describe the evolution of the *Art & Architecture Thesaurus (AAT®)*, the *Getty Thesaurus of Geographic Names (TGN®)*, and the *Union List of Artist Names (ULAN®)* as multilingual, cross-cultural knowledge organization systems (KOS); the factors that make them unique; and their potential, when expressed as Linked Open Data (LOD) to play a key role in the Semantic Web.

Tennis, Joseph T. **Foundational, First-Order, and Second-Order Classification Theory.** *Knowledge Organization.* 42(4), 244-249. 53 references.

Abstract: Both basic and applied research on the construction, implementation, maintenance, and evaluation of classification schemes is called classification theory. If we employ Ritzer's meta-theoretical method of analysis on the over one-hundred year-old body of literature, we can see categories of theory emerge. This paper looks at one particular part of knowledge organization work, namely classification theory, and asks 1) what are the contours of this intellectual space, and, 2) what have we produced in the theoretical reflection on constructing, implementing, and evaluating classification schemes? The preliminary findings from this work are that classification theory can be separated into three kinds: foundational classification theory, first-order classification theory, and second-order classification theory, each with its own concerns and objects of study.