

lita

lita

**TECHNOLOGY
AND LIBRARIES**

Cataloging Theory In Search Of Graph Theory And Other Ivory Towers

Ronald J. Murray, Barbara B. Tillett

Abstract

This paper summarizes a research program that focuses on how catalogers, other cultural heritage information workers, web/Semantic Web technologists, and the general public understand, explain, and manage resource description tasks by creating, counting, measuring, classifying, and otherwise arranging descriptions of cultural heritage resources within the bibliographic universe and beyond it. A significant effort is made to update the nineteenth-century mathematical and scientific ideas present in traditional cataloging theory to their twentieth- and twenty-first-century counterparts. There are two key elements in this approach: (1) a technique for diagrammatically depicting and manipulating large quantities of individual and grouped bibliographic entities and the relationships between them, and (2) the creation of resource description exemplars (problem–solution sets) that are intended to play theoretical, pedagogical, and IT system design roles.

Full Text:

[PDF](#)

DOI: <https://doi.org/10.6017/ital.v30i4.1868>

Refbacs

- There are currently no refbacs.



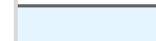
Copyright (c) 2015 Information Technology and Libraries

License URL: <http://creativecommons.org/licenses/by/3.0/>



ISSN:2163-5226

[SCImago Journal & Country Rank data for ITAL](#)



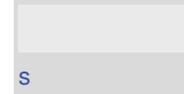
r me

IONS

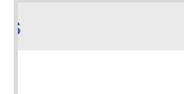
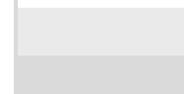


Personal Data
Policy.

CONTENT



ION



about enhancing cataloging theory. Murray and Tillett conclude that cataloging theory formation and practice can now be understood as a much more comprehensive, multilayered activity containing two distinct viewpoints : the cosmological view of the bibliographic universe – managing large scale resource descriptions , and the quantum level view – character sets, identifiers, RDF triples, etc. At ALA Midwinter Diane Hillman also described cataloging practice as a more compreh We will be enhancing cataloging theory with concepts from communications theory, history of science, graph theory, computer science, and from the hybrid field of anthropology and mathematics called ethnomathematics. Employing this strategy benefits two groups: * Workers in the cultural heritage realm, who will acquire a broadened perspective on their resource description activities, who will be better prepared to handle new forms of creative expressions as they appear, and who will be able to shape the development of information systems that support more sophisticated types of resource descrip