

Toppan Best-set Premedia Limited	
Journal Code: ASI	Proofreader: Mony
Article No: ASI23341	Delivery date: 13 Jun 2014
Page Extent: 2	

## Book Review

**APPROVED**

**The Discipline of Organizing.** Edited by Robert J. Glushko. Cambridge, MA: MIT Press, 2013. 559 pp. \$40.00 (hardcover) (ISBN: 9780262518505)

One way in which a field of study advances is through the infusion of concepts from other disciplines. It is well understood that information technology (IT) has a great deal to contribute to library and information science (LIS). Not so well understood is what LIS can contribute to IT. The question can be raised: What are these mutual contributions?

Another way in which a field of study moves forward is through generalization—the elevation of its concepts to a higher level of abstraction. How can this broadening of the big picture be achieved in IT and LIS?

IF IT and LIS are to advance, both in theory and in practice, these questions need to be considered. They are not easy to deal with and have been largely neglected, until now. In their exciting book, *The Discipline of Organizing*, Bob Glushko and his collaborators address these questions with vision and scholarly rigor. Glushko is uniquely qualified to lead this endeavor. He thoroughly understands both the IT and LIS cultures. As a Silicon Valley entrepreneur, he pioneered the use of XML in document-centric publishing and transaction languages. He authored the book *Document Engineering*. Currently, he is an adjunct full professor at the University of California Berkeley School of Information.

Many disciplines deal with organizing systems. This book takes a transdisciplinary look at such systems with respect to what is being organized, namely physical objects (e.g., books and museum paintings) and digital objects (e.g., MP3s, web pages, and scientific data sets). It analyzes systems, which have been developed to organize such objects with respect to the language used in their conceptualization, then goes on to create a generalized language applicable to all—a transdisciplinary language.

If one feature of *The Discipline of Organizing* could be singled out as the most stellar, it is this creation of a generalized language applicable to all organizing systems. The skill needed to create such a language is not easy to achieve; it requires the ability to recognize a common concept hidden behind the different labels that may be given to reference it. For instance, the objects to be organized may be variously referred to as “entities,” “objects,” “works,” “items,” “instances,” “documents,” “artifacts,” and so on. In its generalized transdisciplinary language, the book

uses the term “resources.” A resource is defined as “anything of value that can support goal-oriented activity.”

The book begins by discussing fundamentals—what is meant by a resource and what is meant by a system that organizes resources. The latter is defined as “an intentionally arranged collection of resources and the interactions they support.” Writing about fundamentals tends to be definitional, theoretical, even philosophical. Such writing is sometimes dismissed as being empty and irrelevant to practice. However, practice that proceeds without an underlying theory is in danger of being blind and purposeless. In the theoretical writing not only advances the fields of LIS and IT but also was developed to serve a practical purpose: the design of effective and efficient systems for organizing.

For centuries, functions carried out by systems for organizing resources have been categorized as selecting, organizing (which includes both describing and tagging), retrieval, and maintenance. As a result of advances in IT and the increasingly complex and fluid nature of digital resources, the boundaries between these categories have become greatly expanded and sometimes blurred (e.g., statistical methods for classification developed in the middle of the last century are in today’s digital environment used for retrieval). *The Discipline of Organizing*, with its more generalized perspective, retains these categories, but replaces the category “retrieval” with “interactions” since retrieval is only one of many functions that connect users to resources; also in an online environment, account must be taken of how robotic devices manipulate resources or how “smart” resources initiate their own interactions.

Taking a more abstract perspective on organizing is essential for our students and their prospective employers. “Big data” and “data science” hype is creating great demand for people who can classify resources, create new categories through integration and segmentation, maintain resources over time, and analyze patterns of resource use to make predictions and recommendations. New computational techniques of machine learning get lots of attention, but this book makes it clear that the foundational skills and concepts required are those that have been taught and written about in LIS for decades.

The bulk and substance of *The Discipline of Organizing* is an explication of the various systematic methods, automated and manual, that have been developed to facilitate the functions of selecting, organizing, interacting, and maintaining. The approach is transdisciplinary, with a focus on the differences and similarities between organizing digital and physical resources. A veritable compendium of techniques

1 and principles—one that perhaps could be achieved only by  
2 a collaboration, it is useful as a text and a reference for those  
3 involved in systems design in the IT and LIS fields. Of  
4 potential interest to the IT community are LIS contributions  
5 such as principles and objectives underlying retrieval  
6 systems, measures that have been developed to evaluate  
7 them, the semantic devices developed for vocabulary  
8 control, and various algorithms for retrieval. Of use to the  
9 LIS community are IT techniques developed for digital  
10 resources, techniques such as modeling, statistical collocation,  
11 markup languages, natural language processing, and  
12 semantic networks.

13 The book is divided into 10 well-structured chapters.  
14 Abstract concepts are brought down to earth by many  
15 examples—everyday examples as well as examples in the  
16 form of case studies. Each chapter ends with an enumerative  
17 summary of important points. To help readers across  
18 domains understand the book's transdisciplinary language  
19 as well as specific disciplinary terminology, definitions are  
20 given in context and elaborated further in an excellent  
21 35-page glossary.

22 Also helpful is the way the nearly 600 endnotes are  
23 handled. For the most part, these are customized to elaborate  
24 discipline-specific content and are tagged accordingly:  
25 Library/Information Science, Computing, Cognitive  
26 <sup>[1]</sup> Science, Law and Business. This structuring allows the  
27 authors to emphasize core abstract concepts that bridge

various disciplines while not getting bogged down in the  
substantive contributions from each. This book architecture  
lends itself to implementation in ebook and browser formats  
that exploit links and pop-up notes to let readers control the  
effective depth of the text. Finally, as befits a book on organizing,  
it has a well-designed index.

In its savvy blend of theory and practice, its encyclopedic  
explication of traditional and IT methods used in organizing,  
and its creation of a transdisciplinary language to talk about  
such systems, *The Discipline of Organizing* is ideally suited  
as a textbook for teaching LIS and as a substantive reference  
text for those involved in the design of organizing systems.  
The first ebook editions are essentially identical in content to  
the print one, but future ebook editions will take greater  
advantage of the digital medium with multimedia interactivity  
and enhanced navigation.

**Elaine Svenonius**

Graduate School of Education and Information Studies <sup>[1]</sup>  
University of California, Los Angeles (UCLA)

2820 Malcolm Avenue

Los Angeles, CA 90064

E-mail: [esvenoni@ucla.edu](mailto:esvenoni@ucla.edu)

Published online in Wiley Online Library

([wileyonlinelibrary.com](http://wileyonlinelibrary.com)).

DOI: 10.1002/asi.23341