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English names. Dickinson devised a long table for Indian names based on Cutter's method, which Satija reproduces in full. A further chapter, rich in examples, is devoted to the author table developed in 1961 by the National Library of India at Kolkata. Although the Cutter author tables are explained, they are not reproduced. These tables, however, are easily available.

Book Numbers: Indian and Cutter is divided into short chapters enriched by appendices and many examples. Each system is prefaced by a brief biography of its designer. The seven-page introduction presents the definition, purpose and history of book numbers. The last chapter addresses the meaning and use of full call numbers indicating the place of the book in the library.

Focusing on Indian systems of book and author numbers, Satija's *Book Numbers* complements American publications such as Donald J. Lehnus' *Book Numbers: History, Principles, and Applications* and John P. Comaromi's *Book Numbers: A Historical Study and Practical Guide to their Use.* Its language is lucid, and the bibliography running from 1916 to 2007 is useful for further studies. The high production quality of this short book can easily be compared to any international standard. *Book Numbers: Indian and Cutter* is a timely reminder that book numbers still have their utility. It will thus be very valuable to librarians and students in library science.

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This special issue of *Axiomathes* presents an ambitious dual agenda. It attempts to highlight aspects of facet analysis (as used in LIS) that are shared by cognate approaches in philosophy, psychology, linguistics and computer science. Secondarily, the issue aims to attract others to the study and use of facet analysis. The authors represent a blend of lifetime involvement with facet analysis, such as Vickery, Broughton, Beghtol, and Dahlberg; those with well developed research agendas such as Tudhope, and Priss; and relative newcomers such as Gnoli, Cheti and Paradisi, and Slavic. Omissions are inescapable, but a more balanced issue would have resulted from inclusion of at least one researcher from the Indian school of facet theory. Another valuable addition might have been a reaction to the issue by one of the chief critics of facet analysis. Potentially useful, but absent, is a comprehensive bibliography of resources for those wishing to engage in further study, that now lie scattered throughout the issue. Several of the papers assume relative familiarity with facet analytical concepts and definitions, some of which are contested even within LIS.

Gnoli's introduction (p. 127–130) traces the trajectory, extensions and new developments of this analytico-synthetic approach to subject access, while providing a laundry list of cognate approaches that are similar to facet analysis. This brief essay and the article by Priss (p. 243–255) directly addresses this first part of Gnoli's agenda. Priss provides detailed discussion of facet-like structures in computer science (p. 245–246), and outlines the similarity between Formal Concept Analysis and facets. This comparison is equally fruitful for researchers in computer science and library and information science. By bridging into a discussion of visualization challenges for facet display, further research is also invited. Many of the remaining papers comprehensively detail the intellectual heritage of facet analysis (Beghtol; Broughton, p. 195–198; Dahlberg; Tudhope and Binding, p. 213–215; Vickery). Beghtol's (p. 131–144) examination of the origins of facet theory through the lens of the textbooks written by Ranganathan's mentor W.C.B. Sayers (1881–1960), *Manual of Classification* (1926, 1944, 1955) and a textbook written by Mills *A Modern Outline of Classification* (1964), serves to reveal the deep intellectual heritage of the changes in classification theory over time, as well as Ranganathan's own influence on and debt to Sayers.

Several of the papers are clearly written as primers and neatly address the second agenda item: attracting others to the study and use of facet analysis. The most valuable papers are written in clear, approachable language. Vickery's paper (p. 145–160) is a clarion call for faceted classification and facet analysis. The heart of the paper is a primer for central concepts and techniques. Vickery explains the value of using faceted classification in document retrieval. Also provided are potential solutions to thorny interface and display issues with facets. Vickery looks to complementary themes in knowledge organization, such as thesauri and ontologies as potential areas for extending the

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facet concept. Broughton (p. 193–210) describes a rigorous approach to the application of facet analysis in the creation of a compatible thesaurus from the schedules of the 2nd edition of the Bliss Classification (BC2). This discussion of exemplary faceted thesauri, recent standards work, and difficulties encountered in the project will provide valuable guidance for future research in this area. Slavic (p. 257–271) provides a challenge to make faceted classification come 'alive' through promoting the use of machine-readable formats for use and exchange in applications such as Topic Maps and SKOS (Simple Knowledge Organization Systems), and as supported by the standard BS8723 (2005) *Structured Vocabulary for Information Retrieval.* She also urges designers of faceted classifications to get involved in standards work.

Cheti and Paradisi (p. 223–241) outline a basic approach to converting an existing subject indexing tool, the *Nuovo Soggetario*, into a faceted thesaurus through the use of facet analysis. This discussion, well grounded in the canonical literature, may well serve as a primer for future efforts. Also useful for those who wish to construct faceted thesauri is the article by Tudhope and Binding (p. 211–222). This contains an outline of basic elements to be found in exemplary faceted thesauri, and a discussion of project FACET (Faceted Access to Cultural heritage Terminology) with algorithmically-based semantic query expansion in a dataset composed of items from the National Museum of Science and Industry indexed with AAT (Art and Architecture Thesaurus). This paper looks to the future hybridization of ontologies and facets through standards developments such as SKOS because of the "lightweight semantics" inherent in facets.

Two of the papers revisit the interaction of facets with the theory of integrative levels, which posits that the organization of the natural world reflects increasingly interdependent complexity. This approach was tested as a basis for the creation of faceted classifications in the 1960s. These contemporary treatments of integrative levels are not discipline-driven as were the early approaches, but instead are ontological and phenomenological in focus. Dahlberg (p. 161–172) outlines the creation of the ICC (Information Coding System) and the application of the Systematifier in the generation of facets and the creation of a fully faceted classification. Gnoli (p. 177–192) proposes the use of fundamental categories as a way to redefine facets and fundamental categories in "more universal and level-independent ways" (p. 192).

Given that *Axiomathes* has a stated focus on "contemporary issues in cognition and ontology" and the

following thesis: "that real advances in contemporary science may depend upon a consideration of the origins and intellectual history of ideas at the forefront of current research," this venue seems well suited for the implementation of the stated agenda, to illustrate complementary approaches and to stimulate research. As situated, this special issue may well serve as a bridge to a more interdisciplinary dialogue about facet analysis than has previously been the case.

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Wolfgang G. Stock and Mechthild Stock, *Wissensrepräsentation: Informationen auswerten und bereitstellen* [Knowledge Representation: Analyzing and Providing Information]. Munich: Oldenbourg Wissenschaftsverl., 2008. xviii, 441 p. ISBN 978-3-486-58439-4.

Wissensrepräsentation (i.e. Knowledge Representation) is the second volume in the "Introduction to Information Science" series from the Oldenbourg publishing house. It can be considered a companion to "Information Retrieval: Searching and Finding Information" published in 2007, which is referenced throughout the book. Both textbooks are aimed at German-speaking students of information science and information management as well as a broader audience in the information managing industries.

The authors' intent is to provide a far encompassing overview of methods and means to represent knowledge for information retrieval. The book is divided into seven topical parts:

- Propaedeutics of knowledge representation (i.e. history, term definitions etc.)
- Metadata (bibliographic, factual, non-topic filtering)
- Folksonomies (collaborative indexing, editing of tags)
- Knowledge organization systems (nomenclatures, classifications, thesauri, ontologies, facetted systems, crosswalks)
- Textual methods of knowledge organization (textword method , citation indexing)