tion points. I would recommend this chapter for beginning web indexers.

With Chapter Eleven, "Library 2.0" we move into Part Three: 2.0 – and Beyond. It discusses the idea of Library 2.0 (making libraries easier, faster and more convenient) and how it should be applied to planning service provision.

In Chapter Twelve, "Get a Second Life! Libraries in Virtual Worlds" the reader is presented with how librarians had created a virtual library in Second Life (an online virtual world). It is extremely interesting, but again not very relevant to indexers.

The next few chapters deal with the issue of today's hands-on technology. Chapter Thirteen, "Leadership + Technology + Instructional Design = Blended Librarian" moved into the realm of education and new skills sets for librarians as did Chapter Fourteen, "Training Librarians for the Future: Integrating Technology into LIS Education." In Chapter Fifteen, "Technophobia, Technostress, and Technorealism" the focus is the problem of adapting to technology.

Chapter Sixteen, "One Past, Many Futures" closes the book with a discussion of how libraries will have to change to meet the changing needs and expectations of their clients, and how that change cannot truly be predicted.

Overall, it's a strong, interesting book that I would highly recommend for librarians, whether or not they are indexers. For indexers who are not in the library world, it is of general interest only.

— Natalie Boon 🛛 🔵

Alice Redmond-Neal and Marjorie H.K. Hlava 2007. ASIS&T Thesaurus of Information Science, Technology, and Librarianship, Third edition. Information Today, Inc.



As we know, there are two types of thesauri: 1) a kind of dictionary or lexicon of synonyms, such as Roget's, that is useful

## for writers, and 2) a structured controlled vocabulary that is used to ensure consistency in indexing and retrieval, especially in multi-volume, periodical, or database indexing. For a thesaurus as a book to be reviewed, you might expect the Roget's kind. Occasionally, however, a specialized indexing thesaurus is published as its own work. That is the case with the *Thesaurus of Information Science, Technology, and Librarianship*, published for the American Society for Information Science and Technology (ASIS&T) by Information Today Inc. (hereafter referred to as the ASIS&T Thesaurus).

Thesauri for indexing were published as stand-alone printed works more commonly in the recent past than they are today. Now the use of the electronic medium tends to result in thesauri that are never put into print, but merely continuously updated online. Indeed, the published ASIS&T Thesaurus is now in its third edition, and surely updated editions will be expected in the future. The first edition, edited by Jessica Milstead and contributed to by an advisory board of information science professionals, was published in 1994 and updated again in 1996 (back when ASIS&T was just ASIS). This work had been based on the first Thesaurus of Information Science written by Claire Schultz in 1968. Not only was the thesaurus published as a stand-alone work, but it wasn't until after the publication of the second edition that it was actually utilized, starting in 2002, as a controlled vocabulary for indexing, in this case for the various ASIS&T periodicals: The Journal of the American Society for Information Science and Technology, Bulletin of the American Society for Information Science and Technology, Annual Review of Information Science and Technology, and Conference Proceedings of the American Society for Information Science and Technology. The process of indexing articles in these periodicals revealed the need for new terms in the thesaurus.

The third edition, published in 2005 after Ms. Milstead's retirement, was edited by a new pair of thesaurus experts, Alice Redmond-Neal and Marjorie Hlava, the president and the chief taxonomist respectively at Access Innovations Inc. Thus, this edition was created in Access Innovation's Data Harmony thesaurus construction software. (Those who attended the 2008 ASI conference in Denver might recall meeting Ms. Redmond-Neal at the Data Harmony exhibit.) Ms. Milstead had created the previous editions in the Liu-Palmer Thesaurus Construction System (TCS), whose vendor has since become Webchoir Inc. The third edition of the thesaurus is not only available as a book, but for an additional \$30 can be purchased along with a CD that contains the electronic version with a limited version of the

Data Harmony software that allows searching, sorting, and candidate term submission.

The ASIS&T Thesaurus begins with a fourpage introduction that explains its history, purpose, scope, structure, standards followed, and tools used, in addition to a paragraph explaining what a thesaurus is: "a controlled vocabulary used for descriptive indexing...arranged in a hierarchical structure." Term relationships include broader terms (BT), narrower terms (NT), and related terms (RT). Terms not used for indexing but have equivalent usage for (UF) thesaurus terms are called nonpreferred terms. This introduction is followed by a three-page guide to using the thesaurus. The thesaurus itself is presented in three successive standard display forms: 1) an alphabetical listing of terms with their scope notes and relationships (comprising 139 pages), 2) a hierarchical display of top level terms with a narrower term hierarchy under each (19 pages), and 3) a permuted (also called rotated) display of terms, both preferred and nonpreferred, showing the keyword in context (KWIC) of the term phrase (95 pages). The different displays are different access methods to the same list of preferred terms.

A sample term listing from the alphabetical display is as follows:

# locators

SN Devices, which indicate the position of information items within files.

UF page references reference locators

BT knowledge organization systems

## NT URL

#### RT URI

#### call numbers

A sample term listing from the hierarchical display, whereby the top terms are not actually indexable terms, but rather are facet names, so appear in parentheses:

(physical media)

## . artifacts

- . electronic ink
- . electronic paper
- . magnetic media
- . . magnetic disks
- . . . floppy disks
- ... hard disks
- . . . magneto-optical disks
- . . magnetic tapes
- . . . audiotapes

#### . . . . audiocassettes

## .... digital audio

#### . . smart cards

A sample term listing from the permuted (KWIC) display, which is arranged alphabetically on the second column word within a phrase:

	thesauri
bilingual	thesauri (Nonpre- ferred)
graphical	thesauri
multilingual	thesauri
displays	(thesauri) (Nonpre- ferred)
	thesaurofacet
	thesaurus construc- tion (Nonpreferred)
	thesaurus displays
automatic	thesaurus generation (Nonpreferred the- saurus management

The thesaurus contains 1,970 preferred terms, extended as far down as nine hierarchical levels deep, although three or four levels predominate. The terms are grouped into 18 top level categories, or facets, which are not actual indexing terms themselves. These 18 facets cover seven broad subject areas which, as listed below with sample terms following each, illustrate the scope of the thesaurus:

- people and organizations (such as authors, experienced users, schools, etc.)
- actions, events, and processes (indexing, library operations, data parsing, etc.)
- physical objects (local area networks, photocopiers, library buildings, etc.)
- theoretical concepts and influences on information (precision, bias, gender, etc.)
- information, information delivery formats and channels (mass media, standards, book reviews, etc.)
- methods of study (ranking, surveys, Boolean logic, etc.)
- geographic information (South America, England, etc.)

The earlier edition had only 1,312 preferred terms and 680 nonpreferred terms, but there were 20 facets instead of 18. More related-term links and scope notes have since been added, and some hierarchical relationships were changed. Proper nouns are for the most part excluded, except for geographic places and a few well-known tools, standards, and classification schemes, such as Library of Congress Classification.

When browsing the alphabetical display, it may appear to the reader that some terms are

too vague and not specific enough to information science, such as: effectiveness, cost, similarity, etc. But when viewed hierarchically within the attributes facet, these terms make perfect sense for inclusion. An article could be indexed with any of these terms in combination with other, more specific subjects. Book indexers should be aware that periodical indexing does not always follow the mainentry/subentry pattern, and attribute-type terms, which would be more appropriate as subentries, will often appear in a thesaurus in the same way as main-entry type terms.

Although this most recent edition is already three years old, there are indeed some newer terms such as: electronic books, semantic relationships, social networking, and weblogs. Other newer concepts and buzzwords, however, that have yet to be added, even if just as nonpreferred terms, include: folksonomy, governance, OWL, PDF, Web 2.0, and wikis.

The ASIS&T Thesaurus is useful for a number of reasons, not only for indexing ASIS&T publications, which was not, in fact, its original use. It is first and foremost an authoritative reference for the field of information science. It is not unusual for a professional society or government agency associated with a discipline or technical subject area to publish a glossary, dictionary, and/or a thesaurus to set the standards for the field's terminology. In some fields, especially those that are more interdisciplinary, such as information and library science, a thesaurus is of greater need than a glossary. There are many terms whose definitions are not needed (such as World Wide Web), but how they relate to other terms (such as Web sites, hypertext, and Internet) is less obvious and can be clearly shown in a thesaurus

Another purpose of the ASIS&T Thesaurus is to serve as an example of a well-designed thesaurus for those individuals who either need to create a thesaurus or would merely like to learn how. The fact that the people who create thesauri (thesaurus editors, controlled vocabulary editors, or taxonomists), tend to either come from a library science background or at least have an interest in it, means that this example thesaurus is comprised of terms in the subject area of greatest interest to thesaurus-construction students. Library and information science is also a broad and complex subject area, in comparison with a thesaurus on a discipline of natural science or field of engineering, in which, at least to an expert, the hierarchies are more obvious. Whether for the purpose of looking up terms, or for learning how to construct a thesaurus, the additional electronic version on CD is probably a good investment. Nevertheless, the printed version has certain advantages for

quickly browsing and seeing the overall layout of a subject area.

I highly recommend the ASIS&T Thesaurus of Information Science Technology, and Librarianship as a useful reference book to anyone with a background in library and information science or interest in creating thesauri.

Reference: Milstead, Jessica L. "Shoes for the Cobbler's Children: The ASIS Thesaurus." Bulletin of the American Society for Information Science. Oct/Nov 1994.

– Heather Hedden 🦷

Leise, Fred, Kate Mertes, and Nan Badgett, eds. 2007. *Indexing for Editors and Authors: A Practical Guide to Understanding Indexes*: Information Today Inc. Paper 160 pp, 978-1573873345



As indexers, we engage in much discussion about how to "train" authors and publishers about indexes and the value they bring to a work, whether it is in book form, periodical, electronic, or whatever. It is reassuring to now know that three ASI members, *Fred Leise, Kate Mertes*, and *Nan Badgett*, have produced a comprehensive work designed for just that audience.

Indexing for Editors and Authors: A Practical Guide to Understanding Indexes is well-organized from its basic explanation of what, precisely, an index is, through the process of designing a strong index, to the relationships that develop between publishers, authors, and indexers. This team of experienced editors clearly define the various types of indexes and explain what characteristics make a good index.

While many indexers – both experienced and new – will find the opening chapter very preliminary, I found it to be an excellent reference to index structure. It defines those attributes that make an index...well...an index! Headnotes, index entries, alphabetization, subheadings, and locators are defined with examples to clarify the definitions. In Chapter Two,