for success.

Although these articles were all simultaneously published in the journal *Science and Technology Libraries,* having them also available as a monograph with an index for easy reference is valuable. Several of the articles provide concise background information, so that the reader can better understand the current issues. The information provided is appropriate for those new to the profession as well as for the veterans. The editors summarize it best by stating, "This collection of papers highlights some of the issues, resources, tools, and techniques that will be necessary to meet the challenges of engineering librarianship in the future" (2).—*Tamika Barnes (tamika_barnes@ncsu.edu), North Carolina State University, Raleigh*

Works as Entities for Information Retrieval. Edited by Richard P. Smiraglia. Binghamton, N.Y.: Haworth Information Pr., 2002. 267p. $59.95 cloth (ISBN 7890-2020-3); $39.95 paper (ISBN 7890-2021-1). Published simultaneously as *Cataloging & Classification Quarterly* 33, nos. 3–4.

Library catalogs are ambiguous in essence. What do they describe at all? What is the precise nature of the "cell units" of which such "organisms" consist? What is the precise nature of the "sinews" that bind those cell units together?

The basic cell of a catalog is the bibliographic record; the basic sinews that bind them together and give them meaning as a whole are bibliographic relationships. But the overall ambiguity of library catalogs results from the very ambiguity of basic cells themselves: what is it that a bibliographic record describes? Any skilled cataloger will immediately reply: "A publication," that is, a product—a *physical* product. Or, to put it more accurately, a set of features common to a given set of physical products.

But what about the immaterial content of bibliographic products? Librarians cannot ignore that fundamental aspect, and they strive to account for something like "content." Here begins the ambiguity. Catalogers strive to stuff into the tiny space of bibliographic records information that relates either to physical products (i.e., *publications*) or to intellectual products (i.e., *works*). And yet, they keep to the equation:

> 1 distinct [physical] publication = 1 bibliographic record

Hence those huge lists of hits, if you are unfortunate enough to search for a heading such as "Shakespeare" in a library catalog.

Theoreticians in library science—and practitioners as well—have therefore been investigating the possible helpfulness of *works* in information organization (and Seymour Lubetzky's influence proved instrumental in that field). In this regard, Richard P. Smiraglia's *Works as Entities for Information Retrieval* is timely, welcome, and immensely valuable. But Smiraglia's concerns go far beyond just the problem of library catalogs—he is also fascinated by the semiotic value of works in those two tightly interrelated systems, human society and individual mind. In the present collection he therefore called for contributors in either aspect of the *work entity* research.

The issue of huge hits lists is addressed by Allyson Carlyle and Joel Summerlin's paper "Transforming Catalog Displays: Record Clustering for Works of Fiction." This paper reports on a study of the feasibility of automatic creation of record clusters "to condense and better organize long catalog displays, making retrieval sets more intelligible to users" (14). It seems that this research is closely related to the FictionFinder prototype that is currently being developed by the OCLC Research Team, and reports on FictionFinder may constitute a good complementary reading.[1]

More specific contributions deal with peculiar categories of materials, namely representations of scientific models, cartographic materials, video works, television series, digital editions, and multimedia CD-ROMs. A wide range of different types of materials is therefore covered. But more interestingly, each of these authors poses and discusses, beyond the mere physical peculiarities of the various categories of materials they address, more profound theoretical problems than just "How shall I catalog that?"

For example, in "Scientific Models as Works," Anita S. Coleman poses the problem of "of-ness" and "about-ness" relationships. Typically, catalogers and indexers will tend to regard a scientific treatise or paper that contains a representation of a scientific model as a *textual work* that was written *about* that scientific model. She convincingly argues that such textual works *are* the scientific model itself or, to put it more accurately, that they have an "of-ness" rather than an "about-ness" relationship to it. Practically, that changes many things in the way they should be cataloged.

Similarly, in "Lucy Is 'Enceinte': The Power of an Action in Defining a Work," Andrea Leigh does not just handle the problem of 'how to catalog television series on videocassettes," she also investigates the fundamental difference between performed works and non-performed works, what makes the former so specific, and the inadequacy of current cataloging codes.

Other papers deal with the second aspect of the *work entity* research, that is, Smiraglia's favorite theme of works as *signs.*

Thus, Frances Morrissey, in "Introduction to a Semiotic of Scientific Meaning, and Its Implications for Access to Scientific Works on the Web," investigates "formal scientific communication . . . through scientific works of accepted genre" (67). Her analysis is impressive and surely correct, but unless the reader has a solid knowledge of semiotics, the paper is

close to unreadable.

However, the most controversial contribution in the entire collection certainly is Jack Andersen's "Materiality of Works: The Bibliographic Record as Text." The author argues that bibliographic records are textual works and that, as such, they are subject to an interpretative process on behalf of their readers. Unfortunately, his tentative "deconstruction" of the "textual elements" (p. 51) at work in a bibliographic record falls short. His listing is both incomplete and full of truisms, such as "the words and concepts used in indexing and classifying a document may yield information toward its content or aboutness" (55). But what about the semantic value of the very ordering (syntax) of all these textual elements, the semiotic value of punctuation, the influence of display options, and so on? The trouble with this paper is not that it is uninteresting—it *is* interesting, but at the same time it frustrates and infuriates the reader, because it is but an awkward sketch of a wonderful paper still to be written. It states a fascinating topic without addressing it.

Smiraglia himself wrote both the introduction and the conclusion of this collection, assigning it a perfect cyclical form. Much of the material in both his papers further develops ideas he expounded in his recent book on the same topic.[2] Readers will benefit from reading both *publications* (i.e., of course, *works)* in connection.

One last (tiny) remark about Scott R. McEathron's paper "Cartographic Materials as Works": the correct spelling of the author of *Theatrum Orbis Terrarum* is Joan *Blaeu,* not *Bleau,* as he writes throughout his paper. That is the kind of small mistake that can definitely impede correct information retrieval.—*Patrick Le Boeuf (patrick.le-boeuf@bnf.fr), Bibliothèque nationale de France, Paris*

References

1. Thomas B. Hickey and Diane Vizine-Goetz, *Implementing FRBR on Large Databases*. (Dublin, Ohio: OCLC, 2002). Accessed December 31, 2002, http://staff.oclc.org/~vizine/CNI/OCLCFRBR_files/frame.htm.
2. Richard P. Smiraglia, The Nature of "A Work": Implications for the Organization of Knowledge (Lanham, Md.; London: Scarecrow, 2001).

Introduction to Technical Services for Library Technicians. By Mary Liu Kao. Binghamton, N.Y.: Haworth Information Pr., 2001. xii, 113p. $34.95 cloth (ISBN0-7890-1488-2); $22.95 paper (ISBN0-7890-1489-0).

There is a position that holds that library paraprofessionals should be moved toward greater standardization, greater professionalism, and (therefore) a certain amount of tertiary education. Under these assumptions, paraprofessionals (or library technicians) would seek an associate's degree or a one-year certificate focusing on the technical workings of a library. This work addresses the need for a textbook for an introductory course in the operations of a technical services department. Unfortunately, despite its intended goal of increasing the professionalism of paraprofessionals, this book is written at such an easy reading level as to imply that anyone with an eighth-grade education could work in a library. And frequent overgeneralizations render some of the information presented inaccurate or even wrong.

In most cases of inaccuracy, it would have been quite easy to have given a slightly more complete statement that would have been true. Referring to a call number as a unique number (39), to the binding of journals as a semi-annual task (72), and to the Library of Congress as the agency that would define indicators in Machine Readable Cataloging (MARC) (55) are inexcusable errors. In the former two examples, it is simply not true that all libraries do things in the way described. As for the latter example, it is simply not true at all (the ALCTS/LITA/RUSA MAchine-Readable Bibliographic Information Committee defines them). Sometimes an overgeneralization is restated elsewhere in the book, in a more complete and accurate way. And sometimes a mistake is perhaps too trivial to be of great importance to the novice paraprofessional. However, to rely on this book as a textbook would be to create an environment of having to fill in the gaps where the author has painted with too broad a stroke. A little misinformation can go a long way.

This has the beginnings of a nice introductory text, although, as mentioned, the reading level is shockingly low for something intended for those looking for employment in an information profession. A slim volume of short chapters (with numerous illustrations, an index, and a bibliography of suggested reading), it is an overview encompassing what "everyone" should know about technical services. Yet certain parts of it seemed to assume no prior knowledge of libraries—plentiful definitions at the beginning of every chapter—while other parts were not so well annotated (for example, "UTLAS" is mentioned but never defined nor described) (15, 22).

This is all very unfortunate, for the book is not without things to recommend it. It is sensibly organized into nine chapters, with a nice narrative flow that somewhat mirrors the flow of tasks through a typical technical services department. Chapters on acquisitions, cataloging, government documents, serials, and preservation are rounded out with introductory chapters on the role of computers and bibliographic utilities.

The chapter on computers and library automation is particularly introductory in its approach, and the book consistently sings the praises of automation and all of the positive changes it can bring to libraries. However, I noticed that it seemed that all of the screen-shots used as illustrations were taken from the same library management system, which made me wonder if that happened