Book Reviews

Challenges in Indexing Electronic Text and Images. Ed. Raya Fidel, Trudi Bellardo Hahn, Edie M. Rasmussen, and Philip J. Smith. Medford, N.J.: Published for the American Society for Information Science by Learned Information, 1994. 306 p. (ISBN 0-938734-76-8).

As academic libraries continue to expand public access to diverse electronic information resources, they are providing increasingly new types of information beyond conventional bibliographic data. For a growing number of libraries, the World-Wide Web has transformed hypermedia from an intriguing futuristic possibility to a day-to-day reality. WAIS servers and CD-ROM systems have made full-text access equally commonplace. Specialized image systems are emerging, ranging from page-image databases of digital representations of printed materials to fine art databases of photographs, pictures, and other graphic material.

Given these trends, *Challenges in Indexing Electronic Text and Images* is a timely work. The book is organized into four sections: indexing and accessing images, indexing of hypermedia, computer support tools for indexers, and indexing and retrieval from full text. Papers in each section are introduced by one of the editors. The papers include research reports, discussions of particular systems and projects, theoretical treatises, and scholarly overviews of different areas of study.

Several papers in this volume are especially notable. Joseph A. Busch's paper discusses the specialized information needs of historical researchers, especially art historians, and describes how these needs are met by representative information retrieval systems. This paper underscores the fact that different disciplines have different information organization and retrieval needs, and, where feasible, we must build systems that address these unique requirements.

As hypertext documents proliferate because of the enormous popularity of the World-Wide Web, we are in desperate need of good design principles to improve navigation within and between these documents. Gary Marchionini's paper examines the relationship between indexing and hypertext, and he suggests that hypertext designers begin the document creation process by building an index to the projected work. This paper is a welcome reminder that the traditional principles of indexing are still valid and useful in new contexts.

While hypertext authors are being encouraged to discover conventional indexing techniques, commercial and nonprofit index publishers are investigating new techniques to improve the indexing process. One of the most interesting and potentially significant indexing strategies being employed is the use of "knowledge-based" indexing, which is derived from artificial intelligence and expert system research. Susanne M. Humphrey's paper surveys developments in this field, and describes her important MedIndEx prototype at the National Library of Medicine. A key challenge inherent in knowledge-based indexing is the effort required to encode a detailed store of knowledge about the subjects under consideration and their interrelationships.

The often bemoaned "information explosion," which has spawned a seemingly endless supply of texts to be indexed, motivates researchers to develop computer-based techniques that

minimize or eliminate human intervention in the indexing process. Donna Harman's paper is a concise and lucid survey of automatic indexing strategies, covering topics like stop words, stemming, term weighting, relevance feedback, and phrase indexing. Amy J. Warner has written an equally laudable overview of the use of linguistic information in the retrieval of full-text documents. For nonspecialists interested in quickly understanding these inherently complex topics, these papers are real gems.

Overall, *Challenges in Indexing Electronic Text and Images* is a commendable work that includes contributions by noted experts. It is more oriented toward information scientists than library practitioners; however, it has a good selection of papers that academic librarians may find of interest, and it is recommended for readers with a serious interest in indexing topics.—*Charles W. Bailey, Jr., University of Houston, Houston, Texas.*

Les Bibliothèques dans l'université. Ed. Daniel Renoult. Paris: Editions du Cercle de la Librairie, 1994. 358p. (ISBN 2-7654-0548-4).

France is the birthplace of networked information for the general public. That country's Minitel, launched in 1982, was the first working system to purvey digitized information to the uninterested user—the user who neither knows nor cares how the system itself works. This general public orientation of the Minitel was a harbinger of things to come. These now are arriving with a vengeance for the U.S. Internet. Libraries in France, as elsewhere, have been heavily involved in networked information: in Minitel, in the Internet, in BITNET and JANET, and other "nets." And yet university libraries, which have been in the forefront of networked information in the United States and the United Kingdom, have been badly behind in France. This has been not so much from conscious design or difference of approach. It has been more the result of historical circumstances: political, social, financial. These have been in some respects uniquely

French; but in other respects they have been distressingly evocative of problems now faced, increasingly, by university libraries in the United States and elsewhere. So Daniel Renoult's book—a tightly drawn compilation of essays by leading thinkers from France and other European countries—can provide background indispensable for understanding both the current general travails of French university libraries and a few of the problems now dawning for university libraries in the United States and elsewhere, in networking and other areas.

The book offers six sections: (1) a superb recent history of French university libraries by the able current inspector-general of French libraries, Denis Pallier; (2) a description of the modern context of the French university and of its information service, both library and nonlibrary by Pierre Carbone; (3) an analysis of the user community, both university and general public, by Renoult himself (he directs planning for the Bibliothèque Nationale de France) and Maggy Péyeril of Montpellier's library; (4) a description of French library infrastructure—organization, buildings, administration, classification, personnel—in essays by several authors, with descriptions of library service approaches which to foreigners can sound both familiar ("Computerization Is under Way") and endearingly French ("La Fonction Patrimoniale"); (5) a section on networking giving the French approach to dealing with what every librarian elsewhere knows, that computers and the information that they offer are here to stay, and that they must and may be dealt with effectively and even happily; and, finally, (6) a foreign, comparative perspective, including (a) an introspective essay on Germany by Gernot Gable of Cologne, (b) a wistful, "grass is always greener" report on a tour of modern German library buildings by the French librarian Marie-France Bisbrouck, (c) a startlingly bleak current assessment of university libraries in the United Kingdom, by Derek Law (King's College, London), and (d) an optimistic and encouraging account of a Dutch approach so successful that it