

of real-life assessment in practice. Instruction librarians and coordinators will find helpful assessment models to follow in this volume. The assessment tools described in this book are not necessarily new and different; rather, what differentiates this volume is how the assessment tools are used in faculty-librarian partnerships, so this book will especially be informative and practical for librarians seeking to partner with teaching faculty to enhance and assess information literacy learning. —*Maria T. Accardi, Indiana University Southeast.*

Julian Warner. *Human Information Retrieval.* Cambridge, Mass.: MIT Press, 2010. 189p. alk. paper, \$35 (ISBN 9780262013444). LC2009-010120.

In *Human Information Retrieval*, Julian Warner, a faculty member in the Management School of Queen's University at Belfast with a long-standing interest in the intersection of humanistic and technological approaches to information systems, undertakes the ambitious project of rethinking the theoretical framework of information retrieval (IR). Judging traditional approaches to the topic as being overly limited in their concerns or based on theories insufficiently congruent to real-world practice, he seeks to develop a comprehensive perspective on IR that both acknowledges its human dimensions and gives a theoretically adequate account of currently dominant retrieval practices. Over the course of nine chapters, Warner unfolds this agenda by (1) outlining a new approach to IR centered around the concept of human labor and (2) articulating a rationale for full-text retrieval, which, in his view, is the characteristic modality of IR deployed in information technologies today.

After an introductory chapter, in which he carefully outlines the trajectory of argument for the book as a whole, Warner devotes three chapters to an explication of his labor-theoretic approach to IR. In his view, enhancement of *selection power*, defined as "the human ability to make

choices between objects or representations of objects," is the primary aim and core value of IR. Selection power depends upon *selection labor*, the mental work that goes into the processes of discriminating between objects and choosing between them. Although selection labor is an activity of the human mind, some of its processes can be supported by and, in part, transferred to information technologies. Such transfers are possible, in Warner's estimation, because these technologies are themselves the products of human labor and designed with specifically human purposes in mind: historically, there has been a tendency to delegate as many processes of human labor as possible to technological tools.

Selection labor can be further subdivided into two mutually exclusive types: description labor and search labor. *Description labor* is the material and mental work expended in "transforming objects (documents, images, or people) into searchable descriptions that will assist subsequent retrieval," whereas its converse, *search labor*, is the material and mental work spent in searching for objects in an information system. In a library setting, for example, the cataloger preparing (or modifying) a catalog record is engaging in description labor, while the user posing a query to an online catalog or a search of engine is involved in search labor.

Crosscutting the distinction between description labor and search labor is a further distinction between semantic and syntactic labor. *Semantic labor* is mental labor pertaining to the production and determination of meaning, while *syntactic labor* is mental labor used to carry out operations based on pattern matching and the manipulation of symbols. Both descriptive and search labor have semantic and syntactic components: for instance, the assignment of an index term to a document requires semantic description labor and the arrangement of a set of records into a series by the alphabetical order of their entry terms involves syntactic description labor, whereas translating a

question into an authorized query term represents a kind of semantic search labor and the sorting of a set of retrieved records by date is a type of syntactic search labor. According to Warner, a fundamental distinction between semantic and syntactic labor lies in the fact that the former is “irreducibly human” and not amenable to mechanization, whereas the latter is “transferable to technology as [a form of] machine process.” An important corollary of this view is that, ultimately, there are definite limits to the transfer of selection labor to information technology: in other words, human mental labor cannot be entirely evaded in IR.

After laying out the fundamentals of his new approach, Warner devotes the final five chapters to developing a theoretical account of full-text retrieval from within a labor-theoretic perspective. His point of departure is the difference between word and phrase searches on Internet search engines. Basing himself on a series of concrete examples, he observes that the use of single keywords in searches tends to yield sources on diverse topics, whereas the results of phrase searches manifest greater semantic homogeneity. Such results indicate that isolated keywords are multivalent in their meaning, while phrase searching counteracts this semantic multivalence by inserting words into contexts that constrain their meaning. Arguing that this phenomenon is common to the practical experience of full-text search but has not been given sufficient theoretical attention by librarians or information scientists, Warner draws upon Saussurean linguistics and information theory to explain the semantic and syntactic bases of retrieval from full text.

Warner’s account of the semantics and syntactics of full-text retrieval is intricate, and limitations of space preclude any detailed exposition of it here: nevertheless, an indication of the main lines of his model of semantics can provide at least a taste of his approach. According to Warner, phrase searches deploy what Saussure termed the *syntagma*: that is, the

linear string of words naturally produced in human speech and writing, in which the meaning of each word-element is determined by its relation to the other elements in the string. To remove a word from any syntagmatic context, as is done in single keyword searches, is to shift the basis of its meaning to what Saussure termed the *paradigm*, or the network of all possible meanings that a word might have within a given language. Entering into a paradigm releases a word from the semantic constraints of the syntagma, and it is this that accounts for the semantic heterogeneity of resources yielded by keyword searches. Full-text retrieval, then, involves varying degrees of connection between linguistic expression and semantic content that can impact the results of search in different ways. Significantly, though, both types of searches require semantic search labor, for the onus is on the searcher to disambiguate and interpret the results of a full-text search. This, Warner believes, stems from the fact that “human understanding and composition of written language may be highly intractable computationally” — a thesis that fits neatly within the labor-theoretic view that semantic labor is *the* irreducibly human element of selection power.

Of special interest to readers of this journal will be Warner’s view of the value of human-assigned metadata for IR, an issue that has stirred much controversy in the library community in recent years. In his view, traditional mechanisms for generating human-assigned metadata, such as catalogs and controlled vocabularies, have several disadvantages: they are grounded in an (over-)simplified and deterministic view of language as nomenclature; their protocols and products are limited — and limiting — legacies of a premodern technological régime; and they involve semantic description labor, which is costly to support. Nevertheless, he acknowledges that the products of semantic description labor do have value in collocating materials that would otherwise not be retrieved together; accord-

ingly, he concludes that they may have a continuing, if diminished, role to play in an informational environment that increasingly privileges systems for full-text retrieval such as Internet search engines. Because, in Warner's view, semantic labor is categorically not transferable to machines, any reduction in semantic description labor entails an increase in semantic search labor. Warner tends to view ongoing trends toward increased semantic search labor with equanimity: not all members of the library community will share this attitude.

All in all, *Human Information Retrieval* presents its readers with an interesting perspective on IR that well repays study. The emphasis on human labor as a central analytic category for understanding IR processes allows Warner to integrate a number of disparate themes that have long been objects of reflection for theorists of librarianship and information science into a single, fairly compact theoretical framework. Certainly, the labor-theoretic approach, as set out in the opening chapters of the book, is structurally elegant and has the potential to be a very useful model for "macroscopic" thinking about the design and evaluation of IR systems. One senses, though, that it is not yet complete and requires further development if it is to fulfill its author's ambitions: for example, it pays scant attention to the different types of (and motivations for) search—a factor that should certainly be taken into account in any theory intended to support the evaluation and design of IR systems.

Finally, it should be noted that the book is written in an idiom both erudite and abstract: for this reason, it is a demanding read. Laudably, Warner tries to ease the reader's way through the book by providing concrete examples, culled from a variety of sources, to illustrate the theoretical points he is making, employing diagrams and pictures to aid in the visualization of certain points, and constantly signposting and summarizing the key arguments: moreover, in addition

to a bibliography and a (rather indifferent) index, he helpfully provides a list of supplementary readings for those interested in exploring further the theoretical bases of his model. For some readers, such aids may not be enough to offset the difficult nature of the text; however, those who persevere will be rewarded with a genuinely illuminating account of IR as a human phenomenon.—*Thomas M. Dousa, University of Illinois, Urbana-Champaign.*

Kimberly Black. *What Books by African American Women Were Acquired by American Academic Libraries? A Study of Institutional Legitimation, Exclusion and Implicit Censorship.* Lewiston, N.Y.: Edwin Mellen Press, 2009. 211p. \$109.95 (ISBN 9780773437920). LC2010-278113.

The author of this volume, an Assistant Professor in the School of Information Sciences at the University of Tennessee in Knoxville, has produced a probing and thoughtful examination of the impact of power, and the lack of it, on two communities that she links through explication and analysis. The book-ended communities are (1) African American women writers and (2) acquisition librarians in academic institutions, groups who communicate and connect (or not) through filtering webs of publishers, journals, reviewers, and reviews. With clear prose, backed with statistical models, she lays out her arguments like a scientist, draws her conclusions and leaves very few openings for criticism. Despite its dry title, and somewhat forbidding-looking tables and appendices (but handsome cover), the book offers serious rewards for readers interested in a variety of topics that impact librarianship and our culture at large.

Dr. Black begins with a succinct summary of the distinctive traits of prose and mostly poetry produced by African American women in the late twentieth century, a discussion that can be of use to undergraduates researching that specific topic. She focuses her study specifically on the 233 titles produced by African American women and published by