academic librarians? The interactive fictions Douglas cites are buried in the very substantial bibliography she provides, but one wonders whether English bibliographers are going to check these against the local online catalog, order them, and then have them marked and parked, either literally or virtually. The real value of Douglas's book for academics, supposed experts in books and reading, is the opportunity it gives us to review our own assumptions about how and why people use the contents of our libraries, how and why people read. Perhaps a considered examination of these questions will move us to create collections that are more valuable and serviceable to our users.-Cecile M. Jagodzinski, Illinois State University.

Svenonius, Elaine. The Intellectual Foundations of Information Organization. Cambridge, Mass.: MIT Pr. (Digital Libraries and Electronic Publishing), 2000. 255p. \$37, alk. paper (ISBN 0-262-19433-3). LC 99-41301.

In this book, information organization means bibliographic organization. The first half of the book discusses the objectives of organization, the character of the objects to be organized, the main devices used to organize, and the principles governing the selection and application of organizing devices. The objects to be organized are bibliographic entities: works and their appearances as documents. The primary organizing device is description using special bibliographic languages, which can be analyzed in terms of vocabulary, semantics, syntax, and pragmatics (terms, meanings, combinations of terms, language application rules). The second half discusses the languages used for organization: work languages, document languages, and subject languages. Work and document languages get a chapter each, subject languages get three chapters (vocabulary, semantics, syntax, but, strikingly, no pragmatics). The aim of the work is to synthesize a body of knowledge that has been developed in the (largely) Anglo-American tradition of library cataloging over the past 150 years:

not a summary or outline of codes and thesauri and classification schemes but, rather, a survey of problems to be solved and alternative means of solution. For instance, half of chapter nine concerns the problem of multiple meaning in subject description languages and reviews the alternative ways of disambiguation (e.g., domain specification, parenthetical qualifiers, scope notes, hierarchical displays). This is the kind of information that is of interest far beyond the library, and the book aims to be of interest and use not only to the theorist of bibliographic organization, but also to the designers of information systems generally.

Posing the organizational problem as a linguistic one of devising and applying special languages for describing works, authors, and subjects has great conceptual advantages. It makes it easy to see that descriptive cataloging is as centrally concerned with vocabulary control as is subject cataloging, while also providing a striking way of insisting on the logical and practical differences between description of works and description of documents, by calling for different descriptive languages. It has the interesting consequence of repositioning classification by viewing it in terms of syntax and semantics of linguistic description rather than, say, as mainly a matter of marking for physical placement or assigning abstract locations in a universal classification of knowledge, thus bringing subject cataloging and classification closer together. (It is less successful in integrating indexing with cataloging, for reasons to be seen). By making vocabulary control the heart of the matter, it sharply focuses attention on the contrast between searching in unregimented free text and searching in bibliographically regimented files. It highlights the question of whether or to what extent the expensive intellectual labor of cataloging and indexing can be automated, while at the same time raising questions about the applicability of originally book-oriented practices to a world of new kinds of information-bearing objects. The chapter on document languages is understandably preoccupied with the problems of fitting old descriptive practices to new media, especially electronic documents. Svenonius does not assume that the bibliographic record will continue to play its old role in the new bibliographical universe; in the future, information systems may rely on electronic documents to be self-describing, and the bibliographical universe may be a partly or largely self-organizing one. Perhaps in the future, the theory of bibliographic description will simply be replaced by a theory of bibliographic searching. Still, however practice develops (and she does not attempt to predict this), basic objectives and ontological distinctions will survive; technicalities depend on changing technology, but intellectual foundations, including theory, are "relatively impervious to change." The basic problems dealt with by the tradition will not disappear.

But is this right? What if the intellectual foundations really were built to justify the limits of old technologies? The case of subject description is especially suspicious. Throughout this book, the goal of collocating all documents on the same subject is taken as fundamental, and it is never questioned that this goal can, in principle, be attained by assigning a single subject description to each document. It is, in effect, a basic assumption or postulate of classical cataloging that each single work has a single subject (though the subject might have no established name and one may not want to ask about the subject of some kinds of works, for instance works of fiction). This is why theoretical treatment of indexing is hard to integrate with similar treatment of cataloging. For indexing, a big theoretical question is the question of indexing depth, the postulate of the single subject is a joke, and the traditional library catalog is an exhibition of maximum superficiality. That postulate, as absurdly oversimplified as it is, makes some sense as rationalizing a system whose main weight was once on assigning a single shelf location to each book and economizing on the assignment of subject headings, too. In a world of new technology and new bibliographical objects, however, it looks like a quaint survivor with no further purpose. For a general indexing theory, the question of when a single content description is adequate and how one decides what that description is to be is an important and interesting one, but it is unlikely that it will be satisfactorily explored by anyone who accepts that old postulate. It is very telling that there is no chapter on the pragmatics of subject languages; this is partly because, as the author says, most languages are fairly undeveloped in their pragmatics and past study of bibliographical pragmatics has not generally been fruitful. But this itself ought to raise eyebrows: those secure foundations had little useful to say about the application of subject descriptions? Time, then, to start afresh.

It should be emphasized that Svenonius's book is itself a striking piece of organization of information, though not of the kind dealt with in the book; it is not itself an example of what it is about. It is a piece of analysis and synthesis, not a bibliographical organization of works. It is exactly the sort of work one might use a catalog to try to discover, if one did not have a better way. Svenonius emphasizes as one of the objectives of bibliographical systems that of navigation, served in catalogs by an apparatus of relationships among terms. Navigation is indeed a good name for a crucial objective, but there are many ways to help people navigate in the bibliographical universe, just as there are many ways to organize information to put into that universe and to organize the things after they are put there. What I ordinarily hope for is not to have to use a library catalog's navigational helps, or to use a library catalog at all, but, rather, to have someone such as a reference librarian or colleague or reviewer steer me toward the one thing I need, for instance, the one fine starting point, the one magisterial survey of a territory, such as this book.— Patrick Wilson, University of California, Berkeley.