gress, 1947), and a complement to the exquisite coffee-table book *American Treasures of the Library of Congress* (Abrams, 1997).—*Plummer Alston Jones Jr., Catawba College.*

Douglas, J. Yellowlees. *The End of Books—Or Books without End?: Reading Interactive Narratives*. Ann Arbor: Univ. of Michigan Pr., 2000. 205p. $34.50, alk. paper (ISBN 0-472-11114-0). LC 99-6689.

I think it was a combination of the doomsday title, the breathless, schoolgirl-with-a-crush tone in the acknowledgments to this book, and the first of several grammatical errors that initially put me off J. Yellowlees Douglas's *The End of Books*. The "Interactive Narrative Timeline" prefacing the text challenged me in a different way: Did I agree with Douglas that Laurence Sterne's *Tristram Shandy* (1759), Joyce's *Ulysses* (1914), and Ford Madox Ford's *The Good Soldier* (1915) were interactive narratives in the same family as Michael Joyce's *afternoon* (1990) and Geoff Ryman's *253* (1996)? If all of these were interactive narratives, what kind of narratives weren't "interactive?" Could a lyric poem be interactive? What about plays published in print, but not acted upon the stage? Was Douglas (University of Florida) confusing the experimental (and author-determined) fictions of Sterne with the supposedly reader-driven choices offered in hypertext fiction? Douglas's

book is an attempt to answer these sorts of questions, to provide a theory of how interactive narratives work for both author and reader.

In the introductory chapter, Douglas offers a review of the recent publishing and critical history of hypertext narratives, citing both the continuities and the disjunctions between publishing on the Web and publishing in print. Canonical works such as Jane Austen's *Emma* are available "free" online, whereas Joyce's *afternoon* and Douglas' s own short hypertext fiction "I Have Said Nothing" achieve near-canonicity by appearing in a Norton anthology, *Postmodern American Fiction* (1997). She defines interactive texts as "those that contain episodes in the form of chunked text and a range of action accompanying a single decision" and "joined together by links." She further subdivides interactive narratives into two types: hypertext fictions, which are text based, and "digital narratives," which are image based. These slippery definitions allow for a wide range of authorial product, from computer games to novels; the terms seem to be used interchangeably throughout the book.

In the remainder of her book, Douglas presents her theories on the connections between avant-garde fiction (the earliest interactive fictions?) and hypertext, on how readers piece together discrete pieces of text to form stories. She wishes to explore in particular the "aesthetic, cognitive, and physical aspects of reading … when narratives have no singular, physical ending." We, like Scheherazade's listener, have a desire for the inexhaustible story—a desire that interactive stories fulfill. But instead of "saying the same thing" every time you read it (as Douglas claims print forms of narrative do), interactive narratives remove stories from the confines of the static, linear, printed page. In a reversal of the print revolution Elizabeth Eisenstein posited, hypertext allows the reader to return to a preindustrial fluidity and freedom from the austerity of print. Interactive narratives have no definite beginnings and

endings; the printed book, on the other hand, reminds us, in all its physicality, that it has a beginning and ending. The sequential page numbering, the blank leaves and covers enfolding the text, the plot or organizational structure of the text—all support beginning at the beginning and finishing at the end. Interactive narratives can be read coherently in many orders; the author of hypertexts, unlike experimental writers such as Sterne and Borges, is freed from the printed page and is not obliged to write, as Douglas puts it, "against the medium." With its plenitude of choices, hypertext makes explicit both the restrictions of print and the multiplicity of possibility of the printed word. Reading interactive narratives also reminds us of the complexities of reading, complexities that we have forgotten as we have graduated from knowing our ABCs to reading storybooks to digesting literary theory.

In a chapter on how the medium of print determines our reading of narratives, Douglas argues (with some empirical documentation) that humans impose order and connectedness on what might be disconnected sets of images, words, and events. We tend to view the world as ordered by cause and effect, by event and aftermath. In an experiment with one of her college classes, Douglas literally cut up a short story into fragments in order to "liberate" all the alternative connections that print eliminates. Groups of students were asked to reconstruct the plot; each group did so, but with different results. Douglas uses this anecdote to theorize that all narratives have gaps, are fragmented, and are open to multiple interpretations. Hypertext serves only to emphasize and uncover the implicit assumptions we make when we read, and the author and the printed page make connections for us.

Just as hypertexts redefine narrativity for us, they also redefine closure. There is no way for the reader of a printed book to reconfigure an unsatisfactory ending (unless one counts author/readers such as Alexandra Ripley who got Scarlett and Rhett back together). Readers of interactive narratives can keep reading till they are satisfied. Closure becomes the prerogative of the reader, not the author, and those prerogatives broaden rather than restrict options during the experience of reading. The reader, then, not the author, bears the burden of determining when and what closure is. Douglas argues that a "resolution of tensions" and of the greatest number of ambiguities in the story provide the most plausible sort of conclusion. Such "open works" also invite rereading, because closure can be attained by pursuing linking texts to different endings.

The chapter entitled "The Intentional Network" discusses some of the practicalities of authoring hypertext narratives. Authoring programs such as *Storyspace* allows authors to restrict or free up options for their readers; interactive narratives pile hypertext on top of authorial language on top of "codes written by programmers." Both reader and author must attend to structure as well as content. Does this interjection of the reader into the writing/reading process confirm the "death of the author?" On the contrary, says Douglas. Rather like the clockwork universe crafted by an Enlightenment God, this new sort of author creates a universe that he or she has intended. Douglas does raise some question about the intentional power of the author when she discusses copyright. Copyright may be a notion peculiarly tied to print because online readers can, of course, download and rework the author's intentions and universe as they please.

Douglas concludes with a discussion of the generic possibilities and future of hypertext. Although they retain the traditional features of print narratives (goal-seeking, conflict and uncertainty, and the anticipation of outcomes), they require more scripting, more writing, more dialogue, more work—all in order to free the reader to explore possibilities as they cannot in print.

What implications does Douglas's theorizing have for academic libraries and

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 lan-