the romantic hero (the professor) as an academic entrepreneur.

This is a big, important book that covers much ground. For anyone interested in the formation of the modern university, it will be useful and, perhaps, indispensable. It is, however, a frustrating book with flashes of deep insight and wit interspersed in a great mass of dense prose and torpid exposition. For the reader willing to plow through, it will yield riches. For those unwilling to make the effort, it will prove unreadable. It is a book that calls for an editor—both for content and for the frequent typos—the kind that will not be caught by spell-check. William Terry Couch, head of the University of Chicago Press in the 1940s, would not have let this one go through but would have demanded extensive rewriting that would have brought it in easily under 300 pages.—*Lee Shiflett, The University of North Carolina at Greensboro.*

Wershler-Henry, Darren. *The Iron Whim: A Fragmented History of Typewriting.* Ithaca and London: Cornell University Press, 2007. First published in Canada by McClelland & Stewart, 2005. 331p. alk. paper, $29.95 (ISBN 0801445868). LC 2007-002217.

Modern historiography "relegates the sensational to the sidelines" (Georges Duby) and elevates the commonplace, chronicling changes in mentalities by documenting the way simple artifacts influence behaviors—changes that then determine history. In the historiography of libraries and knowledge transmission, this trend has been reflected in recent years by books that look at the material culture of our profession, from ancient times to the present. Lionel Casson, in *Libraries in the Ancient World* (Yale, 2001), tells the story of the codex book, called *membranae* by the ancients, and how it displaced papyrus rolls over several centuries, beginning around the time of Ovid. Chiara Frugoni's *Books, Banks, and Buttons—And Other Inventions from the Middle Ages* (Columbia, 2003; trans. fr. the Italian by W. McCuaig) scrutinizes the impact of the invention of eyeglasses on the technology and importance of reading. Henry Petroski, technology historian and professor of civil engineering at Duke, has written several books with a bearing on libraries and the evolution of information storage and transmission, among them *The Pencil: A History of Design and Circumstances* (Knopf, 1990) and *The Book on the Bookshelf* (Knopf, 1999). Both books focus attention on the development and social and cultural significance of these everyday objects. A final book deserving mention in this context—and still awaiting English translation—is Markus Krajewski's *Zettelwirtschaft: die Geburt der Kartei aus dem Geiste der Bibliothek* (Engl. "Paper Slip Clutter: The Birth of the Card File out of the Spirit of the Library," Kadmos [Berlin], 2002), which traces the development of organization and retrieval technologies from the sixteenth century to the very threshold of computerization in the early twentieth century.

Darren Wershler-Henry's *The Iron Whim: A Fragmented History of Typewriting* is the latest contribution to this ongoing excavation of our technological past. Like the other books just mentioned, it describes the nitty-gritty artifactual details of its subject and their development. But also like these other works, the author of this new book probes the cultural and psychological aspects of typewriting, which include its attitudinal,

emotional, literary, forensic, and even occult reflexes—the latter especially appropriate for a technology that came of age in the Victorian and Edwardian eras, when ghosts did roam and voices from other worlds were channeled, frequently by new technologies. (One surprising example among many others we read about here: In the final days of his life, Henry James channeled Napoleon—using his typewriter. No wonder Wershler-Henry refers to typewriting as a "haunted technology.")

The typewriter has always riveted attention as a complex machine with a strong visual and auditory presence. Today it remains "one of the biggest visual clichés of our age," rivaling the book itself as an attractant of powerful romantic and nostalgic associations. In a world now dominated by noiseless computer keyboards—or voice-to-text programs and iPhones with *no* keyboards—and by "output" that is created nonlinearly, showing no traces of revisions, mistakes, or total failures (where today is the Wite-Out? where the wastebaskets full of crumpled onionskin?), the typewritten text exudes authenticity, immediacy, and even human warmth. This is especially ironic since there was a time in the not-too-distant past when typewritten letters seemed cold and aloof, a sorry substitute for the hand-penned letters that alone seemed to speak from the heart.

Although the actual history of the typewriter and its mostly failed precursors is covered in this book, this subject is of secondary importance to the author, who directs readers of that more literal bent to Michael H. Adler's *The Writing Machine* (Allen & Unwin, 1973) and other like works. Wershler-Henry instead writes of the typewriter in the tradition of—and with exact knowledge of—French cultural archaeologists Michel Foucault and Jean Baudrillard and German media theorist Friedrich A. Kittler. The actual title of Wershler-Henry's book, *The Iron Whim*, is based on a clever pun borrowed from Marshall McLuhan, who

in 1964 described the impact of the typewriter on modern poetry as comparable to that of musical notation on the work of composers: ". . . for the first time, the poet has the stave and the bar that the musician has had." Calling this "the age of the iron whim," McLuhan capitalizes on the double meaning of "whim," which can mean "caprice," as we regularly mean by it, but also the name of a vertical, usually wooden drum or capstan used in early industrial processes. The typewriter, this figure of speech is meant to express, disciplines and rigidifies the writing process while at the same time liberating the imagination. Much of the book captures the discourse of the typewriter at this level of sophistication, making it all the more remarkable that it is still such an enjoyable read. The intellectual history of the last 150 years, from Nietzsche and Conan Doyle to Douglas Adams, Paul Auster, and the Typewritergate incident that brought down Dan Rather, is retold here in a string of fascinating anecdotes, all through the optics of typewriting as a cultural phenomenon. And, of course, there is also a chapter devoted to "the monkeys"—you know, the ones who, given enough time, will reproduce the entire *Encyclopaedia Britannica*? Chapter 22 of this book is surely the most definitive treatment of the "dactylographic monkey" trope in the literature today.

The end of this book considers whether the computer has "succeeded" the typewriter, in the sense of emerging from typewriter technology as the next logical evolutionary step. Wershler-Henry concludes, despite all the "surface resemblances between typewriting and computing because of the QWERTY keyboard," that these two technologies are almost entirely discontinuous; that typewriting, despite the apparent "missing link" of the hybrid electronic typewriter/word processor of the 1980s, did not "evolve" into the computer; that instead the computer, with its entirely different origins, has gone back and taken over the role of the "profoundly non-

networkable" typewriter, just as it has assumed so many other functions of our social and individual lives.

For library and information historians, this book provides a meticulous, but for that reason no less readable and entertaining retrospective on what was once a central technology of our field. At a more general level, however, *The Iron Whim* offers a case study of how material culture and spiritual culture interpenetrate and inform one another, becoming a single large symbiotic whole.—*Jeffrey Garrett, Northwestern University.*

Cross-Cultural Perspectives on Knowledge Management. Ed. David J. Pauleen, Westport, Conn. and London: Libraries Unlimited (*Libraries Unlimited Knowledge Management Series*), 2007. 259p. alk. paper, $45 (ISBN 1591583314). LC 2006-28274.

Our horizons as librarians have always included scholarly communication and "information science," but have necessarily widened as those fields have developed to include not only patterns and means of communication and dissemination of information, but the array of factors involved in transforming data into "information" and that in turn into "knowledge." A corollary, however, is that as fields of inquiry widen, so do the common vocabulary and shared literature diminish. This book is an example of how that can create difficulties.

The twenty-two contributors to this book are mainly faculty or graduate students in international management schools or programs in several countries: New Zealand and the Netherlands lead, with five each; others are in the United Kingdom, Peru, Austria, Germany, Australia, and Taiwan. There are three authors with appointments in, or degrees from, library or information science schools in the United States and Hong Kong. The amount of citation of each others' works suggests that the contributors are part of an ongoing network of researchers who share many techniques and interests.

While not surprising, and not necessarily worthy of criticism, the fact that the book is an installment in an ongoing dialogue among its authors does mean that it serves them better than we outsiders. That is, one cannot rely on this book to learn new techniques or approaches, and still less can one be instructed by concrete examples of actual problems or solutions. The value lies instead, and mainly for the authors and their colleagues in their field, in fine-tuning concepts they're already persuaded are valuable.

The book has three sections: conceptual approaches to culture and knowledge management, effects of culture on key aspects of knowledge management, and research on, and cases of, culture and knowledge management. The underlying presumption is that the anthropological concept of "culture" is essential for understanding organized, and organizational, behavior. Such is especially a concern when organizations are multinational, international, or global, and hence are presumed both to operate in places whose cultures vary and to have staff from different cultures. How to avoid problems stemming from cultural differences and to make global communication easier is the concern of the authors.

The concept of culture is attributed to anthropology, with some contributors citing Kroeber and Kluckhohn's landmark 1952 compilation of at least 164 definitions of the term. However, more generally, the contributors to this book draw their uses of the concept not from anthropological literature, but instead from management or organizational studies that employed it. The concept as used here is rather fixed. No mention is made of "culture change" or the vast literature in anthropology about it, which would mean that the authors would have to deal with a moving target instead of a fixed principle. Related terms like syncretism, acculturation, and enculturation aren't mentioned either. Overall, the book is an argument in favor of being aware of cultural variation when studying (or applying) management and its principles.