I did find myself at times losing sight of the main focus of the book. This is not easy reading, primarily because of the way the book is organized and the tremendous amount of detail and information it contains. I also found the considerable number of typographical errors somewhat irritating. But that aside, this book should prove most useful for anyone concerned with information services to Native, minority, or immigrant populations.—*Maija M. Lutz, Harvard University.*

Katz, Bill. Cuneiform to Computer: A History of Reference Sources. Lanham, Md. & London: Scarecrow Pr. (History of the Book Series, no.4), 1998. 415p. \$46, alk. paper (ISBN 0-8108-3290-9). LC 97-7094.

At first glance, this book appears to be an obvious choice for academic library purchase. Its title and table of contents-the latter with detailed and initially appealing section headings such as "Roman contributions," "early word lists," "medieval pilgrimage guides," or "index development"-suggest not only a useful reference work but also rewarding browsing for librarians and library users alike. Its author—a professor at the School of Information Science and Policy at the State University of New York at Albany and a prolific writer, editor, and compiler especially known for his Introduction to Reference Work, now in its seventh edition may be presumed to be knowledgeable on the subject. But to call Cuneiform to Computer a disappointment is an understatement.

Katz emphasizes the period from Greco-Roman times to World War Two, and his stated purpose is "to give the lay reader and librarians a brief history of how reference books developed and how they reflect attitudes of their particular period of publication." Each of the nine principal chapters covers "a basic reference form" categorized by the author as: encyclopedias; commonplace books to books of quotations; the reference of time: almanacs, calendars, chronologies, and

chronicles; ready-reference books: handbooks and manuals; dictionaries, grammar, and rhetoric; maps and travel guides; biography; bibliography, serials, and indexes; and government documents. Each form is discussed chronologically and is accompanied by extensive endnotes.

The author's methodology, his approach to sources, and how long he has been working on the subject can only be guessed at. The text has apparently been cobbled together from notes taken on a wide range of reading, possibly over many decades and presumably in conjunction with his teaching and editing. Its organization seems loose because Katz has difficulty leaving out anything he finds interesting, whether about individuals, historical trends, or literary genres. His definition of reference sources is broad and includes how-to books, pamphlets, emblem books, and autobiography. To apply the term history to a chronological discussion based on snippets from secondary sources, supplemented by unsupported personal opinions and yet lacking an authorial point of view, seems unwise.

On almost every page, the reader is brought up short by maddening typos, unexamined generalizations, and murky style. Readers also will be distracted by the ninety pages of endnotes where digressions, non sequiturs, unnecessary definitions, and nonstandard relationships between text and note abound. Moreover, they will be troubled by what is indexed and how it is indexed. Katz's disinterest in the concept of authority control extends even to his own name: Bill Katz on the title page, and William A. Katz in About the Author (online records attribute different birth dates to these two names).

This title's inclusion in a History of the Book Series, noted in large type on the title page, is exasperating, particularly in the 1990s when the interdisciplinary field with the same name explodes with intellectual excitement and rigorous scholarship. Instead, we find frequent confusions and misstatements about the traditional

history of the book, as earlier taught in library schools (for lengthy examples, see pages xv, 11, 112, or 322).

With its diffuse focus and absence of editorial intervention, Cuneiform to Com*puter* has the general air of a first draft or a vanity press production. Academic librarians and their clienteles may find some of its bibliographical references to be helpful as entry points into some specific aspect of a vast subject. Persons looking for inspiration about reference sources and their history should consult works such as Tom McArthur's splendid Worlds of Reference (Cambridge University Press, 1985) or Distinguished Classics of Reference Publishing, edited by James Rettig (Oryx Press, 1992).—Elizabeth Swaim, Wesleyan University (retired).

O'Donnell, James J. Avatars of the Word: From Papyrus to Cyberspace. Cambridge, Mass.: Harvard Univ. Pr., 1998. 210p. \$24.95, alk. paper (ISBN 0-674-05545-4). LC 97-32256.

In Avatars of the Word, James O'Donnell, professor of classical studies and vice provost for information systems and computing at the University of Pennsylvania, reflects in lucid, thoughtful, and thought-provoking prose on the textual foundations of Western culture and the evolving connections among the technologies for recording, distributing, and preserving the written word from late Latin antiquity to our contemporary age of electronic information.

Augustine (354–430) and Cassiodorus (c. 490–c. 583), both of whom figure prominently in O'Donnell's scholarly career, put in appearances throughout *Avatars* as both significant characters in the development of textual culture and reference points in the interplay of continuity and change across the centuries. Augustine, Bishop of Hippo and a founding father of Latin Christianity, left a textual record of more than five million words when he died in 430. When Cassiodorus retired from a career in public office some 150 years later, he established a monastery where students could study the cor-

pus of Christian literature that had continued to grow since Augustine's time. As well as assembling this library, Cassiodorus compiled one of the first of what would become a long line of bibliographic tools for the monastery's students—an annotated bibliographic guide to Latin Christianity.

From these beginnings, texts continued to accumulate, as did tools to make their production and use easier and more efficient. The codex, a second-century development, had superseded the scroll by the fourth century. The codex was not only handier to use, but it also supported nonlinear and hypertextual uses of text. The invention of movable type in the fifteenth century made the production and distribution of texts easier, faster, and cheaper, as well as put access to textual culture within the reach of a much larger public. The present rapid migration of text to electronic formats broadens access even more extensively and places the possibility of authorship in the hands of virtually anyone with the necessary hardware and software.

The importance of access to the technologies of the word is one of the central issues O'Donnell addresses. Given the authority accorded to textual sources in Western culture, control over their preservation, selection, and deployment is a powerful tool in the construction of the master narratives that inform Western social and cultural identities. But these texts have never spoken for themselves. (Augustine puts in a reappearance as a case in point.) Mainstream Western culture has been shaped as much, if not more, by what has been left out of the story. As new technologies of the word open up the field of textual production and consumption, voices previously excluded increasingly challenge those master narratives. It will be virtually impossible to assert control over the written word in cyberspace.

O'Donnell sees this liberation of the word as a good thing, and it is difficult to argue with him. An abundance of diverse information can be exhilarating and can