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Paper Knowledge: Toward a Media History of Documents edited by Lisa Gitelman (Ed.). Durham, NC: Duke University Press, 2014. 224 pp. \$79.95. (hardcover). (ISBN: 978-0822356578)

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## **Book Review**

**Paper Knowledge: Toward a Media History of Documents**. Lisa Gitelman (Ed.). Durham, NC: Duke University Press, 2014. 224 pp. \$79.95. (hardcover). (ISBN: 978-0822356578)

"This book is about the genre of the document glimpsed selectively in four episodes from media history," writes Gitelman in her Introduction (p. 1). The four "episodes" are individual publications presented as archetypal of a stage of development of document design and use. What justifies calling each example an episode and what makes this book of interest is the careful explanation of the social, economic, and technical context of the selected document.

After the Preface and a lengthy Introduction, the first episode celebrates the peak of letterpress "job printing" around 1870 epitomized by a book of type specimens (ornaments, ruled lines, and numerous symbols as well as letters and numerals) published by Oscar Harpel "for the assistance of master printers, amateurs, apprentices and others." Job printing refers to a great variety of specialized, nonliterary printed objects that constituted a large part of the printing business: tickets, labels, timetables, headed stationery, order books, hotel registers, business cards, ledgers, diaries, checkbooks, invoices, and an endless variety of other mundane genres. The interest here is in how this information technology was an integral and enabling component of the rise of modern management procedures necessitated by the increased scale and complexity of railroads and other large corporations. It was a fairly short period between the emerging need and the steady replacement of letterpress job printing by new techniques for small scale reprographics, such as duplicating machinery.

For the second episode Gitelman skips to Robert C. Binkley's *Methods of Reproducing Research Materials* of 1931, which she uses to discuss microfilm and the many duplicating techniques (hectograph, mimeograph, etc.) used for office copying. Binkley was a historian concerned with access to, and the preservation of, research resources and scholarly writing. Binkley's *Methods* was prepared for the very contemporary-sounding Committee on Enlargement, Improvement, and Preservation of Data, later renamed the Joint Committee was formed in 1930 by the Social Science Research Council and the American Council of Learned Societies. His *Methods* was followed by a *Manual* in 1936. His concerns

were taken up in the pages of the *Journal of Documentary Reproduction*, which was published by the American Library Association from 1938 to 1942 and was resurrected in 1950 as *American Documentation*, now this journal, the *Journal of the Association for Information Science and Technology* (JASIST).

The third episode is the illegal photocopying and release by Daniel Ellsberg of a top secret Department of Defense report, *History of the U.S. Decision-Making Process on Vietnam Policy*. This 47 volume report, better known now as "The Pentagon Papers," documented that the U.S. government had systematically lied to the public and also to Congress about the Vietnam War and had secretly enlarged the scale of the war. This event is the basis for a riff on electrostatic copying ("xerography"), which enormously expanded photocopying and greatly changed both office and academic practices.

The fourth example is not about a single noteworthy, archetypal document, but a rather ambivalent account of the development and use of the Portable Document Format (.pdf) standard for digital documents. The ambivalence arises from the irony that a really effective and useful digital document format attracted adoption by aping the appearance and fixity of printing and minimizing the malleable fluidity of digital records. The .pdf format is, in a sense, a reaction within the digital environment to regain the desirable characteristics of the printed page and the photocopied page.

These are isolated case-studies. It is a particularly big skip from printer Harpel to historian Binkley, for whom printing was unaffordable. Binkley was concerned with the reproduction of typewritten texts using duplicating equipment or microfilm. That 60-year skip jumps over the rise of the typewriter, the introduction of inexpensive offset presses, half-tone illustration, numerous duplicating techniques, and photostat (the photographing of documents directly onto sensitized paper, without an intermediate negative). Photostat equipment, pioneered by French humanities scholar, René Graffin, as an aid for editing Syriac texts, became commercially available around 1910. Its rapid and widespread adoption quickly established office (and library) photocopying well before microfilm caught on. Like typescript, photostat provided not only a very useful immediate product but also an intermediate stage for further reprographic operations such as microfilming and photolithographic offset printing (Buckland, 2012). Xerography was developed in a deliberate attempt to replace photostat.

In an Afterword, responding to repeated questions at her oral presentations, Gitelman adds a rather thin but intriguing

history of amateur magazines ('zines) through successive technologies from Harpel to date.

There is a maturity to the writing that likely reflects the numerous oral presentations of this material prior to publication. The book is commendably concise at 150 pages of text, but it is not a quick read. The author savors her use of words and there are 500 endnotes to tempt the attentive reader.

What does this book offer readers of this *Journal*? At the very least it provides an engaging alternative to the normal information science of marginally incremental, quantitative reports. Four exotic examples and an afterword cannot take us very far "toward a media history of documents," but they can and do illustrate a much larger agenda, so this is a welcome contribution in a neglected area.

"Media history" is commonly associated with mass media and popular culture. This book shows us how inadequate that superficial view is. Harpel's type specimens show the central role of new genres of documents in empowering a rising managerial culture; Binkley's *Methods* focus on what Germans at that time called *Die Technik der geistigen Arbeit* (the techniques and technologies of intellectual work); and the Pentagon Papers showed the power of office document copying to subvert secrecy and political power.

Although there is not much recognition of the relevant literature that has been developing in Library and Information Science (e.g., Frohmann, 2004; Lund, 2009; Skare, Lund, & Vårheim, 2007), the related English-language work in the humanities and social sciences is extensively cited. Even knowledgeable readers are likely to be surprised how extensive this literature has become and the 16-page list of works cited is worth mentioning as a resource in its own right.

More radically, Gitelman's offering could be interpreted as one more sign that a rather fundamental paradigm change is emerging in Information Science through a broader acceptance of the material and social aspects of becoming informed. Largely outside of Information Science there is the growing corpus of work associated with social studies of science practice and with Donald McKenzie's influential tract on the need to rejuvenate bibliography through a deeper engagement with social contexts and a much wider range of media (McKenzie, 1986). Jerome McGann, a notable pioneer of digital techniques in the humanities, has recently argued that the very future of humanities scholarship depends in the critical examination not of *texts* but of *documents*, meaning texts embedded within their material and

social environment: "The Lower Criticism devotes itself to the analysis of the textual transcriptions; the Higher Criticism studies the sociohistory of the documents" (McGann, 2014, p. 19). Philosophers, too, have started to write about "documentality," meaning the fundamental characteristics and social roles of documents (e.g., The Monist, 2014). Historians have taken up the role of performance and craftsmanship in the creation and transmission of knowledge (e.g., Smith, Meyers, & Cook, 2014). Largely inside Information Science we have had the increased interest in document theory noted above along with occasional reminders of the essentially material constitution of digital technology (e.g., Blanchette, 2011). Maybe, just maybe, we are recovering from a narrow obsession with information—so twentieth century!—towards a broader engagement with documents, media, society, and becoming informed.

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