Track Changes: A Literary History of Word Processing

By Matthew G. Kirschenbaum. Cambridge, Mass.: The Belknap Press of Harvard University Press, 2016. 368 pp. Hardcover. \$29.95. ISBN 978-0-67441-707-6.

For those who work to preserve and provide access to the cultural record, recurrent and (typically) ahistorical proclamations relative to the challenges of a loosely defined digital age ring false. Archives and libraries have long been collecting, arranging and describing, preserving, and providing access to materials produced computationally, encoded digitally, and arranged in a manner that attests to the affordances of their medium and process. In a sense, our approaches to these challenges are not new, rather, they are in line with a rich tradition of interprofessional and interdisciplinary praxis. If anything, work with digital materials should more readily be rendered as an opportunity to extend our collective expertise and build upon commitments to our respective communities. In light of the trajectory that our continued work with digital materials provides, Matthew Kirschenbaum's Track Changes: A Literary History of Word Processing is an essential contribution that helps chart our way forward. Kirschenbaum's work is a finely nuanced, socially situated, and technically fluent history of literary word processing.

Few scholars are better suited to articulate this history in a manner that has immediate resonance for the archives and library community. Kirschenbaum is associate professor in the Department of English at the University of Maryland, affiliated faculty in the College of Information Studies, and served as associate director of the Maryland Institute for Technology in the Humanities (MITH). Kirschenbaum's first book, Mechanisms: New Media and the Forensic Imagination (MIT, 2008), delves into the relationship between the technical affordances of storage and electronic writing and media production. Throughout this work, he paid significant attention to exploring and applying digital forensic methods, a suite of approaches in which digital archivists grow increasingly fluent. Following Mechanisms, Kirschenbaum went on to author a Council on Library and Information Resources (CLIR) report, Digital Forensics and Born-Digital Content in Cultural Heritage Collections (2010) with Richard Ovenden, Gabriela Redwine, and Rachel Donahue. This report focuses on the relative promise of adapting digital forensics from law enforcement and computer science communities to cultural heritage work with digital collections. In the time since, Kirschenbaum has only continued to dedicate himself to questions salient to the work of Track Changes, with support from the John Simon Guggenheim Memorial Foundation, a wide and heterogeneous network of peers drawn from the academy, the cultural heritage community, and industry.

Track Changes spans the years 1964 through 1984. Kirschenbaum takes pains to avoid a "self-fulfilling" narrative of technological progress, choosing instead

to focus on a reverse chronological telling of the relationship between word processor and writer that is framed by consistent reflection on the gendered history of word processing, its impact on labor, and the material effects it has wrought upon writing process and product. The work's base aim is to reconstruct the manner in which computers and word processing gained their places in literary production. Kirschenbaum scopes his work by defining word processors as "hardware and software for facilitating the composition, revision, and formatting of free form prose as part of an individual author's daily workflow" (p. xiii). Over the course of ten chapters, Kirschenbaum advances a series of arguments that focus on how the material and historical aspects of word processing combined to facilitate opportunities for incorporation in literary practice.

To his credit, Kirschenbaum is able to render these opportunities in technical as well as sociocultural terms. For example, in the chapter "Unseen Hands," Kirschenbaum exposes the reader to the deeply gendered historical dimensions of word processing. By digging into American Management Association (AMA) literature, he uncovers word processing value propositions that focus squarely on policing the labor of women working in offices. Word processing was considered an "efficiency," where efficiency was understood as a method of eliminating women's control of their own time. Kirschenbaum writes that "word processing was about restructuring work, reclassifying roles in the workforce, relocating people in the workplace . . . all under the guise of centralizing and automating the composition, transcription, reproduction, and distribution—the processing of the printed word on paper. It was about procedure, control, accountability and measurement" (p. 148). The word processing transition would have obvious consequences for labor at the corporate level as well as at the individual level in the literary space. Archivists and librarians working with literary archives would be keen to trace the gendered dimensions of Track Changes to gain additional perspectives and vantage points through which to understand the textual and paratextual elements that substantiate the production of collections under their care.

Kirschenbaum provides a number of additional important technical and conceptual contributions to our understanding of literary word processing. Some insights will ring with familiarity for archivists and other cultural heritage workers who currently work with digital materials left behind by writers. In the chapter "What Remains," he recounts an obsolete Dell laptop used by Jonathan Franzen and muses, "Someday an archivist may have to contend with this rough beast" (p. 214). Given his work in this space, Kirschenbaum knows that archivists have and will continue to deal with these rough beasts, the Salman Rushdie example maintained by Emory University, one of a legion.¹

Kirschenbaum's arguments on the conceptual consequences attendant to the technical affordances of word processing have particular force. For example, his discussion of storage media and the ethics of data recovery should bear immediate resonance for archival and library communities. Kirschenbaum conceives of digital text as "genetic text," a source that holds a "history of its own making" (p. 229). A genetic text affords the possibility of recovering aspects of object evolution that its creator deliberately deleted. This particular affordance raises a number of ethical questions for archivists contending with the demands that posterity exerts on the intent of the creator. The possibilities for scholarship and professional praxis proceeding from the genetic text framing should directly inform discussions of what structural meaning must be maintained and accounted for in each of the objects constituting rapidly growing, computationally produced literary collections in institutions throughout the country. And, of course, these considerations need not be bound to the literary; they extend to considerations for working with faculty papers and similar archival collections.

As the cultural heritage community continues to build upon its ability to collect, process, preserve, and provide access to born-digital literary collections through the use of ePADD, ArchExtract, and a suite of other computational methods, it would do well to engage with the considerations that Kirschenbaum advances in this work. Among the growing body of literature that focuses on questions in this space, *Track Changes* is undoubtedly a foundational work that bears immediate value and will likely continue to do so for the foreseeable future. While the work will have immediate resonance with archivists and librarians directly engaged in the work of preserving and providing access to digital literary materials, the text is crafted in such a way that it can readily serve as a meeting ground for productive discussion between colleagues working in disparate (inter)professional and (inter)disciplinary roles.

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Notes

¹ Patricia Cohen, "Fending Off Digital Decay, Bit by Bit," *New York Times*, March 15, 2010, http://www.nytimes.com/2010/03/16/books/16archive.html?pagewanted=all&_r=1.

Alva Ixtlilxochitl's Native Archive and the Circulation of Knowledge in Colonial Mexico

By Amber Brian. Nashville: Vanderbilt University Press, 2016. 208 pp. Hardcover. \$55.00. ISBN 978-0-8265-2097-5.

Such recent works as Kathryn Burns's Into the Archive: Writing and Power in Colonial Peru (Duke, 2010), Anna More's Baroque Sovereignty: Carlos de Sigüenza