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Track Changes: a literary history of the word processor

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Kirschenbaum, Matthew G., *Track Changes: a literary history of the word processor*. Cambridge, MA: Harvard University Press, 2016. ISBN 978-0-674-41707-6

The word processing function named in the title of Kirschenbaum's new book offers to clarify the often murky process of writing by recasting it as a tidy sequence of textual additions and subtractions. The procedure treats all manner of changes with equivalent ease. It can just as readily account for the addition of a comma as the replacement of an entire page with another. What's more, the temporal view of a document achieved by cutting through sedimented edits provides a satisfyingly complete record of its history and peace of mind in knowing that previous versions can be returned to. Track changes, undo, redo, find and replace, cut, copy, and paste: the vernacular of contemporary word processing is meant to address many of the anxieties associated with writing; however, it inevitably introduces anxieties of its own. A lack of constraint can be as stifling as too much constraint; ease of editing easily turns to endless editing, or potentially to writing that is overwrought. There are uniquely *literary* concerns as well. In its advent, the word processor appeared to some as a threat to authorial integrity due to the association of 'processing' with automation. Writers were understandably reluctant to use (or admit to using) a device that the likes of Gore Vidal claimed corrupted the very "idea of literature" (p. 43). These tensions, now mostly settled, illustrate Kirschenbaum's approach to the word processor, as "an ongoing negotiation of what the act of writing means" (p. 23).

Dozens of authors' experiences with early word processors coupled with Kirschenbaum's (frankly) loving attention to the technical and "material particulars" of these scenes of writing, are the warp and weft of *Track Changes*. In one instance, we encounter John Updike sitting at a new Wangwriter II in his Massachusetts home "on or about March 13, 1983", working on a poem that would ultimately be published under the title "INVALID KEYSTROKE" (p. 85). In Kirschenbaum's telling, the poem, an otherwise insignificant moment in Updike's oeuvre, demonstrates the author's "merely typical" ambivalence to the machine. The first stanza reads:

> Wee.word.processor,.is.it.not
> *De.trop*.of.you.to.put.a.dot
> Between.the.words.your.nimble.screen
> Displays.in.phosphorescent.green?

Kirschenbaum relishes the details in his reenactment of these scenes: the Wangwriter II really did have a green phosphorescent screen; it really did display dots (formatting characters called *interpucts*) between words, but these dots are represented as periods in the published version of the poem (as above).

Kirschenbaum concludes: “What we see, then, is Updike substituting an approximation of a special formatting code with an ordinary punctuation mark, a gesture that speaks at once to his sensitivity toward the unique characteristics of the medium he is working in as well as the limits of his personal know-how” (p. 87). Similar vignettes deliver the reader into the writing machines of Isaac Asimov, Octavia Butler, Ralph Ellison, Jonathan Franzen, Stephen King, and Amy Tan—an admittedly arbitrary subset of the many luminaries who make an appearance in the book.

Track Changes' account of the role of personal computing in literature stands out in a field that often emphasizes dramatic formal ruptures over subtle and protracted shifts in the instrumentation of writing. Compared to overtly ‘digital’ forms of writing—hypertexts, databases, and interactive fiction, for example—the word processor does not leap out as an obvious and significant innovation. The word processor’s apparent banality shouldn’t be taken as justification for its neglect, however; quite the opposite. Eschewing the view that its contours are merely the result of a process of remediation—the transfer of affordances from ‘old’ typewriters into ‘new’ computers—Kirschenbaum emphasizes the historical contingency of the now-ingrained constellation: keyboard, screen, printer, CPU, graphical interface, etc. Throughout the book, Kirschenbaum shows how word processing, as we know it, could be otherwise. One of these moments is his discussion of the first novel written with a word processor, a discussion that is important less for the book Kirschenbaum identifies (*Bomber* by Len Deighton, published 1970) than for the strangeness of the machine used to write it: the IBM Magnetic Tape/Selectric Typewriter (MT/ST). After paring down the concept of *word processor*, the reader is left with a surprisingly unfamiliar artifact. The MT/ST bears only a marginal resemblance to a computer or to a typewriter—it had two separate keyboard-like components for storing and retrieving text—nevertheless it was a word processor due to its ability to encode textual information on a magnetic tape for later ‘processing’ and printing. *Bomber* was likely the first work of newly-composed full length fiction to be encoded on magnetic tape (p. 182). Kirschenbaum concludes: “What is important about word processing turns out to be not the glowing letters behind the glass but a workable mechanism for suspending the acts (that is, the moment) of inscription” (p. 245).

The MT/ST plays an important role in *Track Changes* as a point of contact between the worlds of literary production, business technology, and office management. In two chapters, “Think Tape” and “Unseen Hands”, Kirschenbaum departs from a literary focus, delving into the origins of word processing as a managerial concept. His discussion surfaces anxieties that permeated the business community in the 60s and 70s, anxieties that word processing was meant to redress. Systems like the MT/ST were marketed against the backdrop of “The

Paperwork Explosion" (Jim Henson's 1967 film by that title was commissioned by IBM). While early word processors imposed new demands on secretarial work —for example, the MT/ST's manual instructed typists to "stop thinking about what you see on the printed page. Start thinking about what is recorded on the tape" (p. 178, emphasis in original)—these technical burdens were regarded as a small price to pay for the anticipated reduction in paperwork. The reconfigurations associated with word processing were not only technical; they were also social and organizational. Managers' gendered anxieties about the efficiency of secretarial labor, referred to as the "disease" of the "social office" in management literature, resulted in organizational systems that emphasized specialization, repetition, and control. Citing the work Jeanette Hoffman, Kirschenbaum shows how word processing was of a piece with these trends: "Above all, the introduction of word processing in the office was about making female bodies accountable, and it did so by modularizing the anatomical functions of hand, eye, and ear" (p. 147).

While *Track Changes* is committed to a narrative of change, that change is not structured around a 'before' and 'after' of word processing. Instead, Kirschenbaum places the reader between writers and their instruments to experience the "minute torques and tolerances" (p. 31) transpiring there, the sometimes subtle forces that have shaped the scene of writing over the last fifty years. Technological determinism is largely put to the side in order to emphasize the "lived struggle" (p. 234) of confrontations with the materiality of writing machines. Kirschenbaum demonstrates the importance of the word processor less through its technical or economic *effects* than in the aspirations, anxieties, and labor configurations associated with it. Indeed, the book's main theoretical contribution is to show how to proceed with material analysis without falling into the traps of determinism. Overall, *Track Changes* defamiliarizes an all too familiar category, highlights the uncertainty of its boundaries, and restores an element of surprise to a technology that often appears settled.