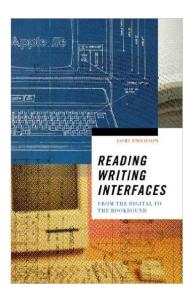
Lori Emerson, **Reading Writing Interfaces: From the Digital to the Bookbound,** Minneapolis, MN: University of Minnesota Press, 2014, 232 pp., \$25.00 (paperback).

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Lori Emerson's book **Reading Writing Interfaces** is a compelling work, deftly maneuvering through territory that might easily have veered toward the conspiratorial. Emerson has pierced the bubble of outward appearance presented by Apple and Google, while offering theoretical context and historical developments toward better understanding the role of computerized interfaces so prevalent today. Informed popular readership will find this book well worth the effort, and readers at the graduate-level and above will find this a refreshing take on a topic seldom explored at the academic level, but one pervasive—though unchallenged—in the social sphere. This work succeeds in accomplishing the rare goal of being pioneering and engaging. The author effectively accomplishes the main objective of



assessing user interaction with the personal computer during the past several decades. Emerson also considers how user experience is massaged by the duplicitous transparency of Internet search engines. If there is one shortfall of the work, it is that the various chapters at times seem somewhat disjointed; however, this too could be seen as a commentary on the computer industry, that is, all is not as it seems. The flow of topics within the text at times meanders, but the return is a rewarding tapestry of interrelated themes.

The buzzwords tinkering, making, and creating are pervasive in Apple-laden American millennial culture. Emerson frames her narrative in the understanding that computer choices have changed or altered what is written. In thinking reminiscent of Marshall McLuhan, the medium is very much the message when considering the deceptively transparent interface of computers. One of Emerson's central points is that while the ubiquitous computer, and now the ever-present Internet that promises to hold all answers, will become an invisible tool, it is—she argues persuasively—directing users toward behaviors of consumerism rather than creativity. Rather than being invisible, these devices are guiding the user, framing them within an acceptable—and profitable—paradigm.

Emerson's narrative carries the reader along, surprising us with tendrils of thought that once untangled prove richly rewarding, such as her comparison of contemporary computing technology with magic tricks and magic shows. Unusual as well is Emerson's frequent discussion of digital arts, digital poetry, and book arts as responses to and critiques of the culture of the computerized interface. Literary scholars, art historians, and computer scientists could have lively discussions as a response to this text, a cross-disciplinary conquest seldom achieved. Literary experiments by authors such as bpNichol explore how the computerized interface manipulates user experience and help shed light on the now everyday

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experience of navigating a smartphone, which for all its apparent simplicity has simply transformed users into complacent followers of the systems presented to them.

The reader need not fear losing the real within the realm of the theoretical; Emerson has presented a cogent history of the personal computer and the rise of Apple projects, discussing, for example the concept of the "third apple" of human wisdom as envisioned by early designers. Here again Emerson makes the compelling argument that while the digital interface was designed to mask the machine beneath for the sake of the user, it has become more than mere tool—it is now a guide. Utilizing 1970s advertisements and leading up to scathing criticism of Google's apparent control of search results (see Postscript), Emerson uses historical scaffolding to support her main points, reminding us that in this paradigm hackers exert more creativity than general Apple product users.

Scholars with concerns over the increasing singularity of control within the world of information will do well to read this concise text. The conclusion of chapter 2 tackles the thorny issue of the "aggressively closed architecture of the Macintosh while marketing it as a democratic computer" (p. 80). The reader is left to wonder if by using these products we have become the complacent masses as depicted in the famous 1984 television commercial. Emerson shatters the myth that the Apple computer, as it is advertised and promoted, is transparent and enhances creativity. Rather, she posits, it is opaque and controlled/controlling.

Some readers may find chapter 3 disorienting, as Emerson jumps from history to theory to topics such as concrete poetry and computerized poetics. Within the greater narrative of control and submission, however, chapter 3 revolves around ideas of activism and authentic creativity; this is the narrative thread of the book overall. Considering McLuhan's contribution to the field of media archaeology, Emerson explores the experiential differences between working on a typewriter verses a computerized interface, while also considering typography and graphic design as conveyors of meaning. The author makes the persuasive argument that new modes of media resulted in the development of new forms of art and poetry.

In her in-depth analysis of media as message (with continuing nods to McLuhan), Emerson highlights the activation of our senses to that which is the material experience of and multidimensional process of writing, interacting, and reading text. As technology nudges the viewer and user into increasingly overvaluing perfection (think of the glossy YouTube Apple videos that celebrate the perfection of production of various products), artists—book artists in particular—take the important role of calling into question these normalized, homogenized structures. This "naturalization" of media becomes central to the discussion in chapter 4, raising the pertinent point that as our devices become more intuitive (parallel to users becoming better trained in believing them intuitive), we cease to recognize them as either separate from us or as having agendas driven by the developers. This theme of control, agency, and agenda takes center stage at the conclusion of Emerson's work.

Emerson challenges our casual use of terms such as "intuitive," reminding the reader to question for whom a device is intuitive: the user or developer? The author supports well the suggestion that all forms of media are "inherently ideological"; unlike a pencil, the computer has been consciously designed

to lead the user through predetermined paths. Only when we encounter a glitch in software are we the user reminded of this reality. The metanarrative of Emerson's book is one of human versus machine and ingenuity versus commerce. Have the users of computers merely become better shoppers, better consumers? Emerson asks us to consider why it is we long so vehemently for this sort of false transparency in something that has become intertwined with our lives.

If the reader accepts the premise that the "interface brings with it strong messages of its own" (p. 144), then it is logical to assume that what appears in such digital experiential formats is untranslatable into other media. Addressing this issue of interface ideology, the book concludes with a consideration of Google and the overall Google culture encountered currently. Like Apple, Google's promoted simplicity is seductive. Users are quietly guided through the process of searching with autocompleted phrasal searches, answering questions before we have even finished forming our questions, and selling "ourselves and our language back to us" (p. 166). And what eager consumers we are. We have, warns Emerson, happily abandoned our own authority over ourselves, gladly accepting the perpetual monitoring of our behaviors. Emerson cites two provocative examples of Google critique, Google Will Eat Itself (GWEI) and The Revolving Internet, allowing the reader to assess how economic forces are driving software engineering, which then drives consumer behavior, generating a feedback loop to further hone the software. The conclusion is that we are caught in a loop far removed from the often noble pioneering efforts of early computer developers.

The reader of Emerson's text is left unsettled. As human dependency on computer and personal devise increases, we as a scholarly community would be wise to allot greater consideration to the trends considered in *Reading Writing Interfaces*. As Emerson concludes, "This assumption that tools are inherently neutral, neither good nor bad, is precisely what separates twentieth-century computergenerated writing from twenty-first-century reading-writing" (p. 177) and, by extension, that of all human/computer interaction.