Reappearing Acts: A Review of Lori Emerson’s *Reading Writing Interfaces: From the Digital to the Bookbound* (2014). The reviewer highlights Emerson's demands that we uncover and demystify the “invisible” interfaces governing our digital tools and platforms, situates Emerson's work with the larger field of digital humanities, and talks at length about the movie *Big*.

I did not expect a book titled *Reading Writing Interfaces: From the Digital to the Bookbound* to announce, on its first page, that it “begins and ends with magic” [Emerson 2014, ix]. But Lori Emerson’s convincing argument in favor of “demystifying devices” — as well as their architects and users — is full of parlor tricks as well as missing Statues of Liberty, Gob Bluths and David Copperfields [Emerson 2014, 9]. Truly, the greatest trick Emerson pulls off is convincing the world that the “interface,” a term that sounds like something Will Ferrell might have come up with in a *Saturday Night Live* George W. Bush sketch, is tied to a rich and far-reaching history worth exploring. Rather than “simply that which opens up from one distinct space to another distinct space” [Emerson 2014, x], the interface, in Emerson’s hands, is the site which determines the very nature of our approach to reading, writing, and navigating the world around us, often with an invisible, at times even nefarious, hand.

Thoughts on the relationship between magic and technology have inspired countless science fiction novels, comic books, and press releases in recent years. Was it Steve Jobs or a character from Warren Ellis and John Cassady’s *Planetary* who bragged about the ability to send “a signal to reality’s operating system” [Ellis et al. 2001, 20]? My favorite story about the intersection between these two seemingly-disparate worlds is *Big*, the 1988 Hollywood fable starring Tom Hanks. The architect of the embiggening that transforms the body of thirteen-year-old Josh Baskin (played by David Moscow) into one that resembles an Academy-Award-winning adult is Zoltar, a coin-operated machine who promises to grant wishes. Zoltar is uncomplicated. He is efficient. He is a literal plot device, an animatronic fortune teller that less charitable viewers might find heavy-handed (not to mention orientalist, given his turban and robes and angry glowing eyes). But he also has a well-designed, intuitive interface: he can be operated by a child with minimal prompting or instruction (though Baskin does have to hit the machine a few times to get it started). He can only perform limited functions, but his users seem to find little reason to pursue other avenues of inquiry. He even provides a receipt: a tiny “Zoltar Speaks” card that lets users know their wish has been granted. Viewed through the lens of Emerson’s magical thinking, he is also the dream of many twenty-first century users of digital technology, a device of seemingly limitless possibilities. If only he accepted credit cards. And fit in your pocket.

The interface is surprisingly front and center in many parts of *Big*. Beyond Zoltar, there is, of course, the famous scene set in New York City’s FAO Schwarz (RIP) where Baskin, in the midst of providing UX advice to the CEO of the MacMillan Toys Company (Robert Loggia!), literally stumbles across the toy store’s “Walking Piano” and “magically” performs two musical numbers. While the first steps on the piano are preliminary and cautious, Baskin and the CEO quickly master the device, speeding through “Chopsticks” to the delight of the assembled shoppers. The CEO is so impressed that he gives Baskin a job on the spot. Like many viewers, “Big Piano” creator Remo Saraceni sees in *Big* “a beautiful message of innocence” [Saraceni 2008].
But what if we do not subscribe to this romantic notion of wisdom inherent in a child’s gaze? What if, like Emerson, we are aware of the ways in which “the supposed naturalness of ubicomp-related gestural interfaces is utterly misleading” [Emerson 2014, 6]? As a kid I was amazed by how quickly this Baskin kid figured out how to play the piano: I didn’t have “Chopsticks” up my sleeve, because I didn’t grow up in a suburban environment that encouraged and afforded piano lessons. While there is some exploratory tinkering in this scene, there is no real trial-and-error with the device, no room for failure. These narrative trajectories live on in the marketing materials for new devices: for example, who could forget the irritating hipster star of an early Google Glass commercial, a man who uses his gadgets to track down a Ukelele In A Day book and broadcast his fast and easy mastery of the instrument (with a New York City skyline backdrop, at sunset no less!) to impress his significant other? Why be John Cusack at the end of Say Anything when you could buy a device that turns you into Peter Gabriel in less than 24 hours?

The last technological interface to be introduced in Big remains in production limbo by the end of the film. As a kid, Baskin’s dream of the ultimate comic – one with a “choose-your-own-adventure” interface that allows readers to pursue a wider range of stories than you’d generally find in a single issue – fascinated me. As his coworker Susan notes, “the kid makes his own decision” [Big 1988]. That the comic’s target demographic will inevitably run out of stories is touted as a feature, not a bug: when someone asks what happens when a reader exhausts the options stored on the device’s computer chip, Susan replies that “you just sell different adventures.” Instead of spending a dollar for 22 pages of a single story, children (and their parents!) now have the option of shelling out $19 for the illusion of choice [Big 1988].

Josh Baskin leaves before finishing his presentation on his digital comic book, deciding to return to the Zoltar machine and overwrite his initial wish with a wish to return to childhood. It’s interesting that the film chooses to stage his retreat at the moment when he is on the cusp of solving the problem he faced at the beginning of the film. The very first image we see in Big is, perhaps surprisingly, a computer screen. “YOU ARE STANDING IN THE CAVERN OF THE EVIL WIZARD,” it reads, underneath an image of said wizard. “ALL AROUND YOU ARE THE CARCASSES OF SLAIN DWARFS.” Called to action by the game, Baskin types, “MELT WIZARD.” The program requires a more specific command. The boy seems frustrated: the thermal pod his digital avatar carries in his hand seems to be the obvious tool of destruction, yet it ends up dying when his follow-up response is delayed by a request from his mother to take out the trash [Big 1988]. Baskin spends a significant portion of his time at MacMillan Toys designing a more engaging, more intuitive, more mobile version of this story; one that might, for instance, anticipate a user’s need to pause while he or she is being yelled at by their parents. Was the project a failure, too cost-prohibitive, not innovative enough? Are we expected to read in the immediate consideration of the economics of such a device the ways in which innovation is limited by market forces? Big is obviously more interested in imagining the possibilities of toys designed by children, warts and all, than in manufacturing the real thing.

**Melt The Interface**

Thomas Padilla argues that, “failure should be a goal” in developing digital initiatives [Padilla 2016]. The poets and artists surveyed by Emerson revel in various acts and performances of failure. They unlock the black boxes of proprietary hardware and software and force the contents found therein to misbehave. They pull algorithms kicking and screaming into the light of day. They create works that stretch across all corners of our material landscapes, messy portraits smeared with the fingerprints of their creators and the marks of their tools of composition. Unlike most project managers, librarians, or developers, artists can devote their energies to producing work “that is deliberately difficult to navigate or whose interfaces are anything but user-friendly” [Emerson 2014, 4]. But as Padilla suggests, maybe there is a need for more time, labor, and institutional support devoted to explorations of difficulty and experimentation in design. Maybe a wider range of digital humanists can productively resist or critique user preferences for the invisible if they, like the artists featured in Emerson’s book, use strategies of defamiliarization to make what seems natural unnatural. We’re not going to learn how to melt wizards if we’re afraid to explore the possibilities of melting wizards in the first place.

Sometimes the digital interfaces of daily academic labor are very much visible to us, almost frustratingly so. Instructors are often strongly encouraged or even required to use Canvas and Blackboard: content management systems that seem designed to punish students. If your university library has decided to invest more in digital ebooks than physical copies, you have likely had a great time doing research in Ebrary’s web interface, apparently invented by someone who
hates to read. And many digital humanists have likely heard the sounds of snickering from the snarkier non-DH faculty members in the room while you’ve stared with horror at an unfamiliar projector interface just before the job talk, or when said interface decides all of a sudden that the commands it prompts you to follow are more recommendations than directives for how the display might be turned on. Perhaps we’ve used words like “intuitive” or “clean” to describe our preferred alternatives to these technological monstrosities. Emerson is here to remind us that the bargains we make in such desperate moments are almost always Faustian.

Specifically, Emerson critiques “glossy” interfaces that “further [alienate] the user from having access to the underlying working of the device” [Emerson 2014, xi]. She identifies the paradox at the heart of contemporary technobabble: for all the rhetoric about the ways in which “the boundary between human and information is eradicated” with every new user-friendly device, the reality is one where we rely more and more on tools “entirely closed off to the user” [Emerson 2014, x–xi]. Some of the benefits of averting a future where The Singularity is sponsored by Apple are self-evident. We like knowing where and how to get out in the event of an emergency, and we are perplexed if not completely apoplectic over design decisions that remove entrances, let alone exit paths: the disappearances of USB ports, CD drives, and now headphone jacks. What happens when I try to crank up Cinderella’s “Don’t Know What You’ve Got (Till It’s Gone)” and it turns out my ear buds are dead? Heartaches come and go, and all that’s left are the words, but now, like, the words are gone too.

Some of the sleight-of-hand tricks revealed in Emerson’s book are likely already known to many Digital Humanities Quarterly readers. I’ve asked my last few DH classes here at Brown to read Mitchell Whitelaw’s “Generous Interfaces for Digital Cultural Collections” (2015), an essay which implores those of us curating digital objects to offer “multiple, fragmentary representations to reveal the complexity and diversity of cultural collections, and to privilege the process of interpretation” [Whitelaw 2015]. Even more recently, Renée Farrar, citing Emerson, has argued that “individual effective resistance” of pre-packaged interfaces and their conventions enables both artists and general users to find “opportunities to think critically in forgotten, invisible spaces, and to shirk off the often unacknowledged influences of user-friendly” [Farrar 2016]. There is also the longer history of critical examinations of the interface, highlighted by Emerson in her introductory chapters: Mark Weiser’s “The World Is Not A Desktop” (1994), Friedrich Kittler’s “There Is No Software” (1995), Steven Johnson’s Interface Culture (1997), among other antecedents.

In “What’s Next: The Radical, Unrealized Potential of Digital Humanities,” Miriam Posner suggests that digital scholars might focus their efforts on creating interfaces that explicitly challenge their users: for example, she describes the ways in which the design of Evan Bissell and Erik Loyer’s The Knotted Line “asks us to question the purpose of an interface” and “links our assumption that we are entitled to straightforward, transparent interfaces with our inability to look deeply at the structures of injustice and inequality in the United States” [Posner 2016]. By examining, dismantling, and reimagining digital interfaces and their aims, we can stress the ways that “natural” or “intuitive” design methodologies rely heavily on false (and often white, North American, and economically privileged) assumptions about the realities of many users.

The Tyranny of Uncertainty

Emerson notes that the “rhetoric” touting the magic of twenty-first century devices, invisible interfaces, and ubiquitous computing initiatives “might not be so disagreeable if it didn’t also help determine the shape of the future of computing” [Emerson 2014, 8]. Channeling (or perhaps more accurately, “Exorcising”) Arthur Clarke, Emerson, in her first chapter, “Indistinguishable from Magic: Invisible Interfaces and Digital Literature as Demystifier,” claims that “the future of computing is domineering, branded, and boring” [Emerson 2014, 8]. We are more indebted to our interfaces than unburdened by them. Current trends in computing — specifically, the current state of “ubiquitous computing,” a dream of a pervasive “Internet of Things” operating silently and efficiently to augment our daily lives to their fullest potential — privilege “the value of an interface that recedes from view” [Emerson 2014, 6]. Our iPads, smart refrigerators, and phones “sense for us what information we need and want,” liberating us from the tyranny of uncertainty [Emerson 2014, 5]. Even better, we can use the time these decision-making gadgets save us to express ourselves creatively, provided these forms of expression utilize applications have been approved for consumption and use on Apple devices.
Or we can try to remember “what creativity via computers could mean and in fact at one point did mean,” marketing be damned [Emerson 2014, 19]. Emerson takes readers on a crash course in digital defamiliarization, introducing us to projects that experiment with multitouch interfaces (via Myron Krueger’s work from the 1970s and 1980s, which predates the finger-swiping mechanics we have come to rely so heavily upon in the 2000s and 2010s), poetic apps created specifically for the iPad by Jason Edward Lewis and Erik Loyer (among others), projects that exploit glitches in software (Deena Larsen’s *Samplers: Nine Vicious Little Hypertexts*) and interfaces that explicitly reject or subvert canonical web design principles and conventions (projects by Jason Nelson and Young-Hae Chang Heavy Industries). These projects do not direct their audiences to new or better uses of technology; instead more often than not, their structures and perceived shortcomings serve to remind us that “the Web has become so familiar to us that we’re not even aware of its structures, its codes, and the way it works on us rather than us working on it” [Emerson 2014, 43].

You may be unfamiliar with many of the pieces of experimental literature highlighted in these and other chapters. You might also be skeptical of Emerson’s insistence upon “the importance of digital literature as an intervening force in the computing industry’s push to have our devices do all the thinking, perceiving, and even creating for us” [Emerson 2014, 35]. I too have been burned by the rhetoric of innovation. While surveying work for my dissertation, which focused on poetry and digital media, I would occasionally find myself shaking my head at seminal works of electronic literature that were held in high regard by other audiences. I do think there is still a great deal of hyperbole circulating in appraisals and defenses of electronic literature, and I wonder about the negative influence of institutional circuits and funding outlets who privilege particular claims about its value. But I also, at times, have lacked an understanding of key contextual and conceptual material in relation to particular projects, which is why I’ve grown more and more appreciative of the critical and curatorial lenses of authors and artists like Dene Grigar, Mark Sample and Élika Ortega (among others), as well as initiatives like the Electronic Literature Collection series. I don’t know if *Reading Writing Interfaces* will succeed in converting all skeptics, but I think Emerson does an admirable job of connecting seemingly-esoteric work to experiences with interfaces that might resonate with many of our heavily-mediated, everyday lives.

For example, I was particularly fascinated by Emerson’s “Postscript,” in which she proposes the term “readingwriting” as a way to acknowledge “the practice of writing through the network, which as it tracks, indexes, and algorithmizes every click and every bit of text we enter into the network is itself constantly reading our writing and writing our reading” [Emerson 2014, 163]. This unwieldy (in a good way) term is used by Emerson to argue that “[w]hat is new and particular to the twenty-first century literary landscape is a revived interest in the underlying workings of the algorithms that are reading, writing, and reading our writing” [Emerson 2014, 164]. The reference to a *return* to the algorithm may surprise some readers, but in fact “poets have been writing with the aid of digital computer algorithms since Max Bense and Theo Lutz first experimented with computer-generated writing in 1959” [Emerson 2014, 164]. Algorithms and their impact are increasingly visible to us, especially when social media networks are constantly refining and rewriting theirs to win favor with particular advertisers or entice new users, revisions that can infuriate early adopters or raise questions about how user information had been previously concealed from view.

**The Road Not Googled**

Google, its search interfaces, and its algorithms are the particular objects of critical inquiry here: Emerson highlights several artists interested in “questioning how it works, how it generates the results it does, and [...] how it sells ourselves and our language back to us” [Emerson 2014, 166]. For example, Bill Kennedy and Darren Wershler’s “apostrophe engine” project, which has created poems out of the language of Google and AltaVista search results, documents the impact of search inquiries and parameters on language that we gravitate towards online and offline. But it is also an experimentation in media archaeology across time, one that “provides us with bits of material evidence that reveal the ever more sophisticated workings of Google’s search algorithm through the shape, the content, and the syntactical structure of the statements themselves” [Emerson 2014, 179]. It is in moments like these where Emerson is most impressive in her evaluations of experimental electronic literature. While many of us may have taken note of or even screenecapped amusing moments of Google’s predictive text (“jim mcgrath linkedin” followed immediately by “jim mcgrath obituary”) is a depressing story of a life unlived; thanks, Google) or enjoyed parody Twitter accounts like @RikerGoogling (where we see the embarrassing daily searches of *Star Trek: The Next Generation* Commander William Riker), we generally refer to “Googling” without recalling that the term refers to a practice that is constantly
changing over time and highly dependent upon the person, device, connection, and interface deploying the search. Emerson and the artists she highlights perform “reappearing acts” in which the trick is revealing what we hide behind the metaphors we use to shape our uses of technology.

In addition to highlighting the speed with which our contemporary web interfaces vanish behind colloquialisms, Emerson recalls the philosophical shifts in the history of personal computing that inspired the “closed, transparent, and task oriented” devices and interfaces we are familiar with today [Emerson 2014, 77]. By closely examining the rise of “user-friendly” graphical user interfaces (GUIs), the pedagogical impulses guiding the creation and dissemination of the Logo programming language and Smalltalk software initiatives of the 1970s and the ad campaigns for the Apple Macintosh (among other texts and archival materials), Emerson documents the messy recent history that preceded our sleeker, flatter, dull monoculture governed by increasingly narrower principles of design. Her work makes visible the contradictions inherent in Apple’s victorious “gloss over the aggressively closed architecture of the Macintosh while marketing it as a democratic computer ‘for the people’” [Emerson 2014, 80]. Whereas the opportunities to bridge the distance between user and interface once invited a variety of designs and methods, these roads have been paved over to favor the more immediate needs of businesses and consumers. This history is particularly compelling to readers too young, too tuned out, or too not-alive to have experienced it firsthand, and its presence here may be useful to readers more preoccupied with the apparent benefits of the user-friendly world we presently inhabit.

Early in Reading Writing Interfaces, Emerson notes that she is not “arguing wholesale against user-friendly interfaces that seek to be invisible” but is instead criticizing the privileging of “transparency” as a design mandate “valued above all else” [Emerson 2014, xi]. She laments the lost possibilities of a present governed by “multifunctional, generative devices for reading as well as writing or producing content” instead of the “appliances for the consumption of content” we keep on us at all times [Emerson 2014, xi–xii]. In the texts and material contexts of works produced by Emily Dickinson and concrete poets like bpNichol, she finds not digital antecedents but “antidotes for the Interface-Free” [Emerson 2014, 140]. “Why do we lure ourselves into believing that these interfaces offer us the ability to somehow transcend the interface itself and not understand that they instead offer us an increasingly difficult to pin down, perhaps even insidious form of control on our creative expression?” [Emerson 2014, 144]. What if we did more than wait passively for the equivalent of Zoltar and his invisible hand? What if we spent less time reveling in the clean, white, endless expanses of Apple and Google commercials and instead took a closer look at the economic and human costs of the labor generating our devices? What if it was OK to pursue creative endeavors that called attention to their present and attendant material conditions, instead of wasting time writing and making excuses for sententious, pretentious trash?

Reading Writing Interfaces has helped me to more productively call attention to ideas of the interface in my academic writings and teaching materials. Within my immediate institutional context as an instructor in Public Humanities, it has provided me with a useful framework to help students and faculty members think more about the design principles motivating their digital projects (as well as my own). Beyond professional applications, it points the way towards new weapons to help in the war against the wizards who are transforming the digital spaces we share into two-dimensional kingdoms that are white, dull, and cold as ice.

Works Cited


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