



Further Reading

Edited by Matthew Rubery and Leah Price

Oxford Twenty-First Century Approaches to Literature

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MATTHEW RUBERY
AND
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ELECTRONIC

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Electronic reading has changed dramatically over the last three decades. From reading on large desktop screens to small mobile devices, from reading long hypertext fictions to short Flash-based poems, and now to reading text beyond screens with augmented and virtual-reality (VR) technologies, “electronic reading” encompasses diverse aesthetics, media formats, and experiences. This fact makes it impossible to describe or define any one type of reading as “electronic,” let alone speculate on the future of these practices. To contemplate electronic reading, then, we might ask what we mean by “electronic” as well as what we mean by “reading.” This essay explores the conjunction of these two terms by way of electronic literature.

Electronic literature is born-digital, made on the computer and with computational aesthetics essential to the poetics of the work and the reading experience of it. Ten years ago, “electronic literature” was largely limited to screens, laptops, or even desktops, and to interaction with their interfaces. Today, a cell phone, VR headgear, or even a public square works just as well as an environment for reading electronic literature. Along with changes in the technological location of electronic literature, its cultural position has also changed. No longer the province solely of the avant-garde, electronic literature is now part of mainstream storytelling and advertising—from augmented reality (AR) children’s games such as Harry Potter’s *Wonderbook: Book of Spells* (2012) to the ubiquitous use of digital flashing poetics, once associated with such new media artists as Young-hae Chang Heavy Industries, in the sidebars of social media advertisements.¹

A focus on electronic literature exposes two things about reading in the digital age: (1) reading is no longer the sole activity and purview of the human; and (2) reading involves a participatory network of media and actors in which humans are no longer the central node. To explore these two points more fully—or, in the language of this volume, *further*—I turn to three very different and very recent works of electronic literature that each complicate simple designations of “electronic”

¹ See yhchang.com.

and the activities associated with “reading.” Collectively, these works promote consideration about what electronic reading entails and means for an age now permeated by mobile devices and cloud computing, wherein electronic reading is a mainstay.

Point 1: Reading Is No Longer the Sole Activity and Purview of the Human

Aaron Reed and Jacob Garbe’s *The Ice-Bound Concordance* (2016) is a work of AR literature comprised of a downloadable app and a highly designed, standalone book, *The Ice-Bound Compendium*. The transmedial game diegetically narrates and formally demonstrates how computers partner with humans to produce and read literature. There are two stories here, two layers intertwined to display and comment on how electronic technologies change reading. The first layer is an interactive game in which the reader-player uses her computer interface to explore a mysterious research station located in frozen tundra of the Polar Arctic. The Carina Polar Research Station holds the secrets of scientific research and of lives lost in its subterranean caverns, and it is slipping into the ice. The reader-player works against the game’s timer to navigate Carina’s labyrinthine structure and to discover narrative clues held within it before the station disappears beneath the Arctic surface. The second layer of storytelling is a metafictional one that comments upon the creation of the story about the Carina station. This narrative revolves around Kristopher Helmquist, author of a popular cult science fiction novel who died before finishing his latest book, destined to be a bestseller. In the wake of his death, his publishing company, Tethys House, uses forensic brain scans of the author to create an Artificial Intelligence (AI), a “simulacra fiction” or “simfic” named KRIS tasked with finishing Helmquist’s novel. In this layer of narrative, the reader-player’s goal is to help the AI become an author. The novel you two are to collaborate in finishing is about, yes, a polar research station called Carina. To complete the task of writing the novel (and winning the game), the reader-player must use the other media form involved in this AR world: the book, *The Ice-Bound Compendium*.

The Ice-Bound Compendium is a small, glossy book, elaborately printed to look like a scrapbook of Helmquist’s life. It supposedly contains alternate drafts of the unfinished novel and is filled with all types of paper-based reading materials: handwritten annotations, Microsoft Word screens scattered with Track Changes annotations, screenplay documents, fictional marginalia, 3 x 5 note cards, magazine cut-outs, and more. (See Figure 28.1.) The book also contains Quick Response (QR) markers that, when scanned by the computer’s webcam, produce a digital connection that projects additional clues and layers of narrative onto the book’s pages. You play this sophisticated game by using the bookish book, but instead of reading its content,



Figure 28.1 Jacob Garbe and Aaron Reed, *The Ice-Bound Compendium* (2015). With permission by the artists.

you scan the book with a digital reading device. The computer then reads the digital data contained in the QR codes and displays content (text and image) for the human reader-player. This transmedial circuit of literary performance positions the computer as the primary reader of the book and a collaborative partner in electronic reading. N. Katherine Hayles recently argued that such collaboration is the new normal: “biological and technical cognitions are now so deeply entwined that it is more accurate to say they interpenetrate one another.”² The implications of this fact extend to ethics, the environment, global markets, and more. “Once we overcome the (mis)perception that humans are the only important or relevant cognizers on the planet,” Hayles writes, “a wealth of new questions, issues, and ethical considerations come into view.”³ For the purpose of this essay, such questions include: what role does the nonconscious agent have in reading, and what are the implications of these new arrangements?

The goal of the game *The Ice-Bound Compendium* is to produce a novel. The narrative’s conceit of working with an AI and a digital data collection for this purpose posits an implicit challenge to the core concept of the novel genre—namely, to the

² N. Katherine Hayles, *Unthought: The Power of the Cognitive Nonconscious* (Chicago: University of Chicago Press, 2017), 11.

³ Hayles, *Unthought*, 11.

idea that an individual human author creates an individual literary work for an individual human reader. This central premise, upon which Western literary production has been based for centuries, haunts *The Ice-Bound Concordance*. The work demonstrates how we not only read *through* computers, using the machine as medium, but also *with* them as co-cognizers.

What does it mean for our understanding of literature when machines, not humans, write and read? Rita Raley examines text messaging (SMS-based) electronic literature to show how such interactive, sited, and social texts operate at conscious and nonconscious levels across human and machinic cognizers.⁴ Such works produce text in real time by combining computational databases with content input by humans, resulting in textual performances that demonstrate the collaboration between humans and machine cognizers while also complicating the concept of a coherent literary "text" that can be read, let alone close read. "What one reads with a momentary peripheral glance is likely not to return and, though the moment of textual consumption might be captured and replayed through recorded documentation, that moment cannot be restaged or reenacted," Raley writes.⁵ In response, such works require a different type of reading practice and purpose than standard print, one that registers a profound change in how we understand what critical reading, in particular, does. Instead of mastery, coherence, and objectivity of the sort associated with close reading and hermeneutics, we must favor the affective, fragmentary, and "disintegrated" (Raley's term). Raley's examples constitute a different genre of electronic literature than *The Ice-Bound Concordance* and my other selections in this essay, but considering them together shows how electronic reading depends upon the embodied, nonconscious, and networked. Recognizing this fact should prompt critical and scholarly literary reading practices to change along with the literature. Such changes go beyond swapping "close" reading for "surface" or "distant" and instead require more nuanced and media-specific considerations of what it means to read when reading is a collaboration between conscious and nonconscious agents.

Point 2: Reading Involves a Participatory Network of Media and Actors

This secondary claim suggests that reading requires a focus not just on text but also on the networks of actors supporting the production and reception of text. This is particularly true of critical reading, the type of scholarly reading suggested by the

⁴ Rita Raley, "TXTual Practice," in *Comparative Textual Media: Transforming the Humanities in the Postprint Era*, ed. N. Katherine Hayles and Jessica Pressman (Minneapolis, MN: University of Minnesota Press, 2013): 5-32.

⁵ Raley, "TXTual Practice," 6.

term “further reading” and the kinds of books that contain such sections for learning more by reading more. Scholarship in textual studies and the history of the book has illuminated how textual production and reading practices happen through infrastructural networks that are social, technological, political, and economic. The recent infrastructural turn in media studies provides further ways to consider the inextricability of human and nonhuman actors in networks of natural environments (John Durham Peters), ecologies (Jussi Parikka), technological systems (Nicole Starosielski), human labor (Lisa Parks), Internet protocols (Alexander Galloway), interfaces (Lori Emerson), and network aesthetics (Patrick Jagoda). These contexts and relationships inform electronic reading, and they should inform our understanding of it.

Electronic reading and electronic literature happen through networks. Real-world infrastructures of technologies and global finance power the “e” in e-lit. The adjective “electronic” describes the energy source that surges through cables to produce “signifiers of voltage differences” that enable software and coding commands to produce “flickering signifiers” onscreen.⁶ Focusing on the material actualities of “electronic” invites examination of this power source as part of electronic reading. Such inquiry into electronic reading can then include critical consideration of the economic costs of electric wattage but also the effects of biochemical mining that extracts from the earth the chemicals necessary to produce the hardware used to transmit this energy source into our e-reading devices. Such examination can turn attention to political and economic configurations supporting electronic reading, including those that enable American companies to pillage the natural resources of continents oceans away in order to make slick, expensive mobile phones and e-readers and then to return said used goods to Third World countries as trash because American policy will not allow the hazardous materials to be dumped in its soil. This complicated context requires examination of what Jussi Parikka calls “a geology of media,” meaning “a different sort of temporal and spatial materialism of medial culture than the one that focuses solely on machines or even networks of technologies as nonhuman agencies... the geological sciences and astronomy have already opened up the idea of the earth, light, air, and time as media.”⁷ Pursuing electronic reading in this vein illuminates how electronic literature is not just technological but also ecological.

My second example of electronic literature is a work that presents a lesson in the geology of media, both in its textual content and in its transmedial format. J. R. Carpenter’s *The Gathering Cloud* (2017) pursues a poetic and feminist media archaeology of a central actor in the contemporary infrastructure for electronic

⁶ The quotations are from, respectively, Friedrich A. Kittler, “There is No Software,” *CTheory.net* (October 18, 1995) (<http://www.ctheory.net/articles.aspx?id=74>); and N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), chapter 2.

⁷ Jussi Parikka, *A Geology of Media* (Minneapolis, MN: University of Minnesota Press, 2015), 3.

reading: the cloud. Stretching across a website, a book, and bookish zine, *The Gathering Cloud's* transmedial network presents a historical and literary foundation only in the last ten years but, as the text suggests, has a much longer history) and how, despite the natural and ephemeral rhetoric attached to the atmospheric metaphor, cloud-based electronic reading depends on material infrastructures and labor practices that exploit natural resources and leave deep footprints on the environment.⁸

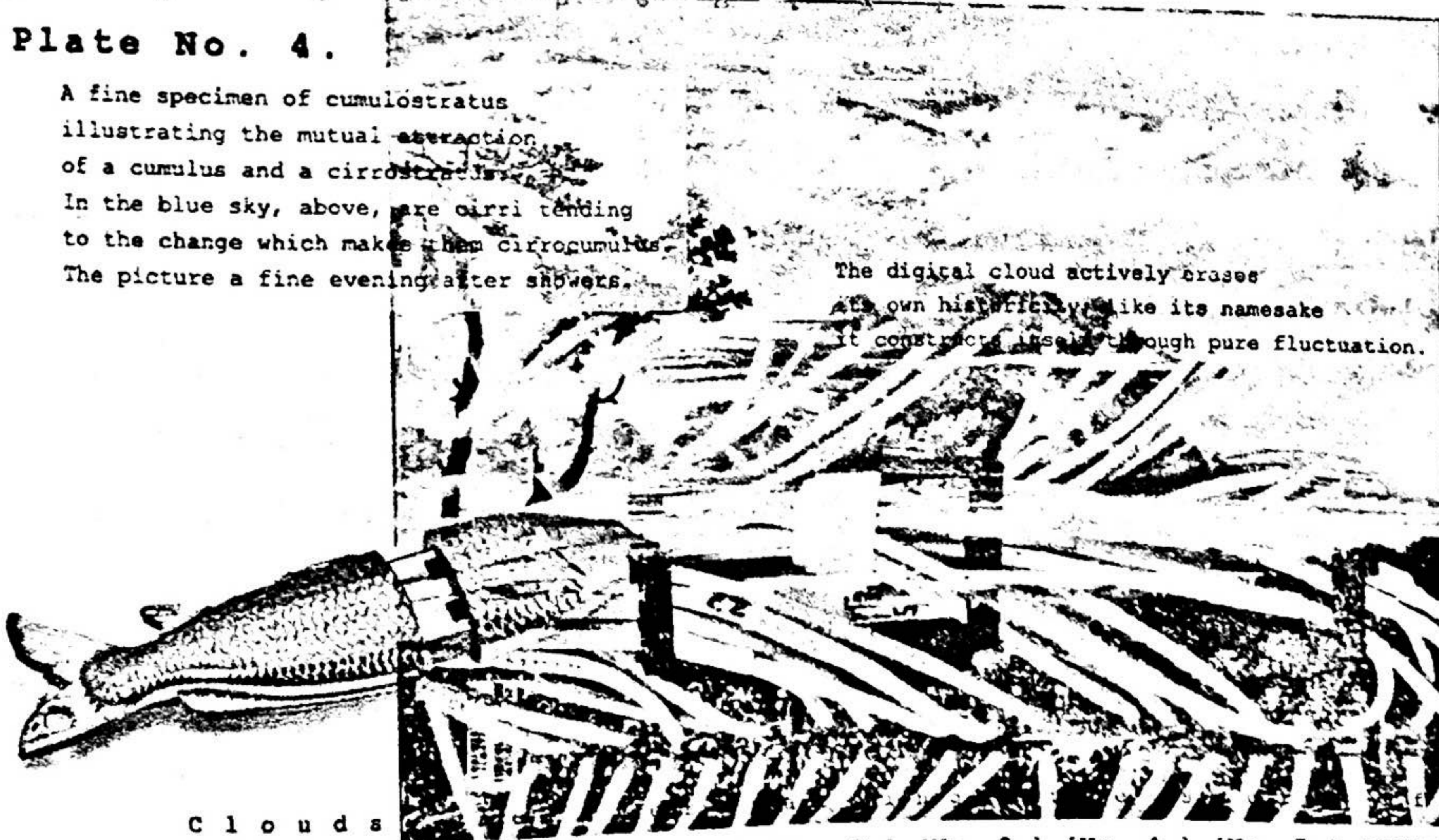
As its title suggests, *The Gathering Cloud* depicts an impending storm: the earth natural elements to power our omnipresent devices and, then, needing to dispose of these toxic objects back into the ground. This situation, it turns out, has a long backstory. *The Gathering Cloud* explores the material, theoretical, and historical contexts behind this contemporary situation using not cutting-edge media aesthetics or futuristic narrative but, instead, a scholarly practice of media archaeology. Carpenter turns this history into poetry and presents it in an analog aesthetic that is paradoxically dependent upon digital media. The website's navigation system is decidedly bookish: the reader clicks on a "Frontispiece" or a list of plates listed "No. 1" through "No. 5." (See Figure 28.2.) The naming conventions for the naviga-

THE GATHERING CLOUD

Plate No. 4.

A fine specimen of cumulostratus illustrating the mutual attraction of a cumulus and a cirrostratus. In the blue sky, above, are cirri tending to the change which makes them cirrocumulus. The picture a fine evening after showers.

The digital cloud actively braves its own history, like its namesake it constructs itself through pure fluctuation.



C l o u d s

w i n d .

[Frontispiece.] [No. 1.] [No. 2.] [No. 3.] [No. 4.] [No. 5.] [SOURCES]

Figure 28.2 J. R. Carpenter, *The Gathering Cloud* (website 2016). With permission by the artist.

⁸ The origins of cloud computing reach back to the 1950s (or, following Carpenter, much farther back), but contemporary iterations of the digital cloud emerged around 2011 with products such as iCloud and Amazon Cloud Player. See Tung-Hui Hu, *A Prehistory of the Cloud* (Cambridge, MA: MIT Press, 2015), ix.

tional devices reference codexical design, specifically the description of plates from Luke Howard's *Essay On the Modifications of Clouds* (1803). Indeed, the entire digital work is built upon the print structure of Howard's text, fragments of which are included in Carpenter's contemporary work. The website is full of analog-ish imagery: engraved illustrations, static photographs (rather than moving images), Courier font, and even handwritten annotations. All of this decidedly old-fashioned material is layered in a palimpsestic aesthetic suggestive of scrapbooks, that codex-based form of personal archiving that is "a material manifestation of memory—the memory of the compiler and the memory of the cultural moment in which they were made."⁹ The actual codexical component of *The Gathering Cloud* presents a different type of compilation: a small poetic book whose verse collates history on meteorology and media, from ancient Greeks and Epicurean materialists to Robert Hooke, "the first Curator of Experiments/ at the Royal Society of London" in 1665, through to the contemporary digital period, to tell a story of how we arrived at our own gathering cloud.¹⁰

The first poetic entry is dated February 2014 and begins with a Gertrude Stein-ian sense of a continuous present: "It's raining. It has always rained. We are silt" (15). The words "raining" and "rained" appear in light grey, a visual emphasis that, in the light of the digital, serves as a visual signifier for a previously-clicked-on hyperlink. The detail suggests layers of readings, past and present, and the historical practices and pursuits that inform what is currently available to be read and known. This initial poem ends with a statement by Devon's chief scientist, Dame Julia Slingo: "We have records going back to/ 1766. We have seen some/ exceptional weather, but nothing like this./ All evidence suggests a link to climate change" (16; emphasis in original). The suggested "link" to an archival past, coupled with the shaded grey color that indexes an activated HTML link on the web, registers the layers of media practice involved in documenting and representing climate change. For Timothy Morton, climate change is the signal example of a "hyperobject"—such "things that are massively distributed in time and space relative to humans" and "force us to rethink what we mean by *object*" through challenging anthropocentric epistemologies and our sense of history.¹¹ "Hyperobjects are *futural*," Morton claims, and they change the way we experience the world.¹² Carpenter's *The Gathering Cloud* approaches this futural hyperobject in a literary practice that demonstrates and invites *further* reading.

⁹ Susan Tucker, Katherine Ott, and Patricia P. Buckler, eds., "An Introduction to the History of Scrapbooks," in *The Scrapbook in American Life* (Philadelphia: Temple University Press, 2006), 1–25; 3.

¹⁰ J. R. Carpenter, *The Gathering Cloud* (Axminster: Uniformbooks, 2017), 33. Subsequent citations will be cited parenthetically.

¹¹ Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis, MN: University of Minnesota Press, 2013), 1, 24. Italics in original.

¹² Morton, *Hyperobjects*, 122.

In its style of compilation, collage, and weaving, *The Gathering Cloud* resembles Sadie Plant's seminal book of cyberfeminism, *Zeros and Ones: Digital Women and the New Technoculture* (1997), which excavates and sutures moments from the histories of computation and feminism. Similarly, Carpenter includes in her poetics of media archaeology and geology women like Eunice Foote who, in 1856, "filled glass jars with/ different gases, and put them out in the sun./ She found that the jar containing water/ vapour and carbon dioxide heated the most" (58) and, in other words, discovered "what we now call greenhouse gases" (58). *The Gathering Cloud's* archival assemblage connects Foote to the most famous philosopher of tools, Martin Heidegger: "During World War I, Heidegger served as a/ weatherman on the western front, near Verdun" (60). The historical detail scaffolds a larger claim: "The Heideggerian trope of vigilance/ as a paramount ethical duty was/ born during these months of scanning the sky for signs" (60). Gathering (in the language of its title) moments from diverse historical registers related to clouds, this work of literary media studies presents an archival and poetic paradigm for approaching the contemporary computational cloud.

The work teaches the following lesson: "The digital cloud is older than we think" (63). Recent scholarship in media history develops this point. John Durham Peters even includes actual clouds in his recent study of media, *The Marvelous Clouds: Towards a Philosophy of Elemental Media*: "The media of sea, fire, star, cloud, book, and Internet all anchor our being profoundly, even if we can't say what they mean."¹³ Peters's expansive definition of media participates in a trend within media studies to examine the infrastructure, not just the objects, products, and practices they support. (For examples of such work, see Wendy Chun, Lisa Parks, and Nicole Starosielski.) "Media are our infrastructures of being, the habitats and materials through which we act and are," Peters writes.¹⁴ Such habitual media structure our lives, experiences, and ways of thinking. In *The Gathering Cloud*, Carpenter writes, "The Cloud is an increasingly essential/ element of infrastructure powering/ industry, government, finance, and commerce,/ as fundamental to us as plumbing and roads" (77). Aligning the cloud with plumbing invokes Nicole Starosielski's scholarly effort to bring to the surface the undersea cables that enable the Internet to appear wireless and cloud-like. "Despite the rhetoric of wirelessness," Starosielski writes, "we exist in a world that is more wired than ever."¹⁵ Her research shows how "[u]ndersea fiber-optic cables are critical infrastructures that support our critical network society."¹⁶ Such infrastructure supports our ability to read. As Carpenter

¹³ John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media* (Chicago: University of Chicago Press, 2015), 14.

¹⁴ Peters, *The Marvelous Clouds*, 15.

¹⁵ Nicole Starosielski, *The Undersea Network* (Durham, NC: Duke University Press, 2015), 9, 1.

¹⁶ Starosielski, *The Undersea Network*.

reminds us, "An email may travel thousands of miles/ and pass through multiple data centres/ to send a photograph across the street" (88). This material fact highlights how electronic reading happens through networks of computational actors, physical sites, and protocols. The human is not the central or primary node in electronic reading.

The Gathering Cloud turns attention to natural clouds and to "the cloud" of digital culture as topics and media to read. A single sentence appears at the top of a nearly blank page: "The term The Cloud refers to a cultural fantasy" (83). A wall of white follows the line, a blank space open for the projection of fantasy. The only other text on this page is a lone line at the bottom: "We walk on the bed of the sea of the air" (83). If we recall that the etymology of "fantasy" is about showing and making visible, then Carpenter's point here and throughout *The Gathering Cloud* is to expose the infrastructures that support our ability to see and thus to read. This infrastructure includes the page (see Bonnie Mak) and the computational cloud that archives the content of digital webpages. Carpenter directs her reader's attention to this infrastructure of pages, both paper- and HTML-based, through the use and arrangement of photographs. Black-and-white photographs of clouds gathering at the ocean's horizon are sprinkled throughout the book; the website also contains a page exhibiting the collected, colored images arranged in rows. These photographs depict clouds and the ocean but, more significantly, the horizon line between them. The images illuminate and expose the natural media and infrastructures that shape perspective and thus inform reading.

My final example of a work of electronic literature that illuminates the infrastructural networks of human and nonhuman actors involved in electronic reading is a very different type of literary experience. Peruvian poet-engineer José Aburto produces electric installation art that challenges expectations of reading, let alone electronic reading. "When materials that support texts change, the contents have to change," Aburto claims.¹⁷ His installations pursue this dictum by exploring and exploiting how changes to the material infrastructures of text in digital literature change the appearance of poetry and approaches to reading it. Aburto produces installations of hybrid electronic sonic-textual poetry that operate through molecular movement and physical vibrations. These works harness and make visible the natural media forces involved in electronic reading. Because they represent a different type of electronic literature and reading experience from my previous examples, they warrant a different type and tone of description.

I first encountered Aburto's sensorial sonic poetry at the 2016 Electronic Literature Organization (ELO) conference in Vancouver. The installation was titled "Matters: Electromagnetic Poems," and it was like nothing I had ever seen... or felt. I walked toward the large tabletop box wrapped in a smooth, burlap-like fabric.

¹⁷ José Aburto, "MATTERS, Electromagnetic Poems," Electronic Literature as a Model of Creativity and Innovation in Practice (ELMCIP) Database (2016).

Its top faced upwards and was printed with poetry—lines of Spanish text, center-aligned in Courier font, and printed in a traditional stanza arrangement with certain words larger and bolder than others. Nothing out of the ordinary yet. I walked closer so as to be able to carefully read the text, and I wondered where to find the “electronic” part of this poetry exhibit. The reading surface contained no screens projecting text and no apparent means of interacting with the interface. And then I saw it.

A little grey blob (or blot, as the poet calls it) moved slowly around the reading surface. Comprised of tiny iron fillings, the blot looked like a little grey mouse. The title of the work, “Blot Alive” (2016), describes the piece: an inanimate object comes to life, animated by electricity to move and also, it seems, to read. (See Figure 28.3.) Manipulated by magnets, the blot moves across the page in line with the text printed on it. Traveling around the poem, it obscures some words while exposing others. Its metallic body often adds a curlicue to the printed text, as if becoming a prosthesis to the poetry. Its presence performs the conceit of art coming to life. When I walked up to the installation, the blot was already moving. I watched this display of electric animation and followed the blot’s movements, reading along with it. This work of literature does not need the human to enact and enliven it. Its electronic performance animates the inanimate object (the blot) to perform an act of reading and thus prompts the human reader witnessing this performance to consider what reading means. “Blot Alive” demonstrates how nonhuman actors participate in electronic reading. It does so by illuminating the actors involved in providing material support for human reading—the minerals, magnets, and networked infrastructure—but also by transforming the experiential activity itself. The presence and movement of the little blot defamiliarizes the embodied practice of reading, while the text it traverses promotes critical attention to this experience.

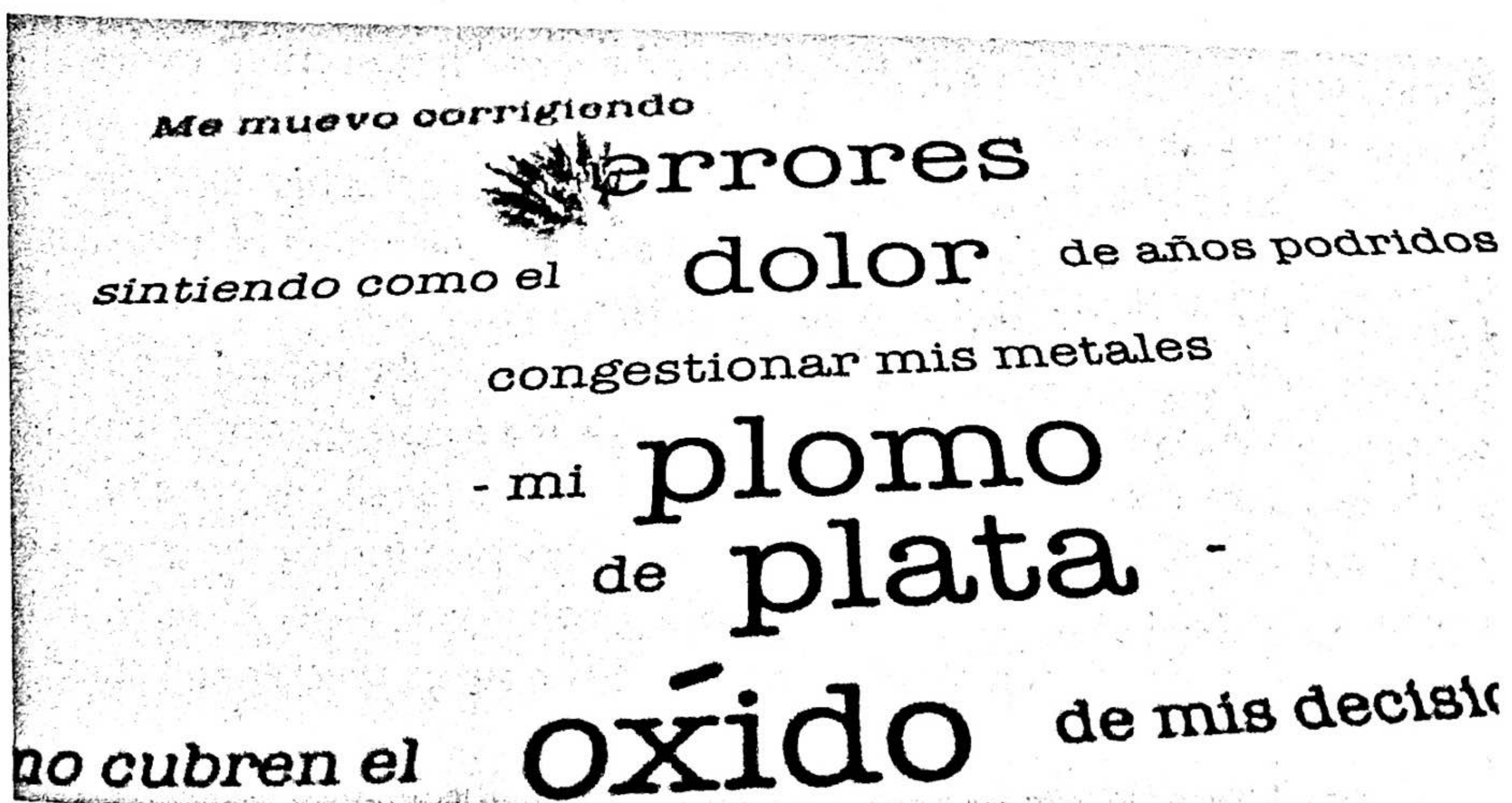


Figure 28.3 José Aburto, “Blot Alive” (2016). With permission by the artist.

The text of the poem in “Blot Alive” begins with “I.” The first-person perspective, along with the movement of the metallic blot across the poetic text, identifies the blot as bot—agent and actor, the “I” in the poem:

Me muevo corrigiendo
 terrores
 sintiendo como el dolor de años podridos
 congestionar mis metales
 -mi plomo
 de plata-
 como cubren el oxido de mis decisiones

--

I move correcting
 terrors
 feeling how the pain of years rotted
 congest my metals
 -my lead
 of silver-
 how they cover the rust of my decisions¹⁸

Metal is the central component and medium of electronic reading. It provides the physical hardware through which electronic voltage passes and the material frame for electronic reading interfaces. Aburto’s poem illuminates and animates the role of metal (“my lead/ of silver”), which must be extracted from the earth and “corrected” into shape before it can be used for purposes of electronic reading. This metal must also be treated so as to be saved from inevitable “rust,” both of chemical oxidation and of planned technological obsolescence (the latter form of rust inevitably coming first in our digital, upgrade culture).

“Blot Alive” focuses attention on natural media, metal in particular, in ways that demonstrate how inanimate objects interact or, in physicist and philosopher Karen Barad’s terminology, “intra-act.” Barad coins the term “intra-action” to describe how, at the level of quantum physics, the relationships between entities are always entangled: “in contrast to the usual ‘interaction,’ which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action.”¹⁹ Aburto’s work makes visible and aesthetic the natural infrastructures and material intra-actions that power the blot and enable electronic reading.

Aburto’s other work in the ELO conference exhibition, the sibling piece to “Blot Alive,” was titled “Paper Alive” (2016). This work takes even further the concept of nonhuman cognizers as co-readers in electronic reading. For “Paper Alive,” Aburto wrapped with paper the top of a large bookshelf-size stereo speaker and stood it

¹⁸ This translation, which does not appear in the work, is by Kaitlin Sweeney.

¹⁹ Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007), 33.



Figure 28.4 José Aburto, “Paper Alive” (2016). With permission by the artist.

upright on the ground. He inscribed the top of the paper-covered surface with large circles of poetry. In the center of these poetry circles, he placed a pale cream-colored and viscous non-Newtonian fluid. The fluid responds to the vibration of the stereo, and the stereo, in turn, vibrates in response to the proximity of a human viewer/reader. When a reader approaches the stereo speaker, her physical movement sets off a feedback loop of interactions: the liquid in the center of the poetry circle vibrates, shakes, bubbles, and even spurts vertically as if dancing in response to the human’s approach. (See Figure 28.4.) When the reader steps away from the installation, the liquid ceases its dance. The text remains the same regardless of the reader’s position, but “Paper Alive” animates the reading surface in ways that promote consideration about what constitutes reading and who (or what) is doing it.

In both of Aburto’s works, poems are inscribed on page-like surfaces and their textual content remains unchanged. The works employ a network of electromagnetism to charge the movement of a nonconscious co-reader, a metallic blot and a liquid dancer, and also to stimulate embodied reading experiences for the human reader: she feels the physical vibrations from the stereo in “Paper Alive” and experiences the slow ticking of time as the blot inches along in “Blot Alive.” Aburto’s

poetry installations register how electronic reading is embodied and distributed across a network of actors and forces, both natural and man-made.

* * *

The works of electronic literature examined in this chapter demonstrate how electronic reading is not solely about screens, hyperlinks, and digital code. Electronic reading is transmedial, embodied, and part of everyday experience. Indeed, the qualifier “electronic” might just be superfluous or outdated, for *all* reading is now informed by digital technologies, practices, and poetics. In our post-digital moment, in which “the digital expression holds less fascination,” we see a change in electronic literature.²⁰ As my case studies demonstrate, contemporary electronic literature moves away from modes of distinctly “digital expression,” screens and interactivity, to transmedial networks that incorporate older media (e.g., the book) and natural media (e.g., electromagnetic systems). The result: electronic reading becomes *just* reading. However, as this volume explores, *just* reading is never so simple.

FURTHER READING

- Carpenter, J. R. *The Gathering Cloud*. Website. 2017 (<https://luckysoap.com/thegathering-cloud/index.html>).
- Carpenter, J. R. *The Gathering Cloud*. Axminster: Uniformbooks, 2017.
- Chun, Wendy Hui Kyong. *Updating to Remain the Same: Habitual New Media*. Cambridge, MA: MIT Press, 2016.
- Emerson, Lori. *Reading Writing Interfaces: From the Digital to the Bookbound*. Minneapolis, MN: University of Minnesota Press, 2014.
- Galloway, Alexander. *Protocol: How Control Exists After Decentralization*. Cambridge, MA: MIT Press, 2004.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press, 1999.
- Hayles, N. Katherine. *Unthought: The Power of the Cognitive Nonconscious*. Chicago: University of Chicago Press, 2017.
- Hayles, N. Katherine, and Jessica Pressman, eds. *Comparative Textual Media: Transforming the Humanities in the Postprint Era*. Minneapolis, MN: University of Minnesota Press, 2013.
- Jagoda, Patrick. *Network Aesthetics*. Chicago: University of Chicago Press, 2016.
- Kittler, Friedrich A. “There is No Software.” *CTheory.net* (October 18, 1995) (<http://www.ctheory.net/articles.aspx?id=74>).
- Mak, Bonnie. *How the Page Matters*. Toronto: University of Toronto Press, 2011.
- Parikka, Jussi. *A Geology of Media*. Minneapolis, MN: University of Minnesota Press, 2015.

²⁰ Christian Ulrik Andersen and Søren Pold, “Manifesto for a Post-Digital Interface Criticism” (January 10, 2014) (<http://mediacommons.org/tne/pieces/manifesto-post-digital-interface-criticism>). On “post-digital,” see also Florian Cramer, “Post-Digital Writing,” *electronic book review* (December 12, 2012) (<https://electronicbookreview.com/essay/post-digital-writing/>).

- Parks, Lisa. "‘Stuff You Can Kick’: Toward a Theory of Media Infrastructure." *Between Humanities and the Digital*, ed. Patrik Svensson and David Theo Goldberg. Cambridge, MA: MIT Press, 2015, 355–73.
- Parks, Lisa, and Nicole Starosielski, eds. *Signal Traffic: Critical Studies of Media Infrastructures*. Urbana: University of Illinois Press, 2015.
- Peters, John Durham. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. Chicago: University of Chicago Press, 2015.
- Plant, Sadie. *Zeros and Ones: Digital Women and the New Technoculture*. New York: Doubleday, 1997.
- Reed, Aaron, and Jacob Garbe. *The Ice-Bound Concordance*. App. 2016.
- Reed, Aaron, and Jacob Garbe. *The Ice-Bound Compendium*. Simulacrum Liberation Press, 2016.
- Starosielski, Nicole. *The Undersea Network*. Durham, NC: Duke University Press, 2015.

- Parks, Lisa. "‘Stuff You Can Kick’: Toward a Theory of Media Infrastructure." *Between Humanities and the Digital*, ed. Patrik Svensson and David Theo Goldberg. Cambridge, MA: MIT Press, 2015, 355–73.
- Parks, Lisa, and Nicole Starosielski, eds. *Signal Traffic: Critical Studies of Media Infrastructures*. Urbana: University of Illinois Press, 2015.
- Peters, John Durham. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. Chicago: University of Chicago Press, 2015.
- Plant, Sadie. *Zeros and Ones: Digital Women and the New Technoculture*. New York: Doubleday, 1997.
- Reed, Aaron, and Jacob Garbe. *The Ice-Bound Concordance*. App. 2016.
- Reed, Aaron, and Jacob Garbe. *The Ice-Bound Compendium*. Simulacrum Liberation Press, 2016.
- Starosielski, Nicole. *The Undersea Network*. Durham, NC: Duke University Press, 2015.