Losing Your Internet: Narratives of Decline among LongTime Users

KEVIN DRISCOLL

Annette Markham's Life Online (1998) documents an historical conjuncture in which the visibility of the Internet in popular culture outpaced hands-on access for most Americans. At the time that Markham was completing her fieldwork, approximately one-third of Americans reported using the Internet, most of whom were white, wealthy, highly educated, and male (Rainie, 2017). Yet, for half a decade, news and entertainment media had been saturated with stories of the Internet as a technical marvel, economic opportunity, social revolution, and moral threat (Schulte, 2013; Streeter, 2017). Every few months, the cover of Time magazine added a new dimension to the Internet story, from the "info highway" in 1993, to the "cyberporn" panic in 1995, dot-com "golden geeks" in 1996, and the "death of privacy" in 1997. Beyond these sensational headlines, friends and coworkers gossiped about relationships and romances forming online. Early users of the Internet were similarly enthusiastic and many shared a sense that computer-mediated communication might transform the social world. Even Markham described her initial observations of the internet and its growing user population as "astounding" and "extraordinary" (1998, pp. 16–17). At the turn of the century, the Internet seemed charged with unknown possibility.

Twenty years later, the structure of feeling that characterized early encounters with the Internet has changed. For millions of people, computer-mediated communication is now an unremarkable aspect of everyday life. In comparison to the fantastical multi-user environments that Markham described in 1998, typical uses of the internet in 2017 seem quite dull: reading the news, solving a crossword

puzzle, shopping for household goods, or arranging meetings with coworkers. Furthermore, in popular media, the Internet seems to oscillate unpredictably from the mundane to the menacing. The same platform used to file income taxes is said to facilitate waves of terrorism, harassment, fraud, and propaganda. Returning to the *Time* archive, we find alarming cover stories about the "secret web where drugs, porn and murder hide online" in 2013 and a failed e-government initiative described as a "nightmare" in 2014. What is striking about these recent headlines, however, is how infrequently the Internet itself is an object of scrutiny. Unlike stories from the 1990s, the presence of the Internet in our homes is now taken-forgranted and the panic lies in its misuse or abuse.

Long-time users, the small group who have enjoyed continuous internet access since 1997, are in a unique position to reflect on the transformation of the Internet from ballyhoo to banality. While any American adult alive in the early 1990s would have been exposed to ideas and arguments about the Internet, only long-time users can compare these narratives with first-hand experience. Long-time users bore witness to several translations in the cultural position of the Internet: from voluntary to compulsory, peripheral to central, marvelous to mundane. For the long-time user, the interleaving of computer-mediated communication and human society is neither taken-for-granted nor natural. And while these transitions unfolded over the course of many years, long-time users are only occasionally prompted to reflect on the changes they have experienced. It is in these moments of self-reflection that we find clues regarding the changing meaning of metaphors over the past two decades.

This chapter focuses on discourses of nostalgia, loss, and decline among longtime users for whom the Internet of the 1990s became, in Markham's analysis, "a way of being" (2003). Almost invariably, long-time users remember the early Internet as a kind of golden age, an electronic Eden in which anyone with a modem was free to play and experiment in relative safety. As one characteristic comment on an historical blog post reads, "[This] brings back some fond memories. [Back then,] the worst thing that would happen was that call waiting would knock me offline!" Undoubtedly, this nostalgia reflects an authentic longing for the excitement one felt standing on the threshold of cyberspace but it also obscures the substantial social barriers and material costs that prevented most people from sharing in that experience. To understand what is at stake in this tension between the nostalgia of long-time users and the on-going expansion and domestication of Internet access, this chapter examines both the contemporary accounts of Internet use captured by Markham in Life Online and the retrospective stories told by high-profile figures in the recent past. This comparison reveals the rhetorical power of narratives of decline to shape debates about Internet policy, technology, and culture. As we consider what it means to live online for another two decades, we must critically consider the stories that we tell about Internets of the past.

LOST WAYS OF BEING ON THE INTERNET

The Internet of today is cheaper, faster and more widely accessible than at any point in the past. But these developments have been achieved through a process of continuous change. The Internet is made and re-made as various components are adopted and abandoned, incorporated and disconnected. As the Internet evolves, long-time users mourn the loss of particular programs, practices, services, or interfaces. Favorite sites shut down, loose network connections fade away, daily habits are disrupted. As the technical systems that make up the Internet change, they unsettle the Internet as a way of being.

The consequences of technological change for long-time Internet users are clearest in the transition from desktop terminals to mobile devices. In the mid-1990s, a majority of online social activity unfolded in text-only environments. Even as faster modems, graphical operating systems, and the Web grew more common, the Net of the 1990s was composed of seemingly endless streams of text; row upon row of letters, numbers, and punctuation. In the decades since, textonly applications such as IRC were displaced by interactive video displays that interleave images and text, respond to taps, gestures, swipes, and voices rather than instructions typed out on a keyboard. Although these new interfaces contributed to the growing accessibility of the internet, the transition was not without costs for users accustomed to navigating by text. For several participants in Markham's Life Online fieldwork, the text-only interfaces of the 1990s afforded ways of being not available elsewhere in their lives. In the words of one interlocutor, text-only environments like MUDs and MOOs gave rise to "a much more complex life of relationships ... centered around being a part of a meaningful community" (p. 176). For some long-time users, the Internet was a way of being because the Internet was made of text.

Text-oriented interfaces also shaped the embodied experiences of users in the 1990s. Markham's interlocutors reported sitting at desks, day and night, in computer labs, offices, and bedrooms. Their hands played across a keyboard or moved a mouse, and their gazes focused on a screen fixed in place. Likewise, the textual environments they inhabited—MOOs, chatrooms, listservs, and newsgroups maintained a material distinction between being online and offline. To enter one of these spaces required being in a particular place, sitting in front of a machine, and entering the proper sequence of commands to open a network connection. Although the predominance of text seemed to offer an "escape" from the body for some users, Markham found that the bodies of her interviewees stubbornly resisted abandonment, a phenomenon that Megan Boler later described as a "new digital Cartesianism" (2007). Embodiment persists, reflected Markham, even when bodies were rendered, enacted, and performed through text alone (1998, p. 209).

For those users who inhabited the Internet as a way of being in 1997, the Internet was, implicitly, a society of written texts. Though text-only interfaces and text-oriented applications may not have obliterated the flesh, they nevertheless privileged written communication over all other forms of social interaction. As mobile broadband and constant connectivity blurred the boundary between online and offline in the late 2000s, however, written communication lost its status as the principal form of computer-mediated communication. For some of the people profiled in *Life Online*, this transition must have been profoundly unsettling. Consider Sherie, Markham's obtuse interlocutor who insisted that life online is "very textual. very discursive and rhetorical. also poetic" (1998, p. 207). Could a user like Sherie, so committed to text, experience the always-on, broadband internet of 2017 as a way of being?

The growing, changing internet of the 2000s gave rise to new forms of creative expression and provided space for a much broader range of voices, but it also foreclosed the dreams of some long-time users whose way of being depended on the primacy of text. For these users, a text-only environment seemed to offer a form communication free from the prejudices they experienced in embodied environments. Text-mode interaction granted these users a special kind of control, evidenced in their recurring references to the "delete" key, a synecdoche for the entire apparatus of the text-only internet. The most optimistic among them imagined that the spread of internet access—that is, text-mode internet access—would bring about a radical egalitarian society, a "civilization of the Mind" in the words of EFF co-founder John Perry Barlow (1996). But it turned out that the diffusion of access was not enough. As the internet became another medium for entertainment and office work, the paradigm shifting dream of the late 1990s began to sound naïve and out of touch. What could be so revolutionary about baby pictures, cute dogs, celebrity news, and TV dramas? For the cyber-romantic of the 1990s, the lived reality of ubiquitous internet access may be a bit of a letdown.

NOSTALGIA FOR INTERNETS OF THE PAST

Nostalgia shapes the memories of long-time users who have lost the Internet as a way of being. To paraphrase a characteristic recollection about the experience of exploring the online world of the 1990s: "Those were such great days, or should I say long nights." But there is more at stake in the nostalgia of long-time users than fond memories. The stories that long-time users share about the diffusion and domestication of the Internet reflect underlying beliefs about how the Internet ought to be. In the hands of people with power and influence, narratives that glorify the Internet of the past will have material consequences for people who rely on the Internet of the present for personal expression and community

support. Excessively sentimental attachment to the early Internet overlooks the most important change in the past two decades: the mutual visibility and increased access for people of different racial and gender identities, socio-economic classes, ages and abilities, geographic locations, and linguistic groups. Paradoxically, of course, the utopic structure of feeling of the 1990s motivated the work that opened the Internet to others.

Recently, two Silicon Valley entrepreneurs, each a long-time user, marshalled stories about the Internet's past to advocate for a particular vision of its future. While each articulated a narrative of decline, they differed in their diagnoses of the problem. One offered a hopeful account of paths-not-taken while the other blamed Internet newcomers and social media speculators for shortsightedness and a lack of ambition. Comparing the uses of history in these two rhetorical moments underscores the importance of memory in the experience of the Internet as a way of being.

In late 2012, long-time blogger Anil Dash published "The Web We Lost," lamenting a decline in "core values" that were once "fundamental to the web world" (2012a). Dash elaborated these values through a chronological series of examples of the design of social technologies and the collective behavior of industrial organizations. The blog post was widely read—Dash lists it among his personal favorite and most popular posts (2012b)—and, shortly after, Dash gave a talk on the topic at the Berkman Center for Internet and Society at Harvard University (2013). In the spoken version, titled "How We Lost the Web," Dash marshalled a narrative of decline to critique the enclosure of the Web by mutually incompatible social media systems, a process that Anne Helmond later characterized as "platformization" (2015).

In Dash's narrative, the "early social web" ran from 1999 to 2005, the period immediately following the conclusion of Markham's fieldwork. First, he acknowledged the scarce documentation of the period—"younger folks may not even know how the web used to be"—and, second, he established his credibility as a first-hand observer, "I got to witness it." In Dash's recollection, blogging was the preeminent activity of the period, a lingering effect of the privileged status of written communication during the 1990s. For Dash's crew of early bloggers, the internet was a way of being: "[blogging] distinguished you and who you were." This shared identity gave rise to a shared culture and a shared set of values involving openness, privacy, control, and creativity. In Dash's narrative of decline, the platform that dominates today's Internet offers no similar shared identity to its users: "Nobody's a 'Facebooker."

For Dash, the purpose of sharing this narrative of decline was to inspire an alternative vision of the future in his readers. His personal recollections of an earlier Internet suggest that the platformization of the internet was not pre-ordained, nor universally welcome. He describes the transition from self-hosted blogs to

centralized platforms as happening "really, really quickly with almost no public discourse about the implications" (2013). In setting up the present conditions as aberrant, he offers a potential remedy for the future: "The reality is public policy can be a really, really effective part of addressing the problems in the technology industry" (2013). In effect, Dash pitched a "battle" between the past and the present, characterizing the decline as temporary and appealing to readers to join his pursuit toward a different future.

In contrast to Dash's focus on values, a manifesto titled "What happened to the future?" circulated by the venture capital firm Founders Fund in 2011, told a story of the Internet's past characterized by failures of technological achievement (Gibney, 2011). (The manifesto was written by Founders Fund partner Bruce Gibney but authorship is often misattributed to his fellow partner Peter Thiel.) At the time of the essay's publication, journalists covering the tech industry were especially likely to quote a sentence that did not actually appear in the body of Gibney's essay: "We wanted flying cars, instead we got 140 characters" (2011). Coming from a firm closely associated with Facebook, industry insiders interpreted this quip as an attack on competitors and it led to a staged debate between Thiel and Twitter investor, Marc Andreesen (Horowitz, 2013). To the general public, however, the sentence neatly captured a feeling of bitter disappointment.

Reactionary narratives of decline mistakenly blame the loss of the Internet as a way of being on the growth in the size and diversity of the online population. In the 2013 debate with Andreesen, Thiel elaborated his dismissal of Twitter's "140 characters" by targeting the players of casual games and users of social media:

You have as much computing power in your iPhone as was available at the time of the Apollo missions. But what [is it] being used for [?] It's being used to throw angry birds at pigs[;] it's being used to send pictures of your cat to people halfway around the world; it's being used to check in as the virtual mayor of a virtual nowhere while you're riding a subway from the nineteenth century. (Horowitz, 2013)

These examples reflect Thiel's evaluation of certain Internet applications as low value and undeserving of "computing power." By this logic, the decline of the Internet was caused by an overindulgence in technologies of pleasure, entertainment, community, and kinship.

The resentment evident in narratives such as Thiel's have real consequences for people who have come to rely on the internet. Men like Gibney and Thiel invest financially as well as emotionally in the future of the internet. Their personal feelings, preferences and priorities shape the terms by which they deem new technologies worthy of support and enable them to flourish. For this milieu, the internet of the 1990s provided more than a way of being. Thanks to the irrational exuberance of the dot-com bubble, a mastery of arcane computer technology translated into political power and economic capital. As beneficiaries of that brief moment, industry elites are uniquely positioned among long-time users to act on their narratives of decline.

Weaponized by capital and privilege, narratives of decline can empower dangerously regressive visions of the future. The embittered dotcommer—no longer part of a technical vanguard, bored by an early retirement, alienated by an internet population that better represents the full range of humanity—wants to recapture the openness and optimism they felt when the early internet was their way of being. When this nostalgia gives way to frustration and anger, long-time users may be drawn to arguments like Thiel's, convinced that the decline of the Internet is the fault of new users, new practices, new interfaces, and new techniques. Ironically, in grieving over the sense of novelty they felt on the Internet of the past, they risk missing out on what is exciting and new about the Internet of the present.

WAYS OF BEING ON INTERNETS OF THE FUTURE

At the conclusion of her fieldwork, Markham noticed that her own experience of life online had begun to settle down into the realm of familiar. After three years exploring the Net, she was surprised to touch the boundaries of a system that had once seemed so limitless. "I am amazed that I don't find more weird stuff and more exotic transmutations of the body and mind online" (p. 222). In this moment, Markham anticipated the challenge facing us today: to imagine a future for an unremarkable internet. In a final interview, interlocutor Terri Senft offered a concise portrait of a mundane way of being online: "Sometimes blown away. Sometimes bored. Sometimes angry. Often, I have to pee" (p. 223).

Every vision of the internet's future contains a vision of its decline. Since the publication of Life Online, the Internet has become the infrastructure of everyday life, suffused into the most quotidian social exchanges and financial transactions. More people in more places have more of their lives mediated by Internet communications. The predominance of young, white, English-speaking men from Europe and the U.S. with money and education has steadily waned. Yet, over the same period, as the Internet shed its exclusivity, it also lost some of its novelty. The mere act of getting online and interacting with other people through a screen no longer inspires the same popular fascination or moral concern that it once did. Long-time users who experienced the frisson of technological mastery or the industrialized hype of the Internet of 1997 may feel some melancholy at the Internet's transformation. But to carelessly remember that older Internet as a virtual Eden is to indict the millions of users who were structurally excluded from participation. The society of the Mind was a dream of computer-mediated colorblindness; an indifference to difference.

32 | KEVIN DRISCOLL

Facing down powerful narratives of decline, long-time users committed to justice must recover alternative memories of the internet's past. One small step in this direction is to narrate the past two decades in terms of a dramatic expansion in the size and diversity of the internet-using population. For many of these 21st century users, the Internet itself is a taken for granted feature of their media environment. Indeed, this mundane Internet may not inspire the same outrageous dreams as the Net of the 1990s but its infrastructural futures are not necessarily any less radical. We have language for the internet at its most mundane—an overgrown garden, or a ship in need of repair. But those who struggle for justice must also capture the internet at its most transcendent. How can the Internet of today—ubiquitous and mundane—inspire new senses of wonder, feelings of possibility, and sparkling visions of better tomorrows?

References

- Abidin, C. (2013). Cyber-BFFs: Assessing women's 'perceived interconnectedness' in Singapore's commercial lifestyle blog industry. *Global Media Journal Australian Edition*, 7(1). Retrieved from http://www.hca.westernsydney.edu.au/gmjau/?p=217
- Abidin, C. (2016). Sorry not sorry: Influencers, shamelebrity, and para-apologetic transgressions. Selected papers of Internet research 17: The 17th Annual Meeting of the Association of Internet Researchers. Retrieved from https://spir.aoir.org/index.php/spir/article/view/1301/pdf
- Abramov, R. N. (2017a). Sovetskie tehnokraticheskie mifologii kak forma «teorii upushhennogo shansa»: na primere istorii kibernetiki v SSSR [Soviet technocratic mythologies as a form of the lost-chance theory: The example of the history of cybernetics in the USSR]. *Sociologija Nauki I Tehnologij*, 2, 61–78.
- Abramov, R. N. (2017b). Sovetskaja inzhenerno-tehnicheskaja intelligencija 1960–80-h gg.: v poiske granic kollektivnogo soznanija [The Soviet engineering and technical intelligentsia of the 1960–80s: In a search of the boundaries of collective consciousness]. *Vestnik Instituta Sociologii*, 20, 114–130.
- Adegoju, A., & Oyebode, O. (2015). Humour as discursive practice in Nigeria's 2015 presidential election online campaign discourse. *Discourse Studies*, 17(6), 643–662.
- Al Zidjaly, N. (2017). Memes as reasonably hostile laments: A discourse analysis of political dissent in Oman. Discourse & Society. https://doi.org/10.1177/0957926517721083
- Alcoff, L. (2006). Visible identities: Race, gender, and the self. New York, NY: Oxford University Press.
- Amatriain, X. (2013). Mining large streams of user data for personalized recommendations. ACM SIGKDD Explorations Newsletter, 14(2), 37–48. doi:10.1145/2481244.2481250
- Anderson, B. (1991). Imagined communities: Reflections on the origin and spread of nationalism. London, UK: Verso.

- Antliff, A. (2012). Anarchist pedagogies: Collective actions, theories, and critical reflections on education. PM Press.
- Appadurai, A. (1996). Modernity at large: Cultural dimensions of globalization. Minneapolis: University of Minnesota Press.
- Arkhipov, V. (n.d.). The Other Things Museum [Online project and a series of exhibitions]. Retrieved from URL http://otherthingsmuseum.com
- Arnold, D., & Bongiovi, J. R. (2011). Literature Review, Draft. Precarious, informalizing and casualizing labor: Concepts and definitions [PDF file]. A paper prepared for the workshop Precarious Work in Asia, Chung-Ang University, Seoul, South Korea, July 19–20, 2011 University of North Carolina at Chapel Hill. Retrieved from http://sawyerseminar.web.unc.edu/files/2011/02/Precarious-labor_Literature-Review_Arnold-and-Bongiovi.pdf
- Avdikos, V., & Kalogeresis, A. (2016). Socio-economic profile and working conditions of freelancers in co-working spaces and work collectives: Evidence from the design sector in Greece. Area. https://doi.org/10.1111/area.12279
- Badger, M. (2004). Visual blogs. In L. Gurak, S. Antonijevic, L. Johnson, C. Ratliff, & J. Reyman (Eds.), into the blogosphere: Rhetoric, community, and culture of weblogs. University of Minnesota. Retrieved from: http://blog.lib.umn.edu/blogosphere/visual_blogs.html
- Baker, A. J. (2014). You get what you need: Stories of fans of the rolling stones. McLean, VA: Miniver Press.
- Bakhtin, M. M. (1935 [1981]). Discourse in the novel. In M. Holquist (Ed.), The dialogic imagination: Four essays (pp. 259-422). Austin: University of Texas Press.
- Bakhtin, M. M. (1970). Speech genres and other late essays (M. Holquist & C. Emerson, Eds.). Austin: University of Texas Press.
- Bakhtin, M. M. (1981). Dialogic imagination: Four essays. Austin: University of Texas Press.
- Banks, I. (1994). Freesum endjinn. London, UK: Orbit Publications
- Barlow, J. P. (1996, February 8). A declaration of the Independence of cyberspace. Retrieved from https:// projects.eff.org/~barlow/Declaration-Final.html
- Barthes, R. (1977). Image, music, text. New York, NY: Hill and Wang.
- Barthes, R. (1981). Camera Lucida. New York, NY: Hill and Wang.
- Bateson, G. (1972). Steps to an ecology of mind: Collected essays in anthropology, psychiatry, evolution, and epistemology. Chicago, IL: University of Chicago Press.
- Baym, N. K. (2000). Tune in, log on: Soaps, fandom and online community. Thousand Oaks, CA: Sage.
- Baym, N. K. (2015). Personal connections in the digital age (2nd ed.). Cambridge: Polity Press.
- Be a New Orleanian. Wherever you are. Dirty Coast Press. (n.d.). Retrieved from https://dirtycoast. com/products/be-a-new-orleanian-wherever-you-are-navy-1090
- Bechmann, A., & Lomborg, S. (2014). The ubiquitous Internet, user and industry perspectives. Routledge: New York.
- Bell, J., Bailey, L., & Kennedy, D. (2015). 'We do it to keep him alive': Bereaved individuals' experiences of online suicide memorials and continuing bonds. Mortality (Abingdon, UK), 20(4), 375-389. doi:10.1080/13576275.2015.1083693
- Berger, J., 1972. Ways of seeing. London, UK: BBC and Penguin Books.
- Bezemer, J. (2012). What is multimodality? [webpage]. UCL Institute of Education. Retrieved from https://mode.ioe.ac.uk/2012/02/16/what-is-multimodality/
- Blanco, M. D. P., & Peeren, E. (2013). The ghost in the machine: Spectral media. In M. D. P. Blanco & E. Peeren (Eds.), The spectralities reader: Ghosts and haunting in contemporary cultural theory (pp. 199-206). Bloomsbury.

- Boellstorff, T. (2008). Coming of age in second life: An anthropologist explores the virtually human. Princeton, NJ: Princeton University Press.
- Boler, M. (2007). Hypes, hopes and actualities: New digital Cartesianism and bodies in cyberspace. New Media & Society, 9(1), 139–168. https://doi.org/10.1177/1461444807067586
- Boomen, M. van den (2014). Transcoding the digital: How metaphors matter in new Media. Amsterdam: Institute of Network Cultures.
- Bourdieu, Pierre. 1990 [1965]. Photography: A middle-brow art. Cambridge: Polity Press.
- boyd, d. (2005, June 22-26). Broken metaphors: Blogging as liminal practice. Paper presented at Media Ecology Association conference (MEA 2005), New York, NY.
- boyd, d. (2011). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), Networked self: Identity, community, and culture on social network sites (pp. 39-58).
- boyd, d. (2014). It's complicated: The social lives of networked teens. New Haven, CT: Yale University Press.
- boyd, d., Golder, S., & Lotan, G. (2010). Tweet, tweet, retweet: Conversational aspects of retweeting on Twitter. In Proceedings of HICSS-42, persistent conversation track. Kauai, HI: IEEE Computer Society. Retrieved from http://www.danah.org/papers/TweetTweetRetweet.pdf
- Braybrooke, K., & Jordan, T. (2017). Genealogy, culture and technomyth. Digital Culture & Society, 3(1), 25–46. doi:10.14361/dcs-2017-0103
- Browne, K. (2006). 'A right geezer-bird' (man-woman): The sites and sights of 'female' embodiment. ACME: An International E-Journal for Critical Geographies, 5(2), 121–143.
- Browne, K., Lim, J., & Brown, G. (Eds.). (2007). Geographies of sexualities: Theory, practices and politics. Aldershot, Hampshire: Ashgate Publishing.
- Bruns, A.(2019). Are filter bubbles real? Polity.
- Brunvand, J. H. (1981). The vanishing hitchhiker: Urban legends and their meanings. New York, NY: W.W. Norton.
- Bucher, T., & Helmond, A. (2017). The affordances of social media platforms. In J. Burgess, A. Marwick, & T. Poell (Eds.), The Sage handbook of social media (pp. 223-253). London, UK: Sage.
- Burgess, J. (2006). Hearing ordinary voices: Cultural studies, vernacular creativity and digital storytelling. Continuum: Journal of Media & Cultural Studies, 20(2), 201–214.
- Burrell, J. (2012). Invisible users: Youth in the Internet cafés of urban Ghana. Cambridge, MA: MIT Press. burrough, X. (2016). A vigil for some bodies. http://missconceptions.net/vigil/
- Butler, J. P. (1990). Gender trouble: Feminism and the subversion of identity. London, UK: Routledge.
- Cadwalladr, C. (2016, December 4). Google, democracy and the truth about internet search. The Guardian. Retrieved from https://www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook
- Carmichael, K., & Dajko, N. (2016). Ain't Dere no more: New Orleans language and local nostalgia in Vic & Nat'ly comics. Journal of Linguistic Anthropology, 26, 234-258.
- Carroll, N. (2001). Modernity and the plasticity of perception. Journal of Aesthetics and Art Criticism, 59(1), 11–17
- Chalfen, R. (1987). Snapshot versions of life. Bowling Green, OH: Bowling Green State University Popular Press.
- Charmez, K. (2006). Constructing grounded theory. London, UK: Sage.
- Chayko, M. (2017). Superconnected: The Internet, digital Media, and techno-social life. Thousand Oaks, CA: Sage.

- Cheney-Lippold, J. (2017). We are data: Algorithms and the making of our digital selves. New York: New York University.
- Christensen, D. R., & Sandvik, K. (2015). Death ends a life not a relationship: timework and ritualizations at Mindet.dk. New Review of Hypermedia and Multimedia, 21(1-2), 57-71. doi:10.108 0/13614568.2014.983561
- Chun, W. H. K. (2006). Control and freedom: Power and paranoia in the age of fiber optics. Cambridge, MA: MIT Press.
- Collister, S. (2014). Abstract hacktivism as a model for postanarchist organizing. Ephemera, 14(4), 765-779.
- Courtois, A., & O'Keefe, T. (2015). Precarity in the ivory cage: Neoliberalism and causalisation of work in the Irish higher education sector. Journal for Critical Education Policy Studies, 13(1), 43-
- Crawford, K., & Gillespie, T. (2016). What is a flag for? Social media reporting tools and the vocabulary of complaint. New Media & Society, 18(3), 410-428. 10.1177/1461444814543163
- Cresswell, T. (2006). On the move. London, UK: Routledge.
- Cresswell, T. (2014). Friction. In P. Adey, D. Bissell, K. Hannam, P. Merriman, & M. Sheller (Eds.), The Routledge handbook of mobilities (pp. 107–115). Oxon: Routledge.
- Dahlberg, L., & Siapera, E. (Eds.). (2007). Radical democracy and the Internet: Interrogating theory and practice. Springer.
- Dash, A. (2012a, December 13). The web we lost. Retrieved October 7, 2017, from http://anildash. com/2012/12/the-web-we-lost.html
- Dash, A. (2012b, December 18). Rebuilding the web we lost. Retrieved October 8, 2017, from http:// anildash.com/2012/12/rebuilding-the-web-we-lost.html
- Dash, A. (2013, April 24). How we lost the web. Retrieved October 7, 2017, from http://anildash. com/2013/04/harvard.html
- Dashkova, T. (2002). "Ideologija v licah. Formirovanie vizual'nogo kanona v sovetskih zhurnalah 1920-h-1930-h godov" [Ideology in faces. Formation of the visual canon in Soviet journals of the 1920s–1930s]. Kul'tura i vlast' v uslovijah kommunikacionnoj revoljucii XX veka. Pod red. K. Ajmermajhera, G. Bordjugova i I. Grabovskogo. Moskva: AIRO-XX.
- Dawkins, R. (1976). The selfish gene. Oxford: Oxford University Press.
- De Certeau, M. (1984). The practice of everyday life. Berkeley: University of California Press.
- Degot' E. (2000). Ot tovara k tovarischu. Logos (5-6). Retrieved from http://www.ruthenia.ru/logos/ number/2000_5_6/2000_5-6_04.htm
- Derrida, J. (1998). Archive fever: A Freudian impression. Chicago, IL: University of Chicago Press.
- Derrida, J., & Stiegler, B. (2002). Echographies of television. Filmed interviews. Cambridge: Polity Press.
- Deuze, M. (2011). Medial life. *Media, Culture & Society*, 33(1), 137–148.
- Deuze, M., Blank, P., & Speers, L. (2012). A life lived in media. Digital Humanities Quarterly, 6(1).
- Dibbell, J. (1998). My tiny life: Crime and passion in a virtual world. New York, NY: Holt.
- Doan, P. L. (2010). The tyranny of gendered spaces—Reflections from beyond the gender dichotomy. Gender, Place & Culture, 17(5), 635-654. doi:10.1080/0966369x.2010.503121
- Dodge, M., & Kitchin, R. (2000). Atlas of cyberspace. London, UK: Routledge.
- Douglas, M. (1966). Purity and danger: An analysis of the concepts of pollution and taboo. London, UK and New York, NY: Routledge.
- Dr. Seuss (1961). The sneetches and other stories. New York, NY: Random House.
- Druick, Z. (1995). The information superhighway, or the politics of a metaphor. Bad Subjects, 18. Retrieved from http://bad.eserver.org/issues/1995/18/druck.html

- Duguay, S. (2017). Identity modulation in networked publics: Queer women's participation and representation on Tinder, Instagram and Vine (PhD dissertation). Queensland University of Technology. Available online: https://eprints.qut.edu.au/111892/
- Dundes, A. (1987). Cracking jokes: Studies in sick humor cycles and stereotypes. Berkeley, CA: Ten Speed Press.
- Dzieza, J. (2014, August 20). A history of metaphors for the Internet. The Verge. Retrieved from https://www.theverge.com/2014/8/20/6046003/a-history-of-metaphors-for-the-internet
- Edsall, T. (2017, March 2). Democracy, disrupted. The New York Times. Retrieved from https://www. nytimes.com/2017/03/02/opinion/how-the-internet-threatens-democracy.html
- Ellis, C., Bochner, A. P. (2000): Autoethnography, personal narrative, and reflexivity: Researcher as subject. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 733-768). Thousand Oaks, CA: Sage.
- Evans, S. K., Pearce, K. E., Vitak, J., & Treem, J. W. (2017). Explicating affordances: A conceptual framework for understanding affordances in communication research. Journal of Computer-Mediated Communication, 22, 35-52.
- Farman, J. (2012). Mobile interface theory: Embodied space and locative media. New York, NY: Routledge. Faucher, K. X. (2014). Alienation and precarious contract academic staff in the age of neoliberalism. Confero, 2(1), 35–71.
- Feenberg, A. (1999). Questioning technology. London, UK and New York, NY: Sage.
- Felstead, A., Jewson, N., & Walters, S. (2005). Changing places of work. New York, NY: Palgrave Mac-
- Ferdinand, P. (2000). The Internet, democracy and democratization. *Democratization*, 7(1), 1–17.
- Ferguson, K. (2015). Everything is a Remix. Retrieved from https://vimeo.com/139094998
- Flecker, J., & Schönhauer, A. (2016). The production of 'placelessness': Digital service work in global value chains. In J. Flecker (Ed.), Space, place and global digital work. London, UK: Palgrave Macmillan. Retrieved from https://doi.org/10.1057/978-1-137-48087-3
- Folbre, N. (2013). The unregulated work of mechanical Turk. New York Times, March 18, 2003. Retrieved September 10, from https://economix.blogs.nytimes.com/2013/03/18/the-unregulated-work-of-mechanical-turk
- Foucault, M. (1984). Des espaces autres (conférence au Cercle d'études architecturales, 14 mars 1967). Architecture, Mouvement, Continuité, 5, 46-49.
- Founders Fund. (2011, August 9). Retrieved August 12, 2019, from http://web.archive.org/ web/20110809183001/http://www.foundersfund.com/
- Freelon, D. G. (2010). Analyzing online political discussion using three models of democratic communication. New Media & Society, 12(7), 1172-1190.
- Frishcmann, B. (2018). The misleading power of Internet metaphors. Scientific American. Retrieved https://blogs.scientificamerican.com/observations/the-misleading-power-of-internet-metaphors/
- Frosh, P. (2017, October 30). Vital signs: Screenshots, social media and existential delegation. Presentation at Precarious Media Life: Digital Existence II. Sigtuna Foundation.
- Fuller, M. (2005). Media ecologies: Materialist energies in Art and technoculture. Cambridge, MA: MIT Press.
- Gandini, A. (2016). The reputation economy [e-book]. Cambridge: Palgrave Macmillan.
- Garrett, L. E., Spreitzer, G. M., & Bacevice, P. A. (2017). Co-constructing a sense of community at work: The emergence of community in coworking spaces. Organization Studies. https://doi. org/10.1177/0170840616685354

- Gaver, W. (1996). Situating action II: Affordances for interaction: The social is material for design. Ecological Psychology, 8, 2.
- Gerasimova, E., & Chujkina, S. (2004). Obshhestvo remonta [Society of repair]. Neprikosnovennyj Zapas, 34(2).
- Gerbaudo, P. (2015). Populism 2.0: Social media activism, the generic Internet user and interactive direct democracy. In D. Trottier & C. Fuchs (Eds.), Social media, politics and the state: Protests, revolutions, riots, crime and policing in the age of Facebook, Twitter and YouTube (pp. 67–87). New York, NY and London, UK: Routledge.
- Gergen, K. J. (2009). Relational being: Beyond self and community. Oxford, UK: Oxford University Press.
- Gershon, I. (2010). Breaking up is hard to do: Media switching and media ideologies. Linguistic Anthropology, 20(2), 389-405. http://doi.org/10.1111/j.1548-1395.2010.01076.x.H
- Ghose, T. (2017, January 30). Hurricane season: Here's what to expect. LiveScience. Retrieved from http://www.livescience.com/57671-hurricane-season.html
- Gibney, B. (2011). What happened to the future? Retrieved from http://web.archive.org/ web/20170413234322/http://foundersfund.com/the-future/#
- Gibson, J. J. (1979). The ecological approach to visual perception (1st ed.). Mahwah, NJ: Erlbaum, Lawrence Associates.
- Gibson, W. (1984). Neuromancer. New York, NY: Ace.
- Gillespie, T. (2010). The politics of "platforms." New Media & Society, 12(3), 347–364. https://doi. org/10.1177/1461444809342738
- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. J. Boczkowski, K. A. Foot, L. A. Lievrouw, & I. Siles (Eds.), Media technologies: Essays on communication, materiality, and society. Cambridge, MA: MIT Press.
- Gillespie, T. (2017). The platform metaphor, revisited. Digital Society Blog. Retrieved August 30, from https://www.hiig.de/en/the-platform-metaphor-revisited/
- Goffman, E. (1956). The presentation of self in everyday life. Edinburgh: University of Edinburgh Social Sciences Research Centre.
- Goffman, E. (1963). Behavior in public places: Notes on the social organization of gatherings. New York, NY: Free Press of Glencoe.
- Goffman, E. (1974). Frame analysis. New York, NY: Harper Colophon Books.
- Graham, L. R. (1993). The ghost of the executed engineer: Technology and the fall of the Soviet Union (No. 87). Harvard University Press.
- Gregg, M., & Seigworth, G. J. (2010). The affect theory reader. Durham, NC: Duke University Press.
- Grier, A. (2005). When computers were human. Princeton, NJ: Princeton Press
- Grønning, A. (2018). Digitale samtaler. Frederiksberg: Samfundslitteratur.
- Grosz, E. (1995). Space, time and perversion: Essays on the politics of bodies. New York, NY: Taylor & Francis.
- Gunkel, D. J. (2016). Of remixology. Cambridge, MA: MIT Press.
- Haddon, L. (2006). The contribution of domestication research. The Information Society, 22, 195-204. Retrieved from https://www.hiig.de/en/sharing-from-ploughshares-to-file-sharing-and-be-
- Hakim-Fernández, N. (2017). An experimental autoethnography of mobile freelancing. Digital Culture and Society, 3(2). https://doi.org/10.14361/dcs-2017-0215
- Hamilton, C. (2019). Popular music, digital technologies and data analysis: New methods and questions. Convergence, 25(2), 225-240. doi:10.1177/1354856519831127

- Hammersley, M., & Atkinson, P. (1995). Ethnography: Principles in practice (2nd ed.). New York, NY: Routledge.
- Haraway, D. (1991). Simians, cyborgs and women: The reinvention of nature. New York, NY: Routledge. Hardt, M., & Negri, A. (2000). Empire. London, UK: Harvard University Press.
- Harrison, S., & Dourish, P. (1996). Re-place-ing space: The roles of place and space in collaborative systems. In Proceedings of CSCW '96. Retrieved from http://www.dourish.com/publications/1996/cscw96-place.pdf
- Hathaway, J. (2017, February 21). The rare Pepe economy is real, and there's serious money behind it. The Daily Dot. Retrieved from https://www.dailydot.com/unclick/rare-pepe-frog-meme-economy/.
- Hayles, K. (1999). How we became posthuman: Virtual bodies in cybernetics, literature, and informatics. Chicago, IL: University of Chicago Press.
- Hayles, K. (2002). Writing machines. Cambridge, MA: MIT Press.
- Helmond, A. (2015). The platformization of the web: Making web data platform ready. Social Media + *Society*, 1(2). https://doi.org/10.1177/2056305115603080
- Hennion, A. (2001). Music lovers: Taste as performance. Theory, Culture & Society, 18(5), 1-22. doi:10.1177/02632760122051940
- Hepp, A., Hjarvard, S., & Lundby, K. (2015). Mediatization: Theorizing the interplay between media, culture and society. Media, Culture & Society, 37(2), 314-324. doi:10.1177/0163443715573835
- Hine, C. (2000). Virtual ethnography. London, UK: Sage.
- Hine, C. (2015). Ethnography for the internet: Embedded, embodied and everyday. New York, NY: Bloomsbury Publishing.
- Hines, S. (2007). TransForming gender: Transgender practices of identity, intimacy and care. Bristol, UK: Policy Press.
- Hirsch, T., & Lee, J. S. (2018). Understanding the complexities of transnational family language policy. Journal of Multilingual and Multicultural Development, 1–13.
- Hodkinson, P., & Lincoln, S. (2008). Online journals as virtual bedrooms: Young people, identity and personal space. YOUNG, 16(1), 27-46.
- Hogan, B. (2010). The presentation of self in the age of social media: Distinguishing performances and exhibitions online. Bulletin of Science, Technology & Society, 30(6), 377-386. https://doi. org/10.1177/0270467610385893
- Hookway, N. (2008). Entering the blogosphere: Some strategies for using blogs in social research. Qualitative Research, 8(1), 91–113.
- Horowitz, A. (2013, April 29). In tech we trust? A debate with Peter Thiel and Marc Andreessen. Retrieved October 10, 2017, from http://a16z.com/2013/04/29/in-tech-we-trust-a-debatewith-peter-thiel-and-marc-andreessen/
- Horst, H. A., & Miller, D. (2013). *Digital anthropology*. London, UK: Bloomsbury Publishing.
- Hutchby, I. (2001a). Technologies, texts and affordances. Sociology, 35(2), 441–456.
- Hutchby, I. (2001b). Conversation and technology: From the telephone to the Internet. Cambridge: Polity Press.
- Ingold, T. (2013). Making: Anthropology, archaeology, Art and architecture. London: Routledge.
- International Digital Economy and Society Index. (2018, November 29). Retrieved July 22, 2019, from https://ec.europa.eu/knowledge4policy/publication/international-digital-economy-society-index-2018_en
- Introna, L. D., & Nissenbaum, H. (2000). Shaping the web: Why the politics of search engines matters. The Information Society, 16, 69-185.

- Jamet, D. (2010). What do Internet metaphors reveal about the Internet? Metaphork, 18, 7. Retrieved from https://www.metaphorik.de/fr/book/export/html/272
- Jenkins, H. (1992). Textual poachers: Television fans and participatory culture. New York, NY: Routledge.
- Jensen, J. L. (2003). Public spheres on the Internet: Anarchic or government-sponsored-A comparison. Scandinavian Political Studies, 26(4), 349-374.
- John, N. (2017). Sharing—From ploughshares to file sharing and beyond. Digital Society Blog. Retrieved August 30, from https://www.hiig.de/en/sharing-from-ploughshares-to-file-sharingand-beyond/
- Johnston, L. (2015). Gender and sexuality 1: Genderqueer geographies? Progress in Human Geography, *1*, 1–11.
- Johnston, R. (2009). Salvation or destruction: Metaphors of the Internet. First Monday, 14(4). doi:10.5210/fm.v14i4.2370
- Jurgenson, N. (2012). When atoms meet bits: Social media, the mobile web and augmented revolution. *Future Internet*, *4*(1), 83–91.
- Kasket, E. (2012). Continuing bonds in the age of social networking: Facebook as a modern-day medium. Bereavement Care, 31(2), 62-69. doi:10.1080/02682621.2012.710493
- Kasket, E. (2019). All the ghosts in the machine. Illusions of immortality in the digital age. London, UK: Robinson.
- Katzenbach, C., & Larsson, S. (2017). Imagining the digital society-Metaphors from the past and present. Digital Society Blog. Retrieved August 30, from https://www.hiig.de/en/imagining-the-digital-society-metaphors-from-the-past-and-present/
- Kaye, J. J. (2006). I just clicked to say I love you: Rich evaluations of minima communication [PDF File]. Extended Abstracts Proceedings of the 2006 Conference on Human Factors in Computing Systems, CHI 2006, Montréal, QC, April 22-27, 2006. Retrieved from http://alumni.media. mit.edu/~jofish/writing/kaye-less-is-more8.pdf
- Khan, I. (2015, April 12). 4chan's Pepe the Frog is bigger than ever—And his creator feels good, man. The Daily Dot. Retrieved from https://www.dailydot.com/unclick/4chan-pepe-the-frogrenaissance/
- Kharkhordin, O., Bychkova, O., Gladarev, B., Cinman, Zh. (2019). Fantasticheskie Miry Rossijskogo Haj-Teka [shi-fi worlds of Russian high-tech]. Moskva: EUSP Press
- Kiberd, R. (2015, April 9). 4chan's frog went mainstream, so they tried to kill it. Vice's Motherboard. Retrieved from https://motherboard.vice.com/en_us/article/vvbjbx/4chans-frog-meme-wentmainstream-so-they-tried-to-kill-it.
- Kiel, P. (2016). Dead online: Practices of post-mortem digital interaction. Selected Papers of Internet Research 16: The 16th Annual Meeting of the Association of Internet Researchers. Retrieved from https://journals.uic.edu/ojs/index.php/spir/article/download/8528/6795
- Kittler, K. (1988). Fiktion und Simulation. In Arts Electronica (Ed.), Philosophien der neuen Technologie (pp. 57–80). Berlin.
- Konradova, N., Schmidt, H., & Teubener, K. (Eds.). (2006). Control+ shift: Public and private usages of the Russian internet. BoD-Books on Demand.
- Kreiss, D. (2016). Social media did not give us Trump and it is not weakening democracy. Culture Digitally. Retrieved from http://culturedigitally.org/2016/11/social_media_trump/
- Kukulin, I. (2017). Periodika dlja ITR: sovetskie nauchno-populjarnye zhurnaly i modelirovanie interesov pozdnesovetskoj nauchno-tehnicheskoj intelligencii [Periodicals for engineers and technicians: Soviet popular science journals and modeling interests of the late Soviet scientific and technical intelligentsia]. Novoe Literaturnoe Obozrenie, 3, 61-85.

- Kumar, P., & Schoenebeck, S. (2015). The Modern Day Baby Book: Enacting Good Mothering and Stewarding Privacy on Facebook. Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing, pp. 1302-1312. https://doi. org/10.1145/2675133.2675149
- Kuznetsov, S. (2004). Oshhupyvaja slona. Zametki po istorii russkogo interneta [Feeling the elephant. Notes on the history of the Russian Internet]. Moskva: Novoe literaturnoe obozrenie.
- Laing, R. D. (1969). Self and others. London, UK: Tavistock.
- Lakoff, G., & Johnson, M. (1980). Metaphors we live by. Chicago, IL: University of Chicago Press.
- Lamarre, T. (2018). The anime ecology: A genealogy of television, animation, and game Media. Minneapolis: University of Minnesota Press.
- Larsen, J., & Sandbye, M. (Eds.). (2014). Digital snaps. The new face of photography. New York, NY: Palgrave Macmillan.
- Latour, B. (1991). Technology is society made durable. The Sociological Review, 38(1), 103–131.
- Lauer, C. (2016). Intimacy: A dialectical study. London, UK and New York, NY: Bloomsbury Academic. Lefebvre, H. (1991). The production of space. Oxford: Blackwell.
- Lehdonvirta, V. (2016). Algorithms that divide and unite: Delocalisation, identity and collective action in 'microwork'. In J. Flecker (Ed.), Space, place and global digital work (pp. 53-80). London, UK: Palgrave Macmillan.
- Lessig, L. (2008). Remix: Making Art commerce thrive in the hybrid economy. New York, NY: Penguin.
- Lévi-Strauss, C. (1962). The savage mind. London, UK: Weidenfeld and Nicolson.
- Lewis, J. (1991). The ideological octopus. London, UK: Routledge Press.
- Liegl, M. (2014). Nomadicity and the care of place—On the aesthetic and affective organization of space in freelance creative work. Computer Supported Cooperative Work: CSCW: An International Journal, 23(2), 163-183. https://doi.org/10.1007/s10606-014-9198-x
- Lipman, S. (2012). Teens waiting to get drivers' licenses, prefer public transport. CSMonitor. from https://www.csmonitor.com/The-Culture/Family/Modern-Parenthood/2012/0712/Teens-waiting-to-get-drivers-licenses-prefer-public-transport
- Liu, A. (2016). Drafts for against the cultural singularity (book in progress) [Online]. Retrieved July 26, 2019, from http://liu.english.ucsb.edu/drafts-for-against-the-cultural-singularity, doi:10.21972/
- Liu, X. (2018). The travel of an iPhone: Ineluctable connectivity, networked precarity, and postsocialist politics. Social Identities, 24(2), 255-270.
- Lingel, J. (2017). Networked field studies: Comparative inquiry and online communities. Social Media + Society, 3, 7, https://doi.org/10.1177/2056305117743139
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. New Media & Society, 10(3), 393-411. https://doi.org/10.1177/1461444808089415
- Llentirb, N. (2016, July 27). How often does the picture of a home get updated? Google Maps & Earth Help Forum [online forum post]. Retrieved from https://productforums.google.com/ forum/#!topic/maps/_OyoDTfCAZU;context-place=forum/maps
- Lovink, G. (2011). Networks without A cause: A critique of social Media. Cambridge: Polity Press.
- Lynch, M. P. (2016). The Internet of us: Knowing more and understanding less in the age of big data. New York, NY: WW Norton.
- MacCormac, E. R. (1985). A cognitive theory of metaphor. Cambridge, MA: MIT Press.
- MacKinnon, R. C. (1995). Searching for the Leviathan in usenet. In S. G. Jones (Ed.), Cybersociety: Computer-mediated communication and community (pp. 112-137). Thousand Oaks, CA: Sage.

- Maddox, A., Barratt, M. J., Allen, M., & Lenton, S. (2016). Constructive activism in the dark web: Cryptomarkets and illicit drugs in the digital 'demimonde'. Information, Communication & Society, 19(1), 111-126.
- Madianou, M., & Miller, D. (2012). Polymedia: Towards a new theory of digital media in interpersonal communication. International Journal of Cultural Studies, 16(2), 169–187.
- Magaudda, P. (2011). When materiality 'bites back': Digital music consumption practices in the age of dematerialization. Journal of Consumer Culture, 11(1), 15-36. doi:10.1177/1469540510390499
- Malinowski, B. (1923). The problem of meaning in primitive languages. In C. K. Ogden & I. A. Richards (Eds.) (1965) The meaning of meaning. A study of the influence of language upon thought and of the science of symbolism (pp. 296-336). London, UK: Routledge and Kegan Paul.
- Mannheim, K. (1955 [1936]). Ideology and Utopia: An introduction to the sociology of knowledge. San Diego, CA and New York, NY: Harcourt.
- Mannheim, K. (1982). Structures of thinking. London, UK: Routledge & Kegan Paul.
- Manovich, L. (2001). The language of new Media. Cambridge, MA: MIT Press.
- Markham, A. N. (1998). Life online: Researching real experience in virtual space. Walnut Creek, CA: Alta Mira.
- Markham, A. N. (2003). Metaphorically shaping our understanding of the Internet: Tool, place, way of being. Retrieved from http://annettemarkham.com/writing/MarkhamTPWwebversion.html
- Markham, A. N. (2004). Internet as research context. In C. Seale, J. Gubrium, D. Silverman, & G. Gobo (Eds.), Qualitative research practice (pp. 358-374). London, UK: Sage.
- Markham, A. N. (2005). The methods, politics, and ethics of representation in online ethnography. In N. Denzin & Y. Lincoln (Eds.), The Sage handbook of qualitative research (pp. 793-820) Thousand Oaks, CA: Sage.
- Markham, A. N. (2013a). Remix cultures, remix methods: Reframing qualitative inquiry for social media contexts. In N. Denzin & M. Giardina (Eds.), Global dimensions of qualitative inquiry (pp. 63-81). Walnut Creek, CA: Left Coast Press.
- Markham, A. N. (2013b). The dramaturgy of digital experience. In C. Edgley (Ed.), The drama of social life: A dramaturgical handbook (pp. 279-294). Farnham: Ashgate.
- Markham, A. N., & Stavrova, S. (2016). Internet/digital research. In D. Silverman (Ed.), Qualitative research (pp. 229-244). London, UK: Sage.
- Marwick, A. E. (2013). Status update: Celebrity, publicity, and branding in the social media age. New Haven, CT: Yale University Press.
- Marwick, A. E., & boyd, d. (2010). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. New Media & Society, 13(1), 114-133. https://doi. org/10.1177/1461444810365313
- McGrath, W. (2015, September 22). What are those kids doing with that enormous gun? The Atlantic. Retrieved October 23, 2019, from https://www.theatlantic.com/technology/archive/2015/09/ what-are-those-kids-doing-with-that-enormous-gun/405769/
- McLuhan, M., & Quentin, F. (1967/2007). The medium is the message. New York, NY: Random House.
- McVeigh-Schultz, J., & Baym, N. K. (2015). Thinking of you: Vernacular affordance in the context of the microsocial relationship app, couple. Social Media + Society, 1(2), 1-13. http://doi. org/10.1177/2056305115604649
- Meyrowitz, J. (1985). No sense of place: The impact of electronic media on social behavior. New York, NY: Oxford University Press.
- Meyrowitz, J. (1998). Multiple media literacies. Journal of Communication, 48(1), 96–108. https:// dx.doi.org/10.1111/j.1460-2466.1998.tb02740.x

- Miller, D. (2011). Designing ourselves. In A. J. Clarke (Ed.), Design anthropology: Object culture in the 21st century. Wien: Springer.
- Miller, D., & Sinanan, J. (2014). Webcam. Cambridge: Polity Press.
- Milner, R. M. (2016). The world made meme: Public conversations and participatory media. Cambridge, MA: MIT Press.
- Mina, A. X. (2014). Batman, Pandaman, and the Blind Man: A case study in social change memes and Internet censorship in China. Journal of Visual Culture, 13(3), 359–375.
- Molotch, H. (2011). Objects in sociology. In A. J. Clarke (Ed.), Design anthropology: Object culture in the 21st Century. Wien: Springer. https://doi.org/10.1017/CBO9781107415324.004
- Nakamura, L. (2001). Race in/for cyberspace: Identity tourism and racial passing on the Internet. Reading Digital Culture, 226–235.
- Nardi, B. (2009). My life as a night owl priest: An anthropological account of world of warcraft. Ann Arbor: University of Michigan Press.
- Nash, C. J. (2010). Trans geographies, embodiment and experience. Gender, Place & Culture, 17(5), 579-595. doi:10.1080/0966369x.2010.503112
- Nash, C. J., & Bain, A. (2007). 'Reclaiming raunch'? Spatializing queer identities at Toronto women's bathhouse events. Social & Cultural Geography, 8(1), 47-62. doi:10.1080/14649360701251809
- Negroponte, N. (1995). Being digital. New York, NY: Vintage Books.
- Negus, K. (1997). Popular music in theory: An introduction. Middletown, CT: Wesleyan University Press.
- Noble, S. U. (2018). Algorithms of oppression: How search engines reinforce racism. New York: NYU Press. Norman, D. (1988). The psychology of everyday things. New York, NY: Basic Books.
- Osborne, S. (2017, May 8). Pepe is dead: Meme creator kills off controversial frog after it was hijacked by white supremacists. The Independent. Retrieved from http://www.independent.co.uk/news/ world/americas/us-politics/pepe-frog-dead-meme-matt-furie-kills-alt-right-image-white-supremacists-hijacked-a7723586.html
- Oslon, M. (2011). Post-Internet. Foam Magazine.
- Owens, L., & Palmer, L. K. (2003). Making the news: Anarchist counter-public relations on the World Wide Web. Critical Studies in Media Communication, 20(4), 335–361.
- Papacharissi, Z. (2004). Democracy online: Civility, politeness, and the democratic potential of online political discussion groups. New Media & Society, 6(2), 259–283.
- Papacharissi, Z. (2011). A networked self: identity, community and culture on social network sites. New York, NY: Routledge.
- Pearce, K. E., Carr, C. T., Vitak, J., & Hayes, R. A. (2018, May). Conceptualizing socially mediated visibility. Paper presented at the 68th International Communication Association Conference, Prague, Czech Republic.
- Pensoneau-Conway, S. L., & Toyosaki, S. (2011). Automethodology: Tracing a home for praxis-oriented ethnography. International Journal of Qualitative Methods, 10(4), 378-400.
- Peters, B. (2016). How not to network a nation: The uneasy history of the Soviet internet. Cambridge, MA: MIT Press.
- Phillips, W., & Milner, R. M. (2017). The ambivalent Internet: Mischief, oddity, and antagonism online. Oxford: Polity Press.
- Pigg, S. (2014). Emplacing mobile composing habits: A study of academic writing in networked social spaces. College Composition and Communication, 66(2), 250-270.
- Pignetti, D. (2005, September 2). Map Resource [Web log post]. Retrieved from http://www.daisypignetti.com/2005/09/02/map-resource/

- Pignetti, D. (2007). The "I" of the storm: How hurricane Katrina changed my life and my methodology. Computers and Composition Online. Retrieved from http://cconlinejournal.org/Pignetti/ title.html
- Pignetti, D. (2010, March 3). Google Map Time Machine [Web log post]. Retrieved from http:// www.daisypignetti.com/2010/03/03/google-map-time-machine/
- Pink, S., Ardevol, E., & Lanzeni, D. (2016). Digital Materialities. London, UK: Bloomsbury Press.
- Polonski, V. (2016, August 5). Is social media destroying democracy? Newsweek. Retrieved from http://www.newsweek.com/social-media-destroying-democracy-487483
- Postill, J., & Pink, S. (2012). Social media ethnography: The digital researcher in a messy web. Media International Australia, 145(1), 123-134.
- Postman, N. (1992). Technopoly: The surrender of culture to technology. New York, NY: Knopf.
- Potter, J., & Wetherell, M. (1987). Discourse and social psychology: Beyond attitudes and behaviour. New York, NY: Sage.
- Prey, R. (2015). Henri Lefebvre and the production of music streaming spaces. Sociologica, 9(3), 1–22. doi:10.2383/82481
- Prieto-Blanco, P. (2010). Family photography as a phatic construction. Networking Knowledge: Journal of the MeCCSA PG Network, 3(2). Retrieved September 14, 2017, from http://ojs.meccsa.org.uk/ index.php/netknow/article/download/48/48
- Prieto-Blanco, P. (2015). Visuelles Tele-Cocooning im Ausland. Eine Autoethnographie. Ultrashort Reframed, 5, 50-54.
- Prieto-Blanco, P. (2016a). (Digital) photography, experience and space in transnational families. A case study of Spanish-Irish families living in Ireland. In A. Lehmuskallio & E. Gómez Cruz (Eds.), Digital Photography and Everyday Life (pp. 122-140). London, UK: Routledge.
- Prieto-Blanco, P. (2016b). Transnational (dis)affect in the Digital Age. Photographic practices of Irish-Spanish families living in Ireland (Unpublished doctoral dissertation). National University of Ireland, Galway, Republic of Ireland.
- Radner, J., & Lanser, S. (1993). Strategies of coding in women's cultures. In J. Radner (Ed.), Feminist messages: Coding in women's folk culture (pp. 1–30). Champaign: University of Illinois Press.
- Rainie, L. (2017, February 9). Digital divides—Feeding America. Retrieved March 1, 2017, from Pew Research Center: Internet, Science & Tech website: http://www.pewinternet.org/2017/02/09/ digital-divides-feeding-america/
- Raptis, D., Kjeldskov, J., Skov, M. B., & Paay, J. (2014). What is a digital ecology? Theoretical foundations and a unified definition. Australian Journal of Intelligent Information Processing Systems, 12(4).
- Raun, T. (2017). 'Talking about his dead child, again!': Emotional self-management in relation to online mourning. First Monday, 22(1). doi:10.5210/fm.v22i11.7810
- Raun, T. (2018). Connecting with the dead: Vernacular practices of mourning through photo-sharing on Facebook. In R. Andreassen, M. N. Petersen, K. Harrison, & T. Raun (Eds.), *Mediated* intimacies, connectivities, relationalities and proximities (pp. 193–207). London, UK: Routledge.
- Redström, J., & Wiltse, H. (2019). Changing things: The future of objects in a Digital World. London, UK: Bloomsbury.
- Rettberg, S., Lehmuskallio, A., Karhio, A., Cheng-Syun Tang, A., Zacher Sørensen, M.-M., & Solberg, R. (2019). We were always right all along, or, how we learned to stop worrying and love the machine, 2068. Unpublished manuscript.
- Rice, C. (2005, September 4). My New Orleans. Salon. Retrieved from http://www.salon. com/2005/09/04/rice_20/

- Rieder, B. (2016). Big data and the paradox of diversity. Digital Culture & Society, 2(2), 39-54. doi:10.14361/dcs-2016-0204
- Roberts, S. (2019). Behind the screen: Content moderation in the shadows of social media. New Haven, CT: Yale University Press.
- Rose, C. (2005, December 6). The storm that keep killing. The Times-Picayune | NOLA. Com. Retrieved from http://www.nola.com/rose/index.ssf/2005/12/the_storm_that_keeps_killing.html
- Ruud, E. (1997). Music and identity. Nordic Journal of Music Therapy, 6(1), 3-13. doi:10.1080/08098139709477889
- RX Fogarty [Robert]. (2008, October 13). Be a New Orleanian. wherever you are [Web log post]. Retrieved from http://post-katrinaneworleans.blogspot.com/2008/10/be-new-orleanian-wherever-you-are.html
- Samarajiva, R. (2012). Facebook = Internet? LIRNEasia [blogpost]. Retrieved August 1, 2019, from https://lirneasia.net/2012/05/facebook-internet/
- Schorr, S. (2019). Saving screens: Temporary tattoos and other methods [Artwork]. United States. http://www.sarahschorr.com/Artist.asp?ArtistID=5380&Akey=Y2PRXfrom C5P&ajx=1#!Group1_Pf184212
- Schreiber, M. (2016). Amplification and heterogeneity: Seniors and digital photographic practices. In A. Lehmuskallio & E. Gomez Cruz (Eds.), Digital photography and everyday life. Empirical studies on material visual practices (pp. 52-69). London, UK: Routledge.
- Schreiber, M. (2017). Digitale Bildpraktiken. Handlungsdimensionen visueller vernetzter Kommunikation (Unpublished PhD dissertation). University of Vienna, Austria.
- Schulte, S. R. (2013). Cached: Decoding the Internet in global popular culture. New York: NYU Press.
- Sconce, J. (2000). Haunted media: Electronic presence from telegraphy to television. Durham, NC: Duke University Press.
- Shaginyan, M. (1960). Mess-mend or Yankee in Petrograd. Novel-tale. M: Detgiz. Cited by Degot' (2000).
- Simondon, G. (2011). On the mode of existence of technical objects. Deleuze Studies, 5(3), 407-424.
- Solnit, R., & Snedeker, R. (2013). Unfathomable city: A New Orleans Atlas. Berkeley: University of California Press.
- Soon, W. (2018). Unerasable Images [Artwork]. Hong Kong. Retrieved from http://siusoon.net/ unerasable-images/
- Spinuzzi, C. (2012). Working alone, together: Coworking as emergent collaborative activity. Journal of Business and Technical Communication, 26(4), 399-441. https://doi. org/10.1177/1050651912444070
- Stefik, M. (1997). Internet dreams: Archetypes, myths, and metaphors. Cambridge, MA: MIT Press.
- Stephens, M. (1998). The rise of the image, the fall of the word. Cambridge: Oxford University Press.
- Stephenson, N. (1992). Snow crash. New York, NY: Bantam Books
- Stevens, R. (1996). Understanding the self. Thousand Oaks, CA: Sage.
- Stoller, S. (2000). Reflections on feminist Merleau-Ponty skepticism. Hypatia: A Journal of Feminist Philosophy, 15(1), 175-182. doi:10.2979/hyp.2000.15.1.175
- Stopera, M. (2015). How I became a minor celebrity in China (After my stolen phone ended up there). Buzzfeed. Retrieved October15, 2019, from https://www.buzzfeed.com/mjs538/how-ibecame-a-minor-celebrity-in-china-after-my
- Streeter, T. (2017). The Internet as a structure of feeling: 1992–1996. *Internet Histories*, 1(1–2), 79–89. https://doi.org/10.1080/24701475.2017.1306963
- Sunde'n, J. (2003). Material virtualities. New York: Peter Lang.

- Tannen, D. (1989 [2007]). Talking voice: Repetition, dialogue, and imagery in conversational discourse (2nd ed.). Cambridge: Cambridge University Press.
- Tassy, A. (2018, November 30). It-anvendelse i befolkningen—2018. Statistics Denmark. Retrieved July 22, 2019, from https://www.dst.dk/da/Statistik/Publikationer/VisPub?cid=29448#
- Tatarchenko, K. (2013). "A house with the window to the west": The Academgorodok computer center (1958–1993) (PhD thesis).
- Tatarchenko, K. (2019). "The man with a micro-calculator": Digital modernity and late Soviet computing practices. In Exploring the Early Digital (pp. 179-200). Cham: Springer.
- Thompson, D. (2014). The Shazam effect. The Atlantic. Retrieved July 26, 2010, from https://www. theatlantic.com/magazine/archive/2014/12/the-shazam-effect/382237/
- Tiidenberg, K. (2015). Odes to heteronormativity—Presentations of femininity in Russian-speaking women's Instagram accounts. International Journal of Communication, 9.
- Tiidenberg, K. (2018a). Visibly ageing femininities: Women's visual discourses of being over-40 and over-50 on Instagram. Feminist Media Studies, 18, 61-76.
- Tiidenberg, K. (2018b). Selfies, why we love (and hate) them. Bingley, UK: Emerald.
- Tiidenberg, K., & Baym, N. K. (2017, January–March). Learn it, buy it, work it: Intensive pregnancy on Instagram. Social Media + Society.
- Tiidenberg, K., & Whelan, A. (2019). "Not like that, not for that, not by them" social media affordances for critique. Communication and Critical/Cultural Studies, 16(2), 83-102.
- Tiidenberg, K., Markham, A. N., Pereira, G., Rehder, M., Sommer, J., Dremljuga, R., & Dougherty, M. (2017). "I'm an addict" and other sensemaking devices: A discourse analysis of self-reflections of lived experience on social media. Proceedings of the 8th International Conference on Social Media & Society. Article No. 21. Available: http://dl.acm.org/citation.cfm?doid=3097286.
- Townley, C., & Parsell, M. (2006). Cyber disobedience: Gandhian cyberpunks. Scan, 3(3).
- Treem, J., & Leonardi, P. M. (2012). Social media use in organizations. Communication Yearbook, 36, 143-189. Retrieved from papers3://publication/uuid/C0737AFA-CEEA-4D9A-B85F-355E795F2593
- Trippi, J. (2008). The revolution will not be televised: Democracy, the Internet, and the overthrow of everything. New York, NY: Harper.
- Tuan, Y.-F. (1979). Space and place: Humanistic perspective. In S. Gale & G. Olsson(Eds.), Philosophy in geography (pp. 387-427). Dordrecht, Holland: D. Reidel.
- Tuan, Y.-F. (2001). Space and place: The perspective of experience. Minneapolis: University of Minnesota Press.
- Tufekci, Z. (2015). Algorithmic harms beyond Facebook and Google: Emergent challenges of computational agency. Colorado Technology Law Journal, 13, 203-218.
- Turkle, S. (2007). Evocative objects: Things we think with. Cambridge, MA: MIT Press.
- Twitchell, J. B. (1997). For shame: The loss of common decency in American culture. London, UK: St. Martin's Griffin.
- University and College Union (UCU). (2016). Precarious work in higher education. A snapshot of insecure contracts and institutional attitudes [PDF file]. Retrieved from https://www.ucu.org.uk/ media/7995/Precarious-work-in-higher-education-a-snapshot-of-insecure-contracts-and-institutional-attitudes-Apr-16/pdf/ucu_precariouscontract_hereport_apr16.pdf
- Vaisman, C. (2014). 'The designs industry': Israeli tween girls play with production and power on blogs. In A. Bennett & B. Robards (Eds.), Mediated youth cultures: The Internet, belonging and new cultural configurations (pp. 95-113). Palgrave Macmillan.

- van den Berg, B. (2008). Self, script, and situation: Identity in a world of ICTs. In S. Fischer-Hübner, P. Duquenoy, A. Zuccato, & L. Martucci (Eds.), The Future of Identity in the Information Society (Vol. 262, pp. 63-76). Boston, MA: Springer.
- Van Dijck, J. (2013). 'You have one identity': Performing the self on Facebook and LinkedIn. Media, Culture & Society, 35(2), 199–215. doi:10.1177/0163443712468605
- Van Dijck, J. (2014). Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. Surveillance & Society, 12(2), 197-208. doi:10.24908/ss.v12i2.477
- van Eijck, K. (2001). Social differentiation in musical taste patterns. Social Forces, 79(3), 1163-1185. https://doi.org/10.1353/sof.2001.0017
- van Zoonen, L. (2013). From identity to identification: Fixating the fragmented self. Media, Culture & Society, 35(1), 44-51. https://doi.org/10.1177/0163443712464557
- Villi, M. (2015). Photographs of place in phonespace: Camera phones as a location-aware mobile technology. In A. Lehmuskallio & E. Gomez Cruz (Eds.), Digital photography and everyday life. Empirical studies on material visual practices (pp. 107–121). London, UK: Routledge.
- Vivienne, S. (2018). Between fire-fighting and flaming: Collective and personal trans* and gender-diverse social media. In A. S. Dobson, B. Robards, & C. Nicholas (Eds.), Digital intimate publics and social media (pp. 193-209). London, UK: Palgrave Mcmillan.
- Vivienne, S., & Barnett, T. (2017). Curating technologies of memory and affect. Media International Australia, 165(1), 14-24. https://doi.org/10.1177/1329878X17727626
- Warfield, K., & Hassan-Zarabadi, S. (2018). Feminist New Materialism in Education. Milton Park, UK: Taylor & Francis.
- Warschauer, M., & Ames, M. (2010). Can one laptop per child save the world's poor? Journal of International Affairs, 33-51.
- Webster, J., Gibbins, N., Halford, S., & Hracs, B. J. (2016). Towards a theoretical approach for analysing music recommender systems as sociotechnical cultural intermediaries. In Proceedings of the 8th ACM Conference on Web Science (pp. 137-145). New York, NY: ACM. doi:10.1145/2908131.2908148
- Weinberg, M. (2017). If you're happy and you know it: Music engagement and subjective well-being. Psychology of Music, 4(2), 257-276.
- Weiser, M. (1991). The computer for the 21st century. Scientific American, 265, 94–104. http://dx.doi. org/10.1038/scientificamerican0991-94
- White, P. B., & White, N. R. (2005). Keeping connected: Travelling with the telephone. Convergence: The International Journal of Research into New Media Technologies, 11(2).
- Wieck, D. (1978). Anarchist justice. In Anarchism, ed. J. R. Pennock and J. W. Chapman. New York: New York University Press, pp. 227–28.
- Wikipedia. (2019). Internet metaphors. https://en.wikipedia.org/wiki/Internet_metaphors
- Wilchins, R. (2017, June 13). Is Trans Over? [LGBTQI+ News & Commentary]. Retrieved January 31, 2018, from http://www.advocate.com/transgender/2017/6/13/trans-over
- Wittkower, D. E. (2016). Principles of anti-discriminatory design. Philosophy Faculty Publications, 28. https://digitalcommons.odu.edu/philosophy_fac_pubs/28
- Woolgar, S. (1990). Configuring the user: The case of usability trials. The Sociological Review, 38(S1),
- Wright, S., & Parchoma, G. (2011). Technologies for learning? An actor-network theory critique of 'affordances' in research on mobile learning. Research in Learning Technology, 19(3), 247-258.
- Wulff, H. J. (1993). Phatische Gemeinschaft/Phatische Funktion. Letikonzepte einer pragmatischen Theorie des Fernsehens [Phatic community/phatic function. Key concepts of a pragmatical theory of television]. Montage A/V, 2(1), 143-163.

- Wyatt, S. (2004). Danger! Metaphors at work in economics, geophysiology, and the Internet. Science, Technology, & Human Values, 29(2), 242-261. https://doi.org/10.1177/0162243903261947
- Yurchak, A. (2005). Everything was forever until it was no more: The last Soviet generation. Princeton, NJ: Princeton University Press.
- Zillien, N. (2008). Die (Wieder-)Entdeckung der Medien das Affordanzkonzept in der Mediensoziologie. Sociologia Internationalis: Internationale Zeitschrift Für Soziologie, Kommunikations-Und Kulturforschung, 46(2), 161-181.
- Zipes, J. (2013). The irresistible fairy tale: The cultural and social history of a genre. Princeton, NJ: Princeton University Press.

Metaphors of Internet

Ways of Being in the Age of Ubiquity

Edited by Annette N. Markham Katrin Tiidenberg



PETER LANG
New York • Bern • Berlin
Brussels • Vienna • Oxford • Warsaw

Library of Congress Cataloging-in-Publication Data

Names: Markham, Annette N., editor. | Tiidenberg, Katrin, editor. Title: Metaphors of internet: ways of being in the age of ubiquity / edited by Annette N. Markham and Katrin Tiidenberg.

Description: New York: Peter Lang, 2020.

Series: Digital formations, vol. 122 | ISSN 1526-3169

Includes bibliographical references and index.

Identifiers: LCCN 2019059859 | ISBN 978-1-4331-7449-0 (hardback: alk. paper) ISBN 978-1-4331-7450-6 (paperback: alk. paper) | ISBN 978-1-4331-7451-3 (ebook pdf) ISBN 978-1-4331-7452-0 (epub) | ISBN 978-1-4331-7453-7 (mobi)

Subjects: LCSH: Internet—Social aspects. | Internet—Terminology. Classification: LCC HM851 .M466 2020 (print) | LCC HM851 (ebook) | DDC 302.23/1—dc23

LC record available at https://lccn.loc.gov/2019059859 LC ebook record available at https://lccn.loc.gov/2019059860 DOI 10.3726/b16196

Bibliographic information published by Die Deutsche Nationalbibliothek.

Die Deutsche Nationalbibliothek lists this publication in the "Deutsche Nationalbibliografie"; detailed bibliographic data are available on the Internet at http://dnb.d-nb.de/.

The paper in this book meets the guidelines for permanence and durability of the Committee on Production Guidelines for Book Longevity of the Council of Library Resources.



© 2020 Peter Lang Publishing, Inc., New York 29 Broadway, 18th floor, New York, NY 10006 www.peterlang.com

All rights reserved.

Reprint or reproduction, even partially, in all forms such as microfilm, xerography, microfiche, microcard, and offset strictly prohibited.

Printed in the United States of America