Sam McCracken

Waste Not, Want Not: Notes on Digital Hoarding

Abstract

This paper argues that Web 2.0 platforms, which unilaterally profit from the extraction and sale of user data, condition users to casually create, save, and—with time—over-accumulate or *hoard* bits of digital ephemera: posts, tweets, status updates, audiovisual media, *ad infinitum*. In part because of their outwardly immaterial form as digital objects, I maintain, these artifacts record those everyday thoughts that might in real-world contexts not bear writing down or preserving indefinitely. I consider the outpouring of quotidian, documentary material online in relation to a tacit process of user-habituation to the rhythms of social networks. I likewise understand this process in relation to the contemporary user's estrangement from the data they produce (to be stored on far-off corporate servers), coupled with a more pervasive mystification of the external uses and potential afterlives of that data by such platforms. This notational essay also considers various efforts on the part of sites such as Facebook to hide or charge with sentimental value the things we share in order to retain user activity, arguing that contemporary users tend to become something of *digital hoarders* in the absence of any incentive to delete outmoded user-generated content, adding undue strain on the electrical grid in so doing.

Two weeks into my first semester of graduate school, I took the plunge and purchased a MacBook Air, my first Apple computer, and noticed soon after booting up that the recycling bin on my desktop had been replaced with a trash can. A fixture of *the* graphical user interface (GUI) as I knew it, Microsoft's iconic Recycle Bin spanned every Windows machine I used as a child and adolescent, from the blocky beige family computer of my core memories to the cheap Acer on which I typed my undergraduate essays. Although, make no mistake, I understood "Recycle Bin" for the euphemism it is, there was a subtle but felt difference between how I conceived of it and how I encountered the comparably colder, comparably more permanent "Trash," a concept for which I had an immediate (and considerably less positive) material referent. This was by design.

In 1988, Apple Computer, Inc., filed a copyright infringement lawsuit against the Microsoft Corporation, alleging that Microsoft—at that time collaborating with Hewlett-Packard on their NewWave (1987–1995) desktop interface for IBM-compatible Windows computers—had knowingly appropriated distinct visual elements from the GUI Apple developed for its Lisa and Macintosh operating systems. The court did not side in Apple's favor. After four years of proceedings, followed by another two in the U.S. Court of Appeals, the Ninth Circuit judge elected to affirm the district court's findings and "to limit the scope of [Apple's] copyright protection to a handful of individual elements in NewWave," rather than allow Apple to lay claim to "the interface itself" as a piece of intellectual property.[1] The judge ruled, in other words, that "Apple cannot get patent-like protection for the idea of a graphical user interface, or the idea of a desktop metaphor which concededly came from Xerox" and precluded the company from petitioning their case to the U.S. Supreme Court.[2]

Though the court may have been hesitant to provide Apple exclusive rights to the "desktop metaphor" that still lies at the heart of most (if not all) operating systems today, it did concede to Apple's claim that the defendants took clear inspiration from Apple's GUI on at least two fronts: in the design of its folder-opening animation and in "the use of a trash can icon to depict the discard function."[3] When Microsoft launched Windows 95, related changes took effect: the Recycle Bin replaced the wastebasket. Though it perhaps goes without saying, this court-ordered update was purely cosmetic; the revamped name and icon belied no observable difference in the function or execution of the designated process. But design is rarely value neutral, and when it comes to interface design, we would do well to remember Alex Galloway's contention that "[i]nterfaces are not simply objects or boundary

Eszter Zimanyi, editor, Spectator 42.2 (Fall 2022): 19-27.

points … but processes that effect a result of whatever kind."[4] In winning the right to reserve the trashcan as the symbol of its discard function, Apple pushed its chief competitor to adopt an icon that suggested an inability or reluctance to fully dispose of unwanted files—potentially complicating how Windows users understood the process of deletion—at a time when computer storage was notoriously low across brands and, for the same reason, greater-than-average storage capacity could prove a considerable selling-point. Whether this minute difference in visual rhetoric actually weighed on the average consumer is moot, but the court's designation of the trash bin as a *proprietary feature* of any one operating system does nevertheless reflect some effort on the part of Apple to structure the relationship between user and file along familiar, material lines.

I open with this introductory anecdote because, as a digital native, the desktop iconography that structured my experience of learning to navigate Windows computers as a child continues in whatever latent or naïve way to inform how I engage with digital media today. And although I may not linger on the strange history of the Microsoft Recycle Bin in particular in this essay, I do ponder how user-facing "delete" functions, among other key features of the contemporary app-laden web, shape the affective bonds we have to what we publish online and determine—by extension—in whatever small way, what we allow ourselves to discard. While promising no clear answer, I ask: How does the seeming ephemerality of the posts we share on social networks influence the care we afford them? Conversely, on sites that memorialize earlier user-generated posts and recirculate them at regular intervals, as does Facebook, what is the nature of our (re)encounter with these fragments of our own informally (if also carefully and calculatedly) shared personal information? And for that matter, under what general affective conditions do or can such once-sentimental digital artifacts devolve into *trash*, into clutter that neither we in the present nor our presumed future selves would care to conserve, and how do social networking platforms complicate any ability on the part of the modern user to understand these uploads as disposable?

Teasing out the above, this essay thus offers some introductory thinking on the strange formal trashiness of digitally mediated texts and objects, paying particular attention to those everyday artifacts we house on social media platforms identified with the mid-2000s shift to Web 2.0. This is not to suggest that users of the "Web 1.0" era—users of an internet replete with chatrooms, forums, and message boards—were without their own impulses to save the exchanges they had online. Rather, the present discussion considers how the things we share in a distinctly *social* mode on, for example, Web 2.0 platforms such as Facebook, Twitter, or Instagram often quickly and curiously come to resemble something akin to garbage at the levels of (observable) lifecycle and aesthetics. That is, the posts we share on such networks may collectively come to make legible a user's online "profile" over time, as part of both undifferentiated "populations" (aggregated masses of networked users) and more discrete "publics" (self-selected groups of particular users), to use Kris Cohen's framework.[5] But individual uploads tend to lie untouched or forgotten about after fulfilling an initial social function. I may think about a post as it accrues reactions from those in my network, but beyond that moment, it serves no discernible purpose for me. And yet it persists on my profile all the same, until I decide to delete it. If, as Nick Douglas compellingly argues, "the internet is built to give outsized attention to the amateurish, the accidental, and the surprise hit,"[6] our collective pursuit of ever-new objects and new fads to occupy our attention would seem to leave a string of functionally abandoned, litter-like uploads in its wake.

What escapes Douglas's characterization, which precedes his discussion of the value of ugly media on (pseudo)anonymous forum-based sites such as 4chan and Reddit, is, of course, the sentimentality that so often accrues to our everyday posts on culturally very different feed-based platforms, on which we tend to maintain social ties with others we know "in real life" (IRL) over the course of years or decades. To be sure, neither the sentimental nor social dimensions of our attachment to the media we publish online ought to be overlooked, but neither should the *potential* for sentimental reflection on any one post overshadow the fundamentally accretive and accumulative nature of the larger activity in which individual posts inherently take part.

I argue that Web 2.0 platforms, which unilaterally profit from the extraction and sale of

user data under a regime of what Jodi Dean terms "communicative capitalism,"[7] condition users to casually create, save, and—with time—over-accumulate or *hoard* bits of digital ephemera. As a result of their ostensibly immaterial form as digital objects, these ephemera record what might in other contexts not bear writing down, much less preserving indefinitely: passing thoughts, everyday uploads, updates about one's life that are written for and shared with an internally varied audience. Social media sites nevertheless automatically archive users' digital ephemera, *just in case* users might like to revisit their posts at some later date. While I understand this quotidian form of online cultural production primarily as a result of the user's reflexive alienation from the sheer quantity of data they produce, coupled with a more pervasive mystification of the external uses of those data by such platforms, we might less cynically understand the continual output of user data as simply what one *does* on social networking sites. Nicholas John contends that "[s]haring is the fundamental and constitutive activity of Web 2.0,"[8] but we would do well to question the terms and conditions of that sharing, as it grows increasingly unclear not only *what* we consent to share upon uploading a media artifact or piece of personal information to a social media platform's corporate servers, but also with whom and for how long we share it in so doing.

Remembering to Forget: Posting and Habit

To return to an earlier example, if the Windows Recycle Bin—in its design's seeming embrace of the environmentalism of the American 1990s—suggests some vague afterlife to one's discarded files despite being little more than a trashcan with court-mandated green arrows, the delete buttons we find dogeared in the corners of our social media posts tend to behave more like recycling bins disguised as trashcans. That is, in contrast to the Recycle Bin, which trashes (by which I mean *deletes*) what it would outwardly purport to recycle, social media platforms tend to recycle relentlessly, repurposing data that has been extracted from users' posts long after those posts are deleted from individual profiles. Though Web 2.0 companies black-box the precise ends toward which they put users' collected data, one can plainly witness one such act of data-recycling on the user-facing end of Facebook, in the platform's interrelated "Memories," "On This Day," and "Year in Review" features. The three perform what is essentially the same operation but at different scales and intervals: "Year in Review" provides an algorithmically curated highlight reel of a user's most-liked posts from the preceding year, typically during the second half of December; "On This Day," which updates daily, aggregates everything a user has posted on a given date over the years that they have had a Facebook account; and "Memories" operates more intermittently, showcasing the content one posted over the course of seemingly random, defined spans of time (i.e., a season, month, week) as well as commemorating arbitrary in-app milestones (e.g., "Sam, your friends have liked your posts 1,000 times!"). Prominently displaying these memories at the top of one's "Newsfeed" at the time of login, the platform encourages users to revisit old content—status updates, media uploads, shared links—as the foundation for *new* content of a patently retrospective mode. By recycling once-forgotten posts, Facebook assigns sentimental or nostalgic value to one's former uploads, in some sense regardless of their specific content, *and* also reinscribes its own role as the repository of these and other mediated memories, memories one might not truly count as such if not for the app's tactical framing. Both effects strive toward the same desired outcome: that users will maintain their Facebook profiles if only for their worth as personal archives. In this way, Facebook asserts itself as not only a tool to connect with others in the moment by sharing "[w]hat's on your mind" (the prompt inscribed in its status-update field), but a means of connecting with oneself by revisiting what *was* on one's mind. Through its capture, every shared event becomes a future memory; users cannot forget because the app never will. Continually recycled as memories, these posts are never quite allowed to become what one might readily understand as "waste," that broad category of expended or functionally worthless things that Mary Douglas once famously characterized as "matter out of place."[9] Instead, so regularly charged with calculated sentimentality, what could pass for disposable reasserts itself as eminently priceless, year after year, conceivably accruing added nostalgic value with every trip around the sun.

The language of habit and habituation, so attuned to repetition and reflexivity, offers a way into thinking about digital hoarding and why, for

some Web 2.0 users, deleting one's own uploads would seem so out of the question—whether because the thought to erase an old post simply never occurs or because it proves distressing to do so. "To acquire a habit," writes Wendy Hui Kyong Chun, "one deliberately learns from others: habits are forms of slow training and imitation that lead to belief, or at least the appearance thereof."[10] Web 2.0 users, by definition imbricated within one or more decidedly social networks, become habituated over time and in distinct ways to the rules of engagement particular to the network in question. Users are versed in such "rules," be they informal (i.e., patterned on the "acceptable" behavior of another user) or explicit (e.g., Facebook's "Terms of Service" guidelines, which disallow certain actions), through their prolonged exposure to both others on a network as well as the site in question, either of which may dictate the frequency with which someone should post or the content one may share. This is user-habituation at work; users differentially adopt as idiosyncratic habits certain ways of being part of the networked digital world they simultaneously co-constitute. As Chun teaches, however, in the context of new media, habit sits in dialectical tension with "crisis," reaching synthesis in the regular "updates" that strive constantly to reinvigorate the habitual with the often curiously unremarkable newness of the now: "The update is central to disrupting and establishing context and habituation, to creating new habits of dependency," she writes, for "[t]hings and people not updating are things and people lost or in distress."[11]

Users habituated to a Web 2.0 platform, then, are habituated to the logic of the continual update, not only as it may bear on the websites they come to use by reflex (which themselves regularly "update" without noticeably changing their defining affordances), but more immediately in how they engage with others on a network, by way of routine personal "updates," and in their relationship over time to the nature of that engagement. On this point, Chun observes that, generally speaking, users' habituation to the posting norms of Web 2.0 has resulted in an emergent form of digital sociality in which we now expect all others to post habitually, offering: "*Automatically recognized changes of status have moved from surveillance to evidence of one's ongoing existence*."[12] Only in the conspicuous absence of updates, Chun suggests, do we as habituated users find cause for alarm, no longer—on the whole—concerned with the threat of external (corporate, state-sponsored) surveillance but instead bound by an internally regulated form of peer surveillance, which we learn by way of habit.

Following Chun, we might say that Facebook users of the post-"Memories" era are now habituated to *reencountering* older posts at *timed* intervals. But their habituation goes deeper still, as Facebook (along with other platforms of the Web 2.0 boom) also function as cloud-based storage systems by another name. Put differently, with the Recycle Bin in mind, if users once understood computers as machines possessing a limited amount of internal storage, implicit in that understanding was the felt necessity of deleting files that fell out of use. Dragging and dropping a file into the Recycle Bin or Trash tacitly proved a matter of efficient data-management, even if the act of pronouncing one's files *trash* through such a maneuver placed some amount of psychic stress on the user. With our habituation to Web 2.0 platforms, which insistently call for *routine* personal updates, internal-storage concerns would seem to have evaporated, as users were presented with a free-to-use, outsourced, web-accessible "profile" on which to accumulate and share digital artifacts with abandon, rarely—if ever—pausing to evaluate our previously shared media as "trash" or "treasure" in part because the platform never asks that we perform that calculus. In fact, as far as Facebook is concerned, the platform performs it on our behalf: not only is this upload from seven years ago *not* worthless, it seems to say, it is a priceless "Memory."

While enshrining everything from a routine status update (such as my own from today's date in 2014, which announces—incorrectly, as it would turn out—that I would never again take a college math class) to more momentous occasions (such as another "On This Day" reminder that informs me I went to prom 9 years ago), Facebook's memory functions betray their unspoken goal of user-retention via user-habituation by obfuscating past updates that are identified as potentially hurtful. Facebook's practice of "sculpting digital voids," as Ben Jacobsen terms it, constitutes "an algorithmically enabled strategy of forgetting."[13] It works by preventing some user-generated content from being recycled via "Memories" on the basis of its presumed-negative affective charge, which the app's filtering and ranking algorithms discern by way of metadata, user engagement history, any

data entered into a personalized blacklist, and the recognition of keywords or images (such as the names or resemblances of exes) thought to be associated with "unpleasant or less important memories" for the user who originally shared it.[14] The strategic paring-down of what is revealed in one's revolving door of a Facebook archive, for Jacobsen, responds to a cultural moment in which "all information has become readily available and easily retrievable, where there is an excess of information and an overexposure to data."[15] Carving out these "digital voids" emerges as the platform's solution to an excess of data shot through with the complexities of human emotion. Unwilling to risk alienating a user—and perhaps rightfully so—Facebook quietly identifies some material as hazardous waste and quarantines it, preventing it from leaking into the memory bank of innocuous content that would appear so essential in its efforts to cultivate and capitalize on user nostalgia. To keep users from deleting certain posts or abandoning their accounts altogether, Facebook remembers to forget.

(Re)Collection: Surplus Data and Digital Hoarding

Web 2.0 platforms like Facebook not only tend to quite visibly recycle and recirculate choice data we provide them in the form of user-generated content, they also *pre*cycle personal information at the moment of its disclosure. To the degree that we can consider a social media platform such as Facebook or Twitter to function as something like an online file-management system—albeit one subject to the invisibilized, algorithmically distributed whims of a neo-feudal techno-oligarchy that may contravene any claim on the part of the lay-user to the possession of one's own personal data—the rent we pay for space on their servers is tacitly collected through the aggregation and sale of those data to advertisers. Twitter's "Privacy Policy" frames the extractive process in terms of volition: "By publicly posting content when you Tweet, you are directing us to disclose that information as broadly as possible."[16] Through the language of "direct[ion]," the platform names us active collaborators in our own market profiling by virtue of using the service for its intended purpose, which is a common refrain throughout the official policies of all manner of like apps. Facebook virtuously asserts in its "Data Policy" that "[w]e don't sell any of your information to anyone, and we never will," before clarifying two subsections later that what they mean by this is "information that *personally* identifies you."[17] Construed as distinct from who one is as an individual, a user's demographic information, interests, and known or inferred consumer purchase history all remain on offer to advertisers in aggregate form.

The mediation of our thoughts, communications, photos, videos, and still other modes of expression on Twitter, Facebook, or any Web 2.0 platform therefore entails the immediate recycling and repackaging of what we share into something legible for those who would seek to advertise their goods and services to us. Independent of its own individual deletion, should we even care to delete it, a post begins its afterlife as the informational basis of yet another star in the constellation that is you, the consumer, at the time of its publication and capture. If, as Alice Marwick suggests, "the 'profile' [is] the key unit of Web 2.0,"[18] it is in part because the profile—in becoming something *more* than the total sum of a user's posts through their diachronic accumulation in a centralized location—comes to profile the user, both for others in one's network and for the ad revenue-dependent networks themselves. For thinkers such as Dean, our asymmetrical relationship to "the owners of communicative capitalism's media platforms," whom she likens to "[neo-]feudal lords," is for this reason characterized by the exploitative appropriation of our surplus data.[19] She writes:

> They appropriate the surplus generated by our use—the data and metadata that accompan[y] our communicative interactions. Through networked personal communication devices, *the social substance* is appropriated, stored, and mined for the extraction of the resource 'information.' What was common becomes private, expropriated from us … through the "feedback," data, and metadata generated by networked lives.[20]

Provocatively framing data as a surplus produced in the very act of using these platforms to communicate, Dean underscores the fundamental

disjuncture between the differential social value users may assign to posts and the immanently material value they hold for the landowning class of tech companies on whose server farms we inadvertently, immaterially toil. In unspoken exchange for the space to store googol exabytes' worth of selfies, subtweets, nightly dinner menus (as my grandma is wont to post on her Facebook), now-prehistoric rage comics, or unpublished TikTok drafts—as well as the bandwidth required to access on-demand virtually any of these things on our own profiles or on someone else's—we are made to provide the personal data encoded therein.

But this distance from the material reality of our uploads, as well as from the amount of power, computing and electrical, they require for their own continual maintenance, also divorces us from their sheer quantity and disincentivizes any impulse to delete redundant, outdated, or simply uninteresting data, which may well hold true when it comes to how we manage local storage on our personal devices. "[W]ith the shift to apps and streamed content, which favors constant connection to a decentralized database in the cloud, over local (i.e., saved to your computer or hard drive) media collections," writes Mél Hogan, we become reliant on scores of invisibilized data centers to provide access to our own files, our "memories." This dependency raises real ecological concerns not only insofar as discrete acts of content-retrieval expend a not immeasurable amount of electricity (necessitating the continued consumption of fossil fuels at scale) but also in that "an incredible amount of energy is reserved for *idling*."[21] Wendy Chun suggests that the hidden costs of idling go hand in hand with our cultural construction of digital archives as idealized extensions of human memory, noting: "If our machines' memories are more permanent, if they enable a permanence that we seem to lack, it is because they are constantly refreshed so that their ephemerality endures."[22] Although Chun makes the remark in reference to digital storage in general, the stakes of her claim take on increased urgency in the age of cloud computing and Web 2.0, for we now reflexively expect even those digital objects that we *treat* as ephemeral at the time of their creation—not that we may merely recognize as *formally* ephemeral, as at risk of some looming obsolescence we might hope to stave off—to endure near-indefinitely. While Twitter users are encouraged to share "[w]hat's happening" in characteristically brief tweets, for example, individual tweets themselves recede into a vertical feed of content that buries past updates and renders them functionally obsolescent in a matter of hours, days, weeks. That I can, at will, view a tweet of my own from 2010 on a now-defunct account, and something as meta-commentative and documentary as "I don't know what to tweet anymore," at that, speaks to the ways in which the enduring ephemerality once imagined of the digital has become something of a realizable standard business practice for companies involved in the management of user-generated content and sale of consumer data.

Whether our newfound ability to accumulate and preserve vast records of past thoughts via social media platforms is "good" or "bad" or altogether gray is beside the point. Of interest here is the way this increased storage capacity, at considerable remove from the user and at virtually no cost to them, has potentially reordered our relationship to the digital texts we create. If only to the extent that we no longer *need* to actively weigh one artifact against another for the purposes of freeing up space, their indefinite storage on platforms flattens a user's posts into equally valuable artifacts. This framing perhaps risks making too big a deal out of what is, for most, a non-issue. After all, Moore's Law assures that computing power doubles every two years, and it would in any event be hyperbole to suggest that the energy required to store my uncle's Facebook statuses are contributing in any measurable or meaningful way to the destruction of the planet, relative to everything else. No, without succumbing to the rhetorical allure of conjecture—and asserting, for instance, that maintaining user-generated content at our current rate *may*, in the future, *one day* pose a problem for the environment, which *feels* true in the present moment but could be dispelled tomorrow—what I find most alarming is what this trend spells in terms of attachment, attention, and cultural (re)production.[23] Even as a fantasy or phenomenon confined to digital culture, if we forfeit the lived necessity of discarding the obsolescent, if we give up the category of trash or lose sight of the ephemeral's immanent link to it, the whole terrain of meaning, sentimentality, and taste begins to shift. We undergo metamorphosis: transforming from a culture of collecting and curating digital artifacts into one of hoarding everything written in binary code.

Interestingly, the spectacularization of compulsive hoarding on primetime television, most notably in A&E's *Hoarders* (2009–), took place in the immediate wake of Web 2.0's initial boom in the years surrounding 2006, with Facebook's public launch. While it might be naïve to chalk up the show's premiere to much more than the post-millennial tendency for networks like A&E, TLC, or the History Channel to make family-friendly entertainment out of the strange perversities of late-capitalist American life, it would not be entirely without precedent to see the hand of the digital in relation to its sudden public interest at this time. In his investigation into the phenomenon of print-matter hoarding, Daniel Fried makes a similar connection, reporting that "empirical research on this particular condition [beginning in the 1990s] has coincided perfectly with the maturation of the internet—a development which might otherwise be suspected of radically altering pathologies often centered on the saving of texts from oblivion."[24] Tracing the history of the textual hoarder as a Western literary archetype to the late-16th century, Fried relates the emergence of textual hoarding to the dawn of print culture and nationalism in the Early Modern period, as well as to a certain "consciousness of the historical rupture in information technology."[25] Fried ultimately cautions that "no amount of digital hoarding presents the same threat to health and safety as does physical hoarding" and attributes "our mild digital hoarding panics" to the images of material hoarding we see in shows like *Hoarders*.[26] Nevertheless, his characterization of the hoarder—informed by psychologists Randy Frost and Gail Steketee—as "unable to prioritise data," "form adequate conceptual categories," or otherwise "distinguish hierarchies of value" proves curiously resonant with what we have discussed with regard to Web 2.0 and digital content-production.[27]

Just as the practice of hoarding printed material is co-emergent with an expansion in the technological capacity to produce and store information in print, so, too, does what we might uninventively call *digital hoarding* in the contemporary moment arise alongside the proliferation of social networking platforms. With neither the felt need nor the incentive, social or structural, to delete old content, Web 2.0 users would seem to become similarly "unable to distinguish hierarchies of value" among their own posts, allowing posts to pile up along users' increasingly difficult-to-sift-through profiles without apparent rhyme or reason. The only notable exception to this rule is perhaps Instagram, which employs a distinctive grid-based feed to organize the visual content that lines one's profile, with the result being an often highly aestheticized curio-like collection of disparate photographs. Decisively, however, at the height of its popularity in 2017 (particularly among Generation-Z users, who were at that time entering or graduating from high school), Instagram unveiled its "Archive" feature, which extends users the ability to sculpt their profiles *without* deleting old content by effectively creating a cache in which they can store former posts temporarily or indefinitely. The function thus allows users to circumvent the dilemma of whether or not to part with an old photo that has since lost its value as an aesthetic signifier (but perhaps not its sentimental value), in seeming recognition of the ease with which most are able to navigate through years' worth of content on that particular app due to the unique affordances of its profiles. If Instagram's Archive button enables a kind of digital hoarding, it is of a savvy, secretive variety, relative to the likes of Twitter or (less so) Facebook. Indeed, if the spectacle of *Hoarders* lies in our coming face-to-screen with the hoard in all of its disarray and in the quasi-sublime overwhelm that accompanies that act of witnessing, these platforms deny us that affective encounter by distributing user-generated content in such a way that we never get a full glimpse of all that any one user has amassed. Instagram tidies up before the cameras start rolling; Facebook and Twitter lead us down long, ambling hallways.

Writing on media obsolescence, John Durham Peters muses that the "[m]initaturization of data storage puts the data out of reach of the unaided human senses."[28] To this, we might add that the gross multiplication of user-generated data within the user-facing end of data storage systems, however physically miniaturized, likewise puts the data out of reach of the unaided human senses, as it masks the enormity of their total volume by offering us only a necessarily limited, partial view of the hoard. Because humans are sentimental, because we relate to and treasure things that others might not, it is difficult to pronounce any such data "trash" on its face. But we can name much of them obsolescent or nonfunctional, even as objects of our sentiment, if only because in their sheer excess, so accumulated on and by social media

platforms, these data present a legitimate challenge to the limits of human cognition. I might not think of my older Facebook statuses as trash if or when I go to delete them one-by-one, but in the abstract, they do constitute a form of garbage in the strict anthropological sense, as "matter out of place," matter that once served a defined purpose (to communicate, in this case) and that now occupies some far-off corner of a corporate server as a defunct reminder of that purpose.

The fact remains, in any event, that it is tough to care about what one no longer remembers or willingly revisits and that Web 2.0 platforms encourage the sustained, steady outpouring of personal information in the form of user-generated content in order to advertise more effectively. "The pleasures and anxieties of always-on computing are emphatically ambient and ordinary,"[29] as James Hodge puts it, and indeed, well beyond the moments in which this pleasure or anxiety is its most acute, their stimuli persist, records of an ordinary that has since passed, waiting to be deleted, discovered, or delivered back as a memory.

Sam McCracken is a third-year Ph.D. candidate in the Department of Comparative Literature at the University of Michigan (Ann Arbor, MI, USA), where he is also enrolled in the graduate certificate program in Digital Studies. His dissertation research centers on the aesthetics and environmental politics of disposability, with a particular interest in both actual trash and those emergent forms of digital ephemera that we don't often regard as such.

Notes

1 Apple Computer, Inc. v. Microsoft Corporation, 35 F.3d 1435 (9th Cir. 1994).
2 *Apple Computer, Inc. v. Microsoft Corporation*.
3 *Apple Computer, Inc. v. Microsoft Corporation*.
4 Alexander R. Galloway, *The Interface Effect* (Cambridge: Polity, 2012), vii.
5 Kris Cohen, *Always Alone, Except for Now: Art, Networks, Populations* (Durham: Duke University Press, 2017).
6 Nick Douglas, "It's Supposed to Look Like Shit: The Internet Ugly Aesthetic," *Journal of Visual Culture* 13, no. 3 (2014): 315.
7 Jodi Dean, "Communism or Neo-Feudalism?" *New Political Science* 42, no. 1 (2020): 1.
8 Nicholas A. John, "Sharing and Web 2.0: The Emergence of a Keyword," *New Media & Society* 15, no. 2 (2013): 167.
9 Mary Douglas, *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo* (London: Ark Paperbacks, 1966), 35.
10 Wendy Hui Kyong Chun, *Updating to Remain the Same: Habitual New Media* (Cambridge: MIT Press, 2016), 7.
11 Chun, *Updating to Remain the Same*, 2.
12 Chun, *Updating to Remain the Same*, 73. Emphasis original.
13 Ben Jacobson, "Sculpting Digital Voids: The Politics of Forgetting on Facebook," *Convergence: The International Journal of Research into New Media Technologies* 27, no. 2 (2021): 363.
14 Manohar Paluri and Omid Aziz, "Engineering for nostalgia: Building a personalized 'On This Day' experience," *Facebook Research* (blog), 30 March, 2016, https://research.fb.com/engineering-for-nostalgia-building-a-personalized-on-this-day-experience/.
15 Jacobson, "Sculpting Digital Voids," 363.
16 Twitter, "Privacy Policy," https://twitter.com/en/privacy.
17 Facebook, "Data Policy," https://www.facebook.com/policy.php. Emphasis added.
18 Alice Marwick, *Status Update: Celebrity, Publicity, and Branding in the Social Media Age* (Newhaven: Yale University Press, 2015): 7.
19 Dean, "Communism or Neo-Feudalism?" 4.
20 Ibid. Emphasis added.
21 Mél Hogan, "Facebook Data Storage Centers as the Archive's Underbelly," *Television & New Media* 16, no. 1 (2013): 7–8. Emphasis added.
22 Wendy Hui Kyong Chun, "The Enduring Ephemeral, or the Future Is a Memory," *Critical Inquiry* 35, no. 1 (2008): 167.
23 To be clear, my research *is* broadly concerned with the ecological ramifications of the data centers that power the internet as we know it today. Any number of conceivable innovations in computer science or engineering

could directly address the problem of energy-consumption by the time this essay goes to press. But the march of technological progress in this respect—even if it were to result in a completely "clean" distributed-storage paradigm—would have little impact on contemporary posting habits or the user's larger relationship to their own online cultural output. In my view, this is what is at stake, independent of technological conditions: when *everything* we produce online is rendered equally valuable, equally memorable, equally sentimental, equally worthy of saving, those once-distinguishing classifications become meaningless (or otherwise *mean less*).

24 Daniel Fried, "Compulsive Hoarding: Psychopathologies of Print, Phenomenonologies of Text," *Culture, Theory and Critique* 55, no. 3 (2014): 347.

25 Fried, "Compulsive Hoarding," 349.

26 Fried, "Compulsive Hoarding," 358–59.

27 Fried, "Compulsive Hoarding," 356, 349.

28 John Durham Peters, ""Proliferation and Obsolescence of the Historical Record in the Digital Age," in *Cultures of Obsolescence: History, Materiality, and the Digital Age*, eds. Babette B. Tischler and Sarah Wasserman (London: Palgrave Macmillan, 2015), 86.

29 James Hodge, "Vernaculars," in *A Concise Companion to Visual Culture*, 1st ed., eds. A. Joan Saab, Aubrey Anable and Catherine Zuromskis (Hoboken: Wiley, 2021), 223.