

On Reading and Being Read in the Pandemic: Software, Interface, and *The Endless Doomscroller*

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Introduction

For years now, the modern smartphone has provided comfort and distraction during breaks or interruptions in the flow of time (Mowlabocus). But perhaps no moment in modern history has provided such widespread and coordinated breaks in that flow as the early COVID-19 pandemic. A time marked by government-mandated shutdowns of non-essential activities, many found themselves working and/or going to school from home, with travel and entertainment plans indefinitely postponed. Further, the period created acute needs for new knowledge, as well as additional desires for comfort and reassurance in the face of global uncertainty.

Eagerly awaiting anyone who reached for their phones in these moments were the social media sites, spaces which a majority of US adults report they are likely to get news from (Shearer). But these platforms aren't designed to inform their users with the best, most accurate information. Instead, they are optimized to *engage* them (Levy, 301). And while humans were already predisposed to react more strongly to negative news stories before the pandemic arrived (Soroka)—the expression “if it bleeds, it leads” comes to mind (Pooley)—then a global existential crisis around a once-in-a-century pandemic is likely to have heightened that predisposition.

At the heart of this exchange between users seeking information and comfort and social media systems providing a response is the act of reading. Users read posts from their friends and follows on an infinitely-scrolling algorithmically-generated and personalized “feed.” In turn, the platforms read the users, analyzing their every recordable action for clues about what the system should provide next to keep that user on the platform, continuing to scroll and “like” and post.

This combination of algorithmic social media feeds, a populace largely stuck online, new gaps in the flow of time, heightened global anxiety, and an uncontrolled pandemic produced a perfect storm of excessive bad news reading. This storm often left users stuck in the scroll, “unable to disrupt [their] own behavior” (Lovink, 78). The activity became so pervasive that it gained a new term called “doomscrolling.”

This paper examines the material at the heart of doomscrolling: software. Software sets the “conditions of possibility” for its users, necessitating careful examination of its smallest components (Fuller, 2). Software and networks compel habits that turn users into machines, “neoliberal subjects ... that are always searching, rarely finding” (Chun, 17). Contemporary software interfaces hide user datafication that structures user action, making it important to “cut up and take apart” these machines that read us as much as we read them (Andersen

and Pold, 72). This is followed by a discussion of the author's net art / e-lit project, an alternative software interface called *The Endless Doomscroller*. Through its distilling of social media and news headlines down to their barest most generalized phrases and interface conventions, *The Endless Doomscroller* asks viewers to consider why social media users can't look away from the scroll, who most benefits from this new compulsive behavior, and what art can reveal about reading and being read in this digital and pandemic age.

Social Media Platforms, Interstitial Time, and the Emergence of Doomscrolling

"IT'S 11:37 PM and the pattern shows no signs of shifting. At 1:12 am, it's more of the same. Thumb down, thumb up. Twitter, Instagram, and—if you're feeling particularly wrought/masochistic—Facebook. Ever since the Covid-19 pandemic left a great many people locked down in their homes in early March, the evening ritual has been codifying: Each night ends the way the day began, with an endless scroll through social media in a desperate search for clarity." — Angela Watercutter, Wired, 25 June, 2020

Though the pandemic has been a monetary disaster for many, with record-setting job losses and other economic indicators frequently earning it the title of "worst [downturn] since the great depression" (Zumbrun), not everyone has suffered equally in this period. Alongside tech sector neighbors such as Amazon and Zoom, the pandemic has been good for the social media platforms. Facebook's stock price rose by 23% in 2020 (Trefis). Twitter's Q4 2020 revenue was up 28% over the previous year (Conger). And platform CEO wealth has followed suit, with, for example, Mark Zuckerberg's personal wealth increasing by \$40 billion USD in the last year (Kneuen).

In some ways the pandemic came at an opportune time for the social media giants. Facing continued scrutiny ever since the 2016 US presidential election, the platforms welcomed an opportunity to highlight a positive role they could play within a locked-down society. But although Facebook, Twitter, and others have indeed provided opportunities for digital connection during these times of social distancing, the era hasn't sparked any significant reconsideration of the platforms' core design constraints. They are still focused on key metrics such as monthly active users (MAUs) at Facebook or monetizable daily active users (mDAU) at Twitter. They still optimize their feeds for engagement (Levy, 413). Their focus remains on growth, as their profit continues to come not from genuine user-to-user connection but from the value of data they extract from users under surveillance capitalism (Zuboff).

One key to this growth has been the expansion of "interstitial time," temporal breaks in the normal flow when so many reached for their digital devices. These increased gaps have made possible new opportunities for "mindless scrolling" that becomes "meditative" (Mowlabocus) and a "distraction from uncertainty" in the face of "existential anxiety" (Hassan). The combinations that arose from these factors—increases in stress, breaks in the normal flow of time, social media feeds used as a source of news, feed algorithms optimized to increase engagement metrics, and a hunger for information in the face of often confusing government messaging (Feldman)—all gave rise to a condition that came to be called "doomscrolling."

Doomscrolling refers to the ways in which people have found themselves regularly—and in some cases, almost involuntarily—scrolling bad news headlines on their phone, often for hours each night in bed when they had meant to be sleeping. Kevin Roose, writing in the *New York Times* in March of 2020, described the condition as “falling into deep, morbid rabbit holes filled with coronavirus content, agitating myself to the point of physical discomfort, erasing any hope of a good night’s sleep” (Roose). *Wired* characterized it as a “roll toward annihilation,” where each person “watches the demise of so much, while also slowly destroying themselves” (Watercutter).

Unquestionably the realities of the pandemic necessitated a level of vigilance for the purposes of personal safety. But doomscrolling wasn’t just a natural reaction to the news of the day—it was and continues to be the result of a perfect yet evil marriage between a populace stuck online, social media interfaces designed to game and hold our attention, and the realities of an uncontrolled crisis. Yes, it may be hard to look away from bad news in any format, but it is nearly impossible to avert our eyes when that news is endlessly presented via designed-to-be-addictive social media interfaces that know just what to show us next in order to keep us engaged.

Infinite Scroll, the Doomscrolling Metainterface, and the User as WHILE Loop

A primary interface mechanism central to doomscrolling is the infinite scroll. An interface paradigm common amongst sites with some kind of algorithmic feed (e.g., search, streaming content, and social media sites), infinite scroll is an asynchronous, dynamic loading mechanism that fetches new data as a user scrolls, and “reduces or eliminates page breaks within the interface” (Monteiro). Key to the user experience of infinite scroll is that the page they are browsing never appears to end. As they approach the bottom of the page, the site detects that condition and appends new material below it. A key aim of the infinite scroll is to remove interface “friction,” to transform the mindful action of page navigation “into a homogenous, seamless” and repetitive behavior (Lorusso).

Any time a corporate software interface employs interaction techniques aimed at reducing friction is a moment that warrants further study, especially when that technique obscures the visibility of a vast infrastructure behind the scenes. Andersen and Pold theorize and name the object produced through such obscuration (and other tactics) as a “metainterface” (Andersen and Pold). To distance the user from these hidden layers of computation and data, metainterfaces employ techniques such as “minimalist hiding, e.g., the hiding of the datafication, monitoring and profiling going on in cloud computing infrastructures behind its immediate, minimalist user-interface” (Pold). Such distancing blurs the interdependence of user-directed consumption and use (e.g., reading posts on a social network feed) with system-directed consumption and use (e.g., the social network’s reading of user behavior and preference through surveillance-based data analysis of that user’s every action) (Andersen and Pold, 71-72). This kind of “double-sided reading” is characteristic of the metainterface, and a key mechanism driving not only surveillance capitalism at the heart of social media (Andersen and Pold, 96), but also the habit of doomscrolling.

In other words, when we read news on a social media platform, the platform reads us back. And the aim of the system's reading is to predict what content we are most likely to consume next, a prediction gained through "processes of monitoring, quantifying, and calculating consumption in controlled environments that can predict general behaviors" (Andersen and Pold, 72). Through its commodification of "reading, language, and the user's body" (Andersen and Pold, 125) this prediction serves the platform's ultimate goal of increased engagement.

A key way this double-sided reading combines with social media's infinite scroll—and the anxiety inherent to uncontrolled pandemic—is to transform the human's act of reading away from one of navigation (of concepts, paths, narratives, etc.) toward a sort of looping consumption of negative headlines. Unable to stop the cycle, the doomscrolling metainterface reprograms the user into habitual repetition (Chun, 69). Interestingly, this habit ends up resembling a key concept from computer programming called `WHILE`. (Hou Je Bek, 182) `WHILE` is a code execution loop that runs indefinitely until its stop condition evaluates as `true`. Before the pandemic, a social media reader's stop condition (in the face of an infinitely scrolling feed) might have been `when bored or has something else to do`. But in the early months of the pandemic, faced with an interface feeding anxious users endless messages that amplified their fear, the stop condition became `when no longer anxious OR when nothing left to read`. Infinite scroll ensured the latter option was never true, while the system's behavioral analysis ensured the former condition would never be reached. Users became stuck in a never-ending loop. As a result, the practical stop condition probably became something akin to a fatal exception in computing along the lines of `when no longer able to stay awake OR when the device runs out of power`. Either way, the aim of the system to keep users on the platform as long as possible was thus achieved by the doomscrolling metainterface.

Net Art / E-Lit, Reductive Interfaces, and *The Endless Doomscroller*

The cultural effects of interfaces is an ongoing subject in net art and electronic literature. Artist Joana Moll's *A Poetic Deconstruction of the Interface* is a series of workshops that train individuals to critically examine contemporary interfaces, using screen-taped paper cutout erasure templates as a key analytical tool (Moll). Matthias Pitscher's work *Mindful Scrolling*, part of his *Social Media Meditation* project, offers nothing more than a vertical webpage of empty boxes that never ends, using abstraction and simplification to critique the infinite scroll (Pitscher). Winnie Soon's *Unerasable Images* occludes the majority of image search results for the term "六四" ("64")—"a reference to the date of the student-led Tiananmen Square Protest in Beijing in 1989"—in order to reveal how "Tank Man" images persist online despite the Chinese government's aim to scrub such images from the internet (Soon). In his book *Electronic Literature*, Scott Rettberg describes the sub-genre of "network writing" as a way to "rethink the ways we engage w/ the network," and as a "critical mirror to help us better understand the networked society" (Rettberg, 182). One example in this area would be *The Deletionist* by Amaranth Borsuk, Jesper Juul, and Nick Montfort, a browser-extension-based poetry generator that hides words on a page of the user's choosing to create new poetry out of the old prose (Borsuk). Each of the example works and genres above (and many not described here) takes on the interface as a site of aesthetic

manipulation using techniques such as erasure in order to examine and/or critique software and its effects.

The author's artwork *The Endless Doomscroller* (viewable at endlessdoomscroller.com) is a net art / e-lit work that examines the cultural effects of doomscrolling, an alternative interface that acts as a lens on our pandemic era software-enabled collective descent into despair (Grosser). The work presents itself on screen as a simple social media and/or news publication feed, with a masthead at the top and a list of feed items below (each one as text contained within outlined boxes in a single vertical column) (see Figure 1).

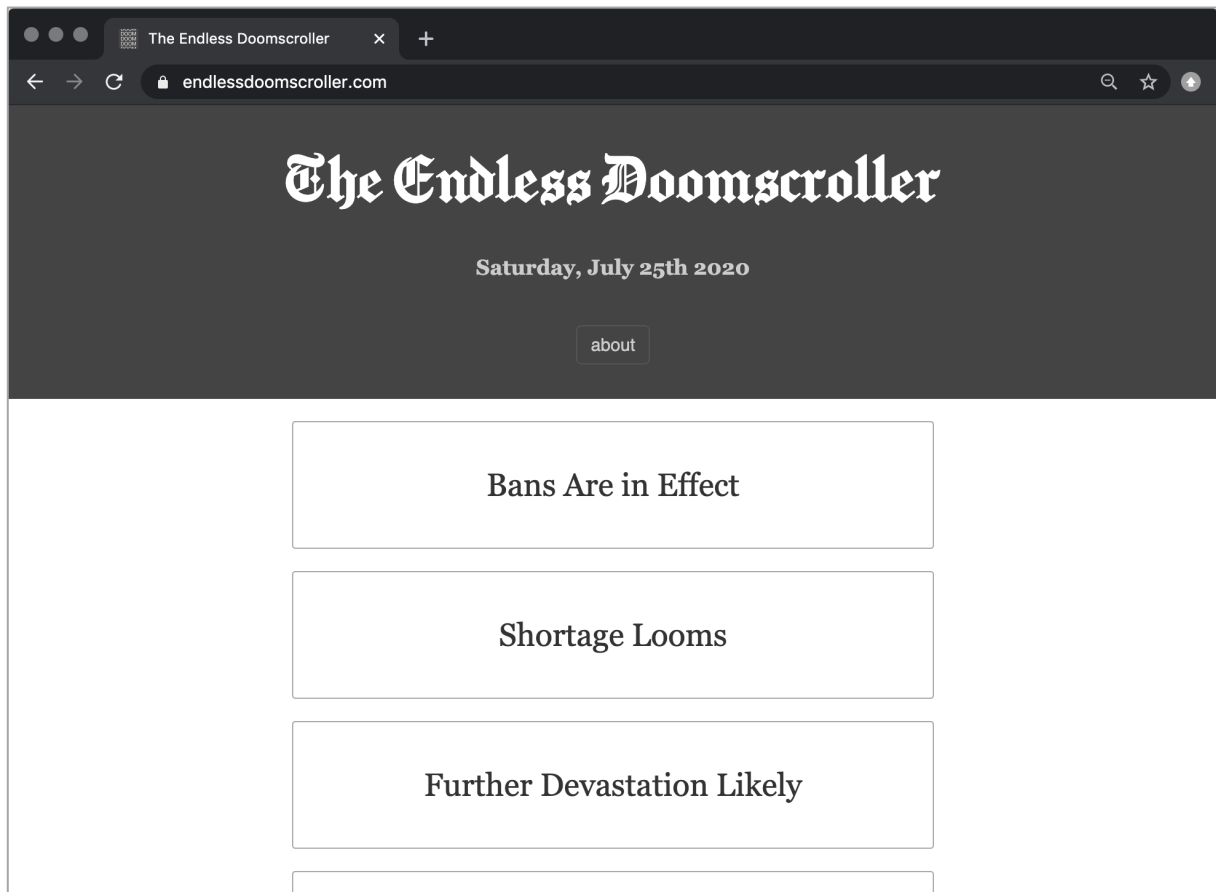


Figure 1: *The Endless Doomscroller*, interface screenshot

The text of each item is a short headline, such as:

- All Events Cancelled
- Devastation Worsens
- Lockdowns Imminent
- Outbreak Continues
- The Numbers Look Bad
- Cases at Record Levels
- No End in Sight

Each item has a hover effect when the mouse enters its area (suggesting it might be a button), but none of the items are clickable. The only action afforded is scrolling. And no

matter how long one scrolls—or how fast they scroll—*The Endless Doomscroller* will never stop presenting its bad news headlines. They just keep coming. The user not only won't ever reach the end, but also will never see a "loading" indicator typical on sites like Twitter when one scrolls to the bottom fast enough.

The Endless Doomscroller's primary technique could be argued as one of *reduction*. The work distills news and social media sites down to their barest most generalized messages and interface conventions. Its headlines are derived from real news headlines found on various social media sites during the first months of the pandemic (with ongoing updates ever since), manually composed simplifications of those negative messages into their most basic form. The social media feeds discussed above are reduced down to their core interaction: the infinite scroll. Through these tactics, *The Endless Doomscroller* deconstructs the doomscrolling metainterface, revealing how it is changing what and how we read in the digital and pandemic age.

Visitors to the work, both users and journalists, have written about experience of *The Endless Doomscroller* on mainstream social media and in publications such as *ABC News*, *Gizmodo*, *Stuttgarter Zeitung*, and *Mic*. Their responses reveal some of the effects of a reductive net art interface. For example, some users of the work were compelled to respond sarcastically, using a tweet or Facebook post as an opportunity to reflect on their typical social media platform of choice. A few examples (source is from Twitter unless otherwise indicated):

"the only source of news I trust" —@PonchoRebound

"perfectly healthy and normal" —@waxy

"Uplifting" —@iamDeveloper

"most trusted source of news" —@numberless

"The only news site you need any more" —@DavidKridler1

For others, the work enabled their own sort of reductive social media analysis:

"fear fear fear fear" —@save2memefolder

"ha ha ha sob" —@catacalypto

"basically twitter" —@oler

Some used their quote tweets to post more pointed critiques:

"Are we chasing/being-fed what's the worst thing that happened on the Earth today? How news and social media feels like in these times.. The Endless Doomscroller" —@voidmonk

“Twitter = “ —@toutlereste

“This feels just like scrolling through twitter but without the pull to engage” —
@YoavGivati

“For America, the road to doom is a rewarding one, abolishing the New Age
positivism PR machine that refuses to address inequality, racism and the destruction
of the public domain, infrastructure and education.” —@glovink

And for many, the work elicited some form of “oh, *this* is what I’ve been doing with my
time”:

“I FEEL SEEN” —@cstross

“Omg, I feel so called out. I need one of those shock collar things that knows when
I'm doomscrolling.” —Annie Norman on Facebook

“Who recorded my actual train of thought and made it into a website?” —Aaron
Elkins on Facebook

“This is what my browsing and internet has looked like today and I need to cut it
out.” — @ryanruppe

Gizmodo echoed these sentiments, writing: “This morning, way too early if you ask me, the
Gizmodo Slack channel was dosed with acid reality, momentarily shattering a cozy illusion of
purpose and the structure of days spent on the internet. I stared down my life, past, present,
and future—thanks to *The Endless Doomscroller*” (Kimball).

Jay Castello at *Mic* wrote about the work as “soothing my doomsday anxieties.” In particular,
they pointed to the work’s technique of abstraction as soothing mechanism, writing:

“...The Endless Doomscroller strips away content that could lead to a spiral of reading
increasingly worse things. On Twitter, for example, a tweet sharing bad news can be
a portal to a wall of replies full of bigotry or coronavirus denialism. Grosser’s project
at least takes away that additional stressor. Similarly, the [work’s] heavily abstracted
headlines ... are a reminder that any real headline is also an abstraction of its article’s
contents. ... By serving as a reminder that doomscrolling doesn’t provide a full picture
of the world, the Endless Doomscroller seems to erase some of the damage of its
real(er) counterpart. Later, when seeing bad news online, it’s easier to challenge the
snap assumptions caused by the headlines” (Castello).

By stripping away the specifics wrapped up in each headline and minimizing the mechanics
behind most interface patterns, *The Endless Doomscroller* appears to be creating an
opportunity for mindfulness about how one spends time online and about who most
benefits from these extended scroll sessions. For some, the work animates critical discussion
about the motivations and mechanisms behind our scroll-induced anxiety: interfaces—and
corporations—that always want more. More doom (bad news headlines) compels more

engagement (via continued liking/sharing/posting) which produces more personal data, thus making possible ever more profit. For others, the piece enables a sort of exposure or substitution therapy, a way to escape or replace what doomscrolling interfaces want from and do to us.

Conclusion

Social media platforms read us while we read them. Yet neither the content provided for our reading, nor the behavioral data scanned via their reading, are for the user's benefit. They both exist to produce user engagement, structuring how and what users read in this digital pandemic age. One way they accomplish this is by erecting their sites as a metainterface, a pretty facade that portends to be in the service of the user by hiding away the myriad code, databases, advertisers, metrics, and more that prescribe what users can do, transforming users into machines that iterate on lists of doom in never-ending loops.

Through its abstraction of social media interfaces, net art and electronic literature can illuminate the structures that underlie the cultural effects of software. In particular, reduction as a strategy can counter the minimalist hiding employed by the metainterface, replacing it with a sort of *minimalist revealing*. A reduction that shows rather than hides.

Ultimately, what *The Endless Doomscroller* does is to show us how the software structures of social media change not only what we read but how we read. As an aesthetic reductive interface experience, it provides renewed opportunities for agency within the systems we all find ourselves stuck inside. In other words, when it comes to reading social media in the age of pandemic, perhaps the only way out of too much doomscrolling is endless doomscrolling.

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