

Hexing Twitter: Channeling Ancient Magic to Bind Mechanisms of Extraction

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ABSTRACT

Imagining different futures contests the hegemony of surveillance capitalism. Yet, strong forces naturalize existing platforms and their extractive practices. We set out to challenge dominant scripts, such as the “addiction” model for social media overuse, which pathologizes users as afflicted with disordered habits that require reform. We take inspiration from the subversive potential of magic, long used by marginalized people for transforming relationships and generating new realities. We present a technical intervention that *curses* the Twitter¹ platform by invoking the Homeric story of Tithonus—a prince who was granted eternal life but not eternal youth. Our design probe takes form in a browser extension that sabotages a mechanism of extraction; it impairs the infinite scroll functionality by progressively rotting away content as it loads. By illustrating the enduring ability of magic to contest current conditions, we contribute to a broader project of everyday resistance against the extractive logics of surveillance capitalism.

CCS CONCEPTS

• **Human-centered computing** → *Interaction design; Social media.*

KEYWORDS

social media, magic, resistance

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1 THE PROLOGUE: SETTING THE ALTAR

Given that private corporations control and design the online social landscape, it can be difficult to imagine how platforms might operate independent of the extractive imperative of surveillance capitalism. Because the economic model monetizes user data, platforms

incorporate features to stimulate and capture behavior [28].² For instance, extending the period of use provides a greater quantity of behavioral data, so platforms integrate mechanisms like gamification and infinite scrolling (which continuously loads content as users scroll down a page) to prolong engagement [28]. Though many people turn to social media sites for connection or self-expression, these platforms are ultimately optimized to generate profit rather than promote human flourishing or other values. Important services are so entwined with extractive practices that people acquiesce to exploitation. Those designs are not inevitable, but popular narratives support the status quo by treating rapacious platforms as normal and acceptable.

Dominant narratives naturalize existing formations; if platform practices conflict with personal well-being, the people are expected to change, not the platforms. For example, mainstream media and many academics have examined social media overuse through the frame of “addiction” [12], thus inviting the popular remedy of digital self-control tools [15]. This orientation characterizes users as tempted by the siren song of platforms, lacking the willpower and discipline to resist; they return again and again to activities they consider meaningless. Digital self-control tools typically aim to produce behavioral changes by tracking user behavior or setting restrictions on use, such as time- or rule-based blockers. While Odysseus had himself lashed to the mast of his ship with strong ropes before sailing past the sirens, these interventions bind users with wet linguine—it is easy to bypass or uninstall the tools. The addiction narrative considers the user doubly at fault: blamed for their compulsion to use social media, and blamed when self-control interventions fail to modify that behavior (as tools, across the board, do not produce long-term change [16, 27]). When we construct users as “addicts,” they can internalize feelings of guilt and shame, even though their phone use behaviors may not diverge from current norms [13]. We argue that this framework considers overuse of social media an individual failing, when it is more productive to recognize these issues as systemic. Rather than reproving the bones of sailors that litter the beach, aim at the monster sunning itself on the rocks and picking gristle from its teeth.

There is an eclectic toolbox of existing practices that contest the power of platforms. Some forms of platform resistance do not require technical support, like writing “le\$bian” to avoid queer content restrictions on TikTok [20]. There have been experiments that disrupt the underlying material (see “Sharks Want to Bite Google’s Undersea Cables” [14]), or target the high priests of platforms (e.g.,

¹The authors are aware of the recent rebrand of the platform as “X,” but have elected not to observe it on the grounds that they would rather not.

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²Though some platforms (such as Mastodon) are not operated by surveillance capitalist firms, they should not be taken as instances of truly post-extractive social media. These alternatives still operate in a space shaped by commercial platforms and often adopt their competitor’s popular features, thereby “reenacting the oppressive structures that [they were] created to escape” [10].

Twitter CEO Jack Dorsey sent his beard clippings to the rapper Azealia Banks to craft into an amulet for protection from ISIS – she instead used the hairs to steal his luck [9]). Designers and technologists have also supplied tactics: cloaking personal images from surveillance [4], dodging trackers and targeted ads [8, 19], and stripping distracting or distressing features from user interfaces [7]. Yet, social media platforms are ever morphing and developing new powers, which warrant cultivating additional practices of resistance.

To inspire new forms of resistance, we suggest a turn to a potent historical form, which has long been used by marginalized people for transformation and generation: magic. Design is not commonly discussed using magical language [23]. Even design fictions, which speculate about possible futures, tend toward “scientific” or “ironic” and leave magic an underexplored terrain [3]. The elite have long feared magic as a “tool of insubordination” which can convince the subaltern that they can “possibly subvert the constituted order” [6]. For instance, authorities cracked down on the mixing of “sterility potions” used for contraception when demand for labor skyrocketed after the Black Death; herbal lore that gave women autonomy over childbearing was a threat to the economic order, so it was criminalized [6]. Magic suggests that desired states can be brought about by ritual rather than work, which can undermine labor discipline and the rationalized pursuit of gain [26]. Though an empirical worldview would reject these practices and beliefs as superstitions, such dismissal underestimates their subversive potential. Using the language of magic, we can imagine and enforce new relations.

Here, we draw upon the ancient Greek magic practice of invoking Homeric poetry, whereby excerpts were used as incantations to effect change. Verses were selected because of a correspondence between the actions depicted and the desired outcome. Though mostly aimed at healing (a passage about the underworld was oft praised as a method to “dislodge bones from the throat”—banishing them down, down into the stomach), some recorded cases use Homeric poetry to curse [5]. We take our passage from the Hymn to Aphrodite, which contains the story of Tithonus and the fate we wish to befall the extractive mechanism of Infinite Scroll. Tithonus was granted eternal life, but not eternal youth. We map these verses onto the Infinite Scroll mechanism to shift the power dynamics between user and platform.

We present a design probe that enacts this magic ritual. Our browser extension, Tithonus, impairs the Infinite Scroll functionality, progressively eroding content as it loads. We translate the decay of tangible physical objects into the digital realm by applying techniques such as blurring and saturating images to appear weathered, and applying glitch effects to text. The rate and styles of decay correspond with the story of Tithonus, whose decline eventually led his lover to abandon him, much as the user must do when the corroded tweets become unreadable.

We restructure only one pattern of Twitter use but do so to tell a different narrative at a grander scale. Some people have a very different relationship with Twitter, and their use of the platform is fulfilling and positive. This extension is not for them—we are not advocating for any specific level of acceptable social media use. Some find the language of magic to be empowering and stimulating, but this attitude is far from universal; research on direct activists

Figure 1: Infinite scroll before Tithonus intervention.



showed that “there are many within the movement who believe that spiritual ritual and symbolism detract from serious political engagement with the issues” [24]. Our extension is just one tactic to help sustain individuals in their struggle against surveillance capitalist platforms.

2 THE RECKONING: CURTAILING PLATFORM OVERREACH

During the COVID-19 pandemic, the term “doom scrolling” came into vogue to describe the irrepressible helplessness many felt as they passively flicked through a never ending stream of depressing news. Many communed with this service daily – often to excess, ensnared by an online experience that builds in triggers to maintain engagement [2]. Yet, in a time when physical connection was dangerous and scarce, Twitter remained an outlet for socialization. Was it possible to bind some of the wicked powers of Twitter, without fully prohibiting interaction?

Users are prodded to consume endless splutterings so that surveillance capitalist firms can record their online behavior and commodify their personal data. Instrumental in this aim is “Infinite Scroll”—a mechanism used by Twitter so that as the user consumes tweets, new tweets load and fill in their place. The Feed is bottomless and eternal. This design encourages scrolling ever onward; after each sip of content more tweets well up so the user can guzzle endlessly.

How can any user hope to defeat this immortal foe? It seems impossible, until a story surfaces in memory that tells of immortality as a curse. The gods appeared to bestow yet another gift on the high-born Trojan prince Tithonus: life everlasting. But though he was blessed with eternal life, Zeus did not grant him eternal youth. We take the narrative pattern of this Homeric story as inspiration for a tool that helps a user reclaim hours of their mortal life from Twitter. This browser extension counteracts the “Infinite Scroll” functionality by rendering content with more and more distortions as a reader scrolls down their feed. This imposes a limit on how many tweets can be consumed in one visit to the site. Scroll far enough, and all tweets are reduced to illegible tatters. When users feel engulfed in a torrent of tweets, the Tithonus extension is a lifeline where the roles of interaction are recast. The Feed sickens and deteriorates in the part of the prince Tithonus. The user stands as his radiant lover, the immortal goddess Eos, who notices his withering, then cares for his declining body, and finally locks him away out of sight.

2.0.1 *The Story of Tithonus, Excerpted From the Homeric Hymn to Aphrodite.*

In much the same way was Tithonus abducted by Eos [the Dawn Goddess], she of the golden pattern-weave. He too belonged to your family line, looking like the immortal ones. Then she went with a request to the Son of Kronos [Zeus], him of the dark clouds, asking that he [Tithonus] become immortal and live for all days to come. Zeus nodded yes to her and brought to fulfillment the words of her wish. Too bad that her thinking was disconnected! The Lady Eos did not notice [verb of noos] in her phrenes that she should have asked for adolescence [hēbē] and a stripping away of baneful old age.

Well, for a while he [Tithonus] held on to adolescence [hēbē], enjoying Eos, the one with the gold pattern-weave, the one early-born. He lived at the streams of the Okeanos, and the ends of the earth. But when the first strands of gray hair started growing from his beautiful head and his noble chin, then the Lady Eos stopped coming to his bed. But she nourished him, keeping him in her palace, with grain and ambrosia. And she gave him beautiful clothes. But when hateful old age was pressing hard on him, with all its might, and he couldn't move his limbs, much less lift them up, then in her thūmos she thought up this plan, a very good one indeed: she put him in her chamber, and she closed the shining doors over him. From there his voice pours out—it seems never to end—and he has no strength at all, the kind he used to have in his limbs when they could still bend. [17]³

3 THE CASTING: REPATTERNING PLATFORM INTERACTIONS AFTER HOMERIC VERSES

The hex is cast in the secret tongue in which tweets are named – Javascript. Technically, we achieve tweet decay through several sub-tasks. The rotting afflicts both image and text. Images are bleached, faded, and blurred. This filtering also applies to videos and GIFs, so that ghostly, writhing shapes cavort on the festering timeline. For text, we use two effects: glitch and deletion. Glitchy text corrupts an underlying message by pairing original letters with an effusion of Unicode diacritical marks. Accents such as \grave{A} and \hat{A} are supported; they can be superimposed as $\hat{\hat{A}}$ and further trussed up as $\hat{\hat{\hat{A}}}$. For deletion, alphanumeric characters and common punctuation are selected and blotted out. The original message is reconstituted with spaces in the positions of the silenced characters. We map our conception of decay from real, material objects onto the online platform; we use blur, saturate, and brightness effects to make the Twitter images look like they have been bleached by the sun, details slowly smoothed away by abrasion. The materiality of cultural objects affects their meaning, so by decaying Twitter, the meaning of Twitter can change.

The rate at which these effects are introduced corresponds with the tale of Eos and Tithonus (Fig. 2). At the outset, the tweets are fresh and unmarred; no effect is applied when the tab is first opened. Eos joins with her lover Tithonus, swept away by her infatuation. As the reader scrolls down their feed, wrinkles appear. Glitches affect but one tweet in five; enough to arouse notice, but merely cosmetic. Doubt shadows Eos's luminous brow. As more tweets are consumed, they begin to deteriorate. Letters are whited-out, so that tweets crack and fissure leaving gaps the user must work to plug. Eos cares for the aging Tithonus, changing his silks and nursing him with ambrosia. The ravages of time only escalate, until the combined effect of glitch and deletion renders the tweets unreadable

³There is a popular translation of this text from Hugh Evelyn-White, who was both a classicist and an archaeologist. In 1922, he worked with the archaeology team that excavated the tomb of Tutankhamun. He died two years later and is said to have written “I have succumbed to a curse,” in his own blood before hanging himself [22]. In an effort to protect the reader from any lingering peril, the authors have opted to reproduce a translation from Professor Gregory Nagy, who is still very active and alive (aged 81 at time of printing).



Figure 2: (I) Infatuation, (II) Notice, (III) Care, (IV) Abandonment.

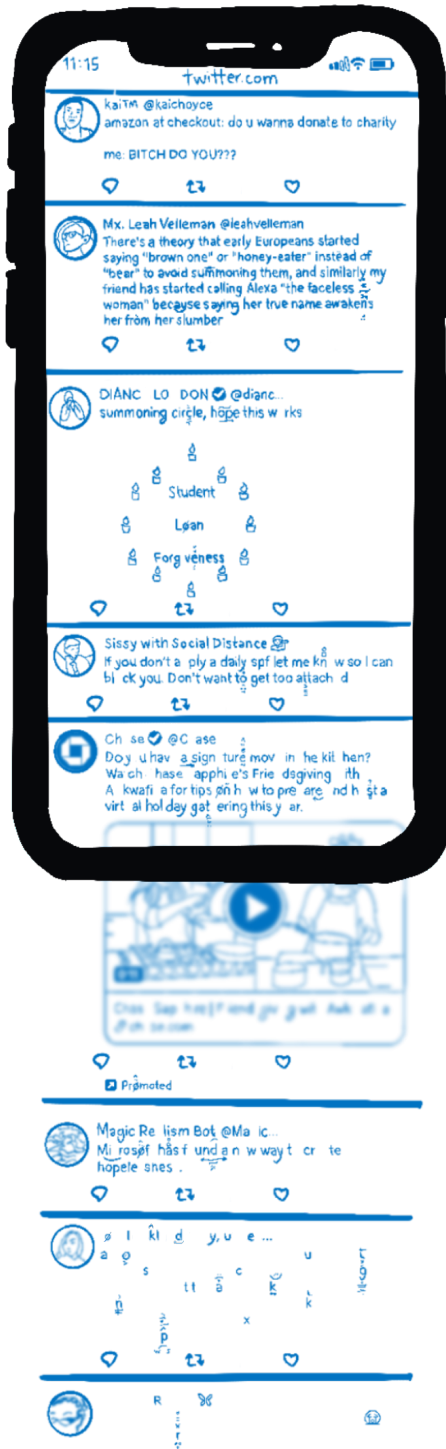
and un-reconstructible. Eos cannot bear to look upon her atrophied lover and locks him away, muffling his senseless babble.

The rate of decay is variable; the user can control how long their Twitter tryst will last before crumbling to dust. This intervention gives users agency to balance the rewards of engaging with Twitter against the costs to their time. That power is stolen away from Twitter's greedy algorithmic claws.

We restock the repertoire of resistance practices by listing this tool in the Firefox browser extension marketplace [18]. Yet, this extension remains vulnerable to changing conditions, and Twitter could easily crush our efforts if we were to attract its attention. Several months after we completed the Tithonus extension, Twitter restyled its UI. The hex did not hold, since tweets were no longer identified by the `id` attribute of an encapsulating `div` (i.e., `id='tweet'`), but were instead now a custom element (i.e., `texttt<article>`). We did not immediately update the project, rendering it a powerless, vestigial icon on our browsers. The ever-shifting social and material contexts necessitate revisiting and revitalizing forms of technical resistance.

4 THE CALLING: REORIENTING INTERVENTIONS

We reject the narrative of personal responsibility that underpins many social media overuse interventions. It justifies the status quo and directs attention away from systemic problems with surveillance capitalist platforms. Consider the popular device of time limits, which notifies users once they have spent a specified period of time on a platform. Timers confront users with single decision point, presented as a choice to either exercise self-control or give in to temptation. They do not modify the platform or attenuate its attractions; they expect the user to change. In our Tithonus extension, we extend the temporal scale so that the intervention does not hinge on a decision at particular point in time, but, rather, provides an experience that moves through multiple stages to reposition the user and the platform. It materially alters the platform by decaying its content; the platform is forced to change. Further, it calls attention to the extractive mechanism of Infinite Scroll by relating its operation to the extent of content decay. The magic ritual that we enact helps to create a technical intervention that contests both the hegemonic narratives and the design features that

Figure 3: Infinite scroll after Tithonus intervention.

support surveillance capitalism. Magic, with its ability to subvert norms and transform realities, remains a deep well of inspiration for new practices.

While our tool springs from an ancient Greek rite, engaging with other magic traditions would broaden and enrich resistance efforts. For instance, some Chinese conventions assume more reciprocity with the spirit world; if a City God received offerings but proved derelict in providing rain, their icon was publicly thrashed [1]. Prioritizing mutuality and accountability could be a valuable direction for future interventions.

Through acts of everyday resistance, a dominated class can develop and prioritize its own set of norms and values [21]. Though these acts do not immediately produce revolution, they may congeal into traditions of resistance over time and set a foundation for collective struggle [11, 25]. We point to the chips in the armor, we retell old tales in new mediums, and we whisper the possibility of new configurations. It will require a collective movement to tell our future.

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