

EXHIBIT 38

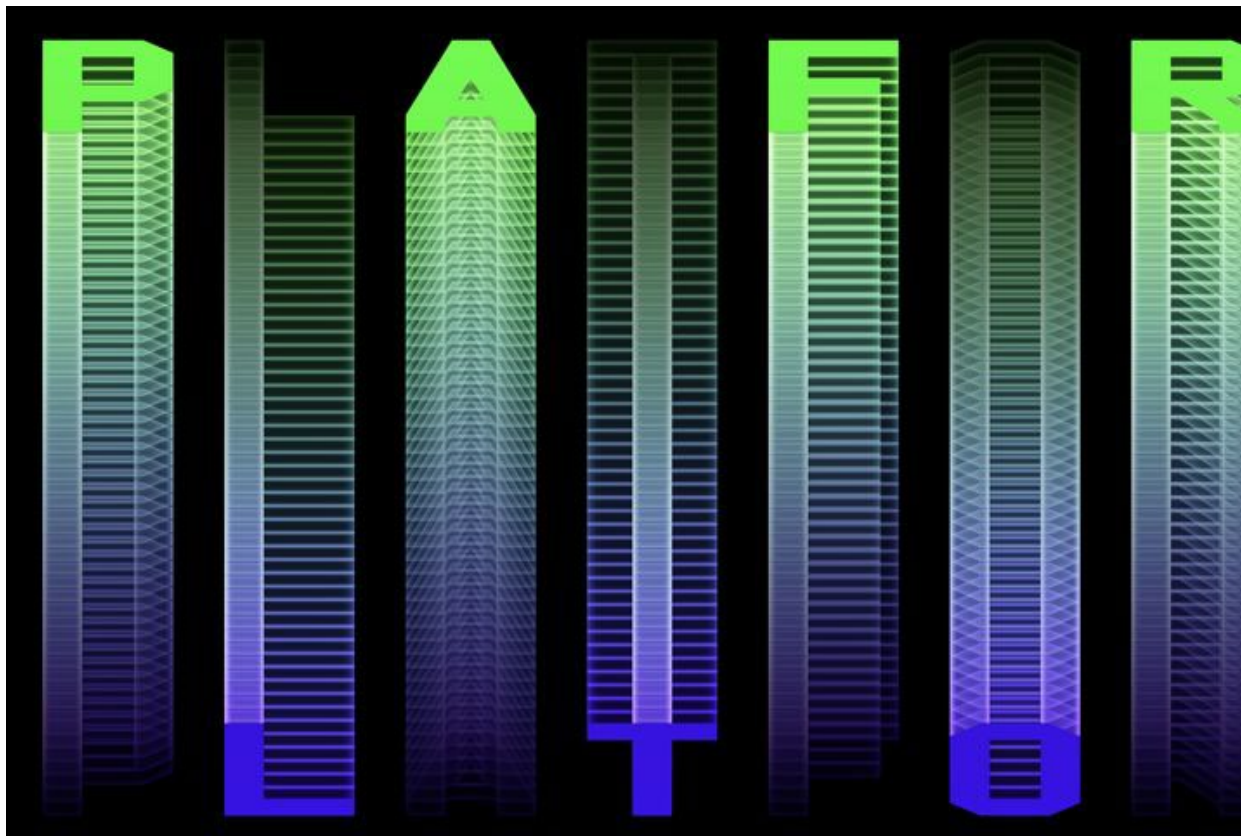
There's an Alternative to the Infinite Scroll

It's easy to feel like there's no escape from doomscrolling. The classical Chinese handscroll suggests otherwise.

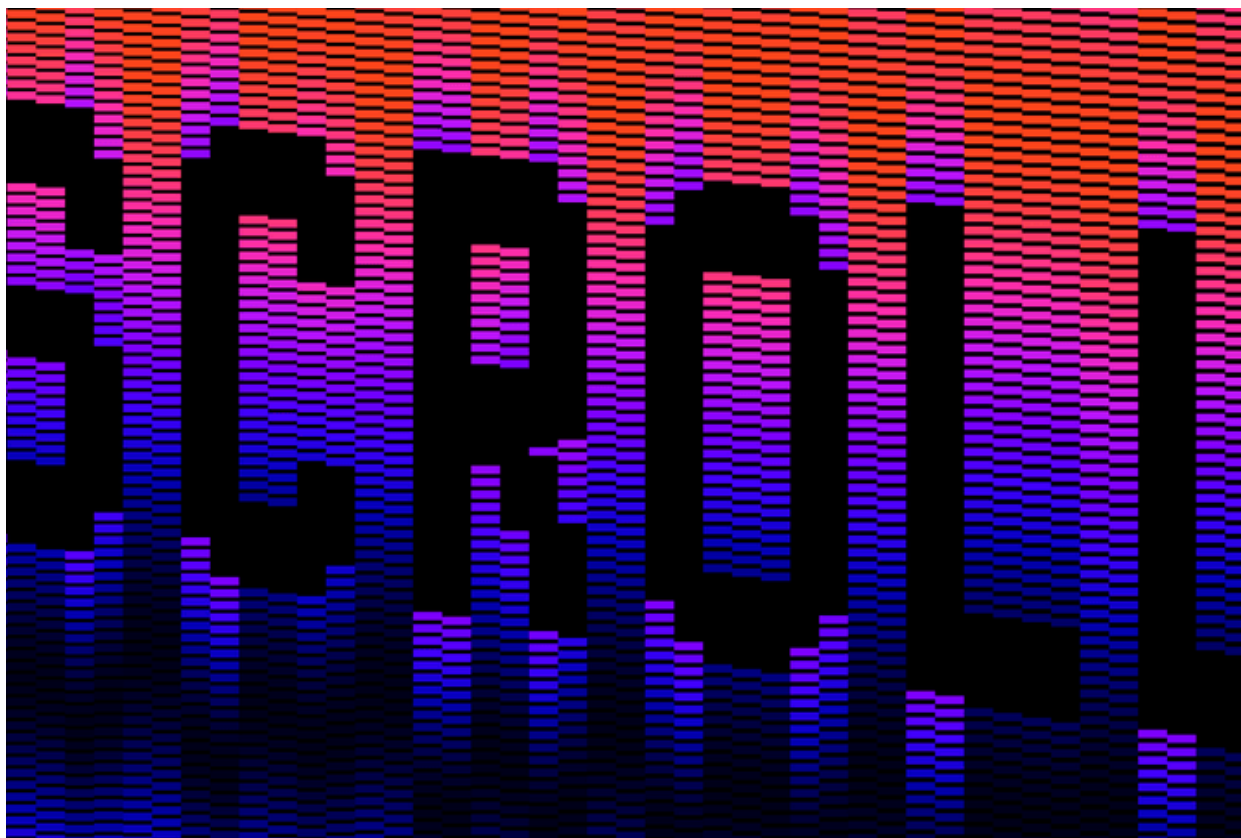
Play/Pause Button

ANIMATION: VERA VAN DE SEYP

The New Tech Lexicon



[Everything's Coming Up 'Platforms'](#)



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Unfurling the 'Scroll'

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The 'Browser' is Watching You

Sometime in the summer of 2020, I noticed an occasional, searing pain shooting up my right forearm. It soon became clear this was a byproduct of a gesture that had become as commonplace as breathing or blinking that season, if not long before: scrolling. This was how I spent most of the day, it seemed. Smartphone welded to my palm, thumb compulsively brushing upward, extracting content out of the empty space beneath my phone charger port, pulling an endless succession of rabbits out of hats, feverishly yanking the lever on the largest and most addictive slot machine in the world. The acupuncturist I saw to help repair my inflamed tendon implored me to stop, so I did, for a while—I just awkwardly used my left index finger instead.

Of course, it wasn't always this way. While a desktop computer has its own hazardous ergonomics, the experience of being online was once far more "embodied," both literally and conceptually. Interfacing with a screen involved arms, hands, and fingers all in motion on clacking keyboards and roving mice. Accordingly, the first dominant metaphors for navigating digital space, especially the nascent World Wide Web, were athletic and action-oriented: wandering, trekking, and most of all, surfing. In the 1980s and '90s, the virtual landscape of "cyberspace" was seen as just that, a multidimensional "frontier" to be traversed in any direction one pleased (with all the troubling colonial subtext that implies), echoed in the name of browsers like Netscape Navigator and Internet Explorer. As media scholar Lev Manovich argues in his 2002 book *The Language of New Media*, by the early 1990s, computer media had rendered time "a flat image or a landscape, something to look at or navigate through."

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But when the screens became stowaways in our purses and pockets, this predominant metaphor, however problematic, shifted. Like the perspectival evolution that occurred when frescoes affixed to walls gave way to portable paintings, shrinking the screen down to the size of a smartphone altered the content coming through it and our sense of free movement within it. No longer chairbound behind a desktop, we were liberated to move our actual bodies through the world. Meanwhile, that sense of "surfing" virtual space got constrained to just our fingertips, repeatedly tapping a tiny rectangle to retrieve chunks of content.

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A user could “scroll” through lines of data using keyboard commands on the first 1960s computer terminals, and the word appeared as a verb as early as 1971, in a computer guidebook. The act became more sophisticated with the introduction of the scroll-wheel mouse, the trackpad, and the touchscreen, all of which could more fluidly scroll vertically or horizontally across large canvases of content that stretched beyond the boundaries of a given screen. Ever since the arrival of the smartphone, “scroll” has been the default verb for the activity of refreshing the content that flows over our screens. The dawn of the infinite scroll (supposedly invented in 2006 by designer Aza Raskin, who has now made a second career out of [his regret for it](#)) and the implementation of algorithmic instead of strictly chronological social media feeds (which Facebook did in 2011, with Twitter and Instagram following in 2016) fully transformed the experience of scrolling through a screen. Now, it is less like surfing and more like being strapped in place for an exposure-therapy experiment, eyes held open for the deluge.

The infinite scroll is a key element of the infrastructure of our digital lives, enabled by and reinforcing the corporate algorithms of social media apps and the entire profit-driven online attention economy. The rise of the term “doomscrolling” underscores the practice's darker, dopamine-driven extremes, but even lamenting the addictive and extractive qualities of this cursed UX has become cliché. Have we not by now scrolled across dozens of op-eds about how we can't stop scrolling?

The first form of portable, editable media was, of course, the scroll. Originating in ancient Egypt, scrolls were made from papyrus (and later, silk or parchment) rolled up with various types of binding. The Roman codex eventually began to supplant the scroll in Europe, but Asia was a different story. Evolving in countless ways against the backdrop of political, philosophical, and material change in China, Japan, and Korea, scrolls persisted in art and literature for centuries and continue to be used as a medium by fine artists today.