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Critical Studies and Design History (CSDH)

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Do Social Media Networks Foster Ethical Design?

Roughly 57% of the global population uses some form of social media - the vast majority of which are controlled by a handful of companies. For example, four out of the five most widely used social media platforms (Facebook, WhatsApp, Instagram and Messenger) are owned by Meta, previously known as Facebook. The sheer scale of the social media landscape translates to 2.9 billion users on Facebook, 2 billion on WhatsApp, and 1.3 billion respectively on both Messenger and Instagram. Since at least a third of the world's population has an account on one of these platforms, Meta stands as one of the most powerful players in a thoroughly monopolized social media landscape, whilst YouTube sits closely behind with almost 2.3 billion monthly active users (Muhammad, 2021).

While social media first started as a way to connect with friends and family, it's since evolved into a coveted hobby used by all age groups (Cherney, 2020). So coveted that a small percentage of users eventually become addicted to social networking sites and engage in excessive or compulsive use. Psychologists estimate that as many as 5 to 10% of Americans meet the criteria for social media addiction today, a behavioral addiction that is characterised as being overly concerned about social media and driven by an uncontrollable urge to log on; devoting so much time and effort that it impairs other important life areas (Hilliard, 2019).

Meta ensures us that "Connection is evolving and so are we" and "The metaverse will be a collective project that goes beyond a single company. It will be created by people all over the world, and open to everyone" (Meta, 2022). The "metaverse", is an idea of a centralized virtual world, a "place" parallel to the physical world, which transpired into the mainstream landscape last year and the growth of online social communities is an example in which more of our lives—for better or worse—is spent in digital spaces (Clark, 2021). Metaverse was first recorded in Neal Stephenson's 1992 novel *Snow Crash* where the protagonist Hiro moves in and out of a

place called the metaverse, a small-scale urban landscape created through code and where users can have lifelike experiences (Roy, 2021).

Online, dopamine-inducing social environments - and the addiction that comes with them - have excelled so fast that tech giants have invested millions into this so-called future version of the internet. Facebook whistleblower Frances Haugen told UK lawmakers that she's "shocked" that the company is pouring so much money into the metaverse (Hamilton, 2021); a tactical distraction from the many harms that have come from the company's profit-driven decision-making and worried that Facebook's new immersive platform would only exacerbate its existing safety flaws (Chow, 2022).

Social media users produce the same neural circuitry that is caused by gambling and recreational drugs to keep them using their platforms as much as possible. The many features designed within its complex architecture, causes the brain's reward area to trigger the same kind of chemical reaction seen with drugs like Cocaine (Hilliard, 2019).

But how do design decisions of these widely popular social media networking sites increase its popularity, keep us coming back for more and consequently leave our offline networks behind?

The "attention economy" is a relatively new term typically exploited in ad-based businesses - where the user of a product or service is not a direct source of revenue but rather the user's attention is the product, and this product in turn is sold to advertisers or other buyers (Williams, 2018 as cited in Bhargava and Velasquez, 2020). More traditional ad-based media including newspapers, radio, and network television have operated on attention-economy business models (Wu, 2016, as cited in Bhargava and Velasquez, 2020) but, the most valuable and influential form are social media companies (PwC, 2018, as cited in Bhargava and Velasquez, 2020). The more we interact and engage, the more our data "provides the basis for invisible discrimination; used to influence our choices, both our habits of consumption and our intellectual habits." says journalist Franklin Foer (Foer, 2017).

These technologies, designed and implemented by a small group of engineers at a small group of companies, are widely deployed, and they are accessed by a large number of people. Tristan Harris, former design ethicist at Google and founder of Time Well Spent, a not-for-profit initiative to help educate businesses, users, and designers about morally acceptable technology design choices says "Never before in history have such a small number of designers—a handful of

young, mostly male engineers, living in the Bay Area of California, working at a handful of tech companies—had such a large influence on two billion people’s thoughts and choices” (Pontefract, 2018).

The complexity of social media design, alongside many of the features that make social media so interactive (and addictive), is the deep understanding of human behaviour. The user experience design (UX design) is cleverly executed, from the way we interact and engage with other users, to how we create content and share it, in tandem with the way the interfaces drive us to action and fill the space on our screens (Wood, n.d.) as you can find in Figure 1 (Varsha Pammi, 2020).

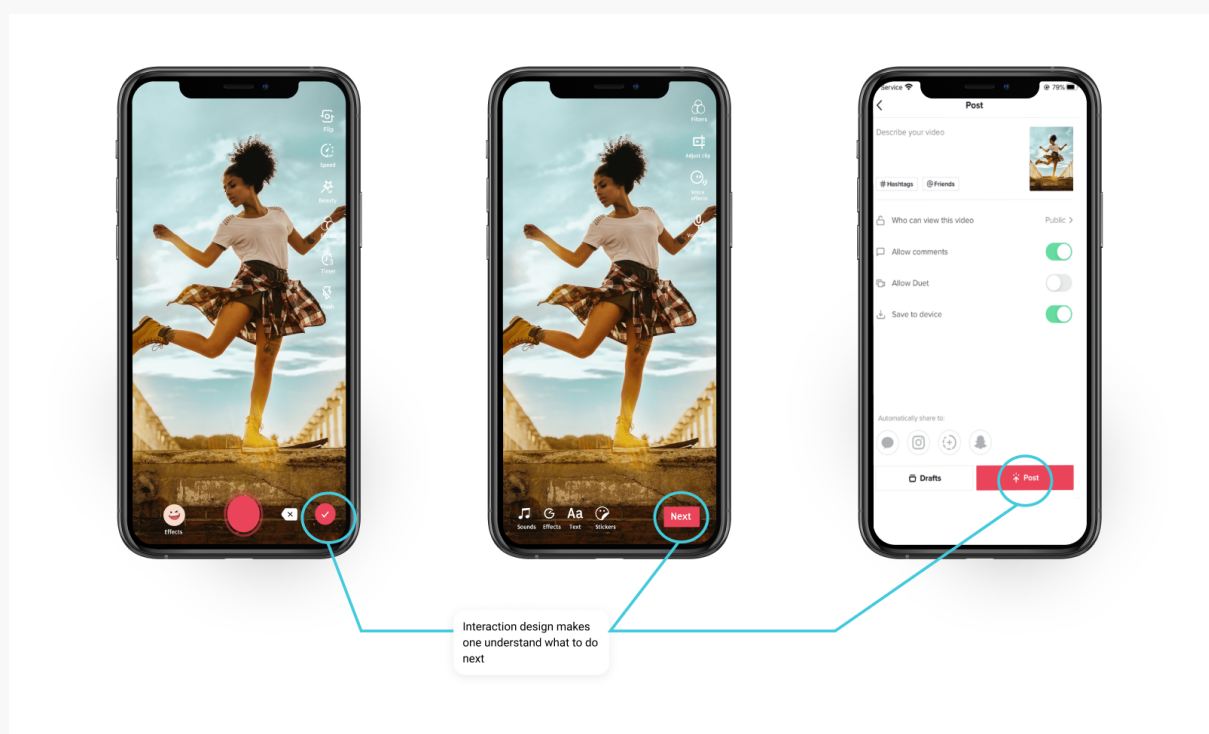


Figure 1. Varsha Pammi, 2020. Interaction Design Uploading a video. [image] Available at: <<https://uxplanet.org/what-makes-tiktok-so-addictive-e951f4ba8052>> [Accessed 13 January 2022].

In 2009, Facebook introduced the 'like' button which now currently sits within the emojis button and includes six more single-click 'reaction' emojis as shown in Figure 2. Today, emojis, first created by Shigetaka Kurita in 1999 (Prisco, 2018) are used as communicative symbols to convey emotional content from sender to receiver in computer-mediated communication. Emojis are ambiguous because they do not symbolize a discrete emotion or feeling state and thus their meaning relies on the context of the message in which they are embedded (Fischer and Herbert, 2021). One of the original designers of the like button, Justin Rosenstein, said "It is common for

humans to develop things with the best of intentions and for them to have unintended, negative consequences” (Morgans, 2017). It is argued that the like button is the main design feature that can also draw users back. Receiving a ‘like’ causes that dopamine rush, a feeling of validation and social acceptance. It’s a modern currency traded all over the internet which can be of extremely high value to both users and advertisers alike (Wood, n.d.).

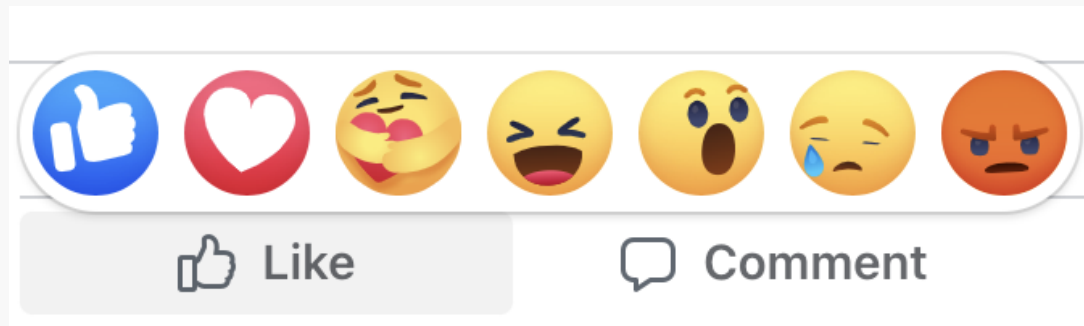


Figure 2. Claudine Derksen, 2022. Reaction emojis on Facebook. [image] Available at: <https://www.facebook.com/> [Accessed 13 January 2022].

But when Vice (Morgans, 2017) asked Rosenstein what he thinks is the most deceptive form of social media manipulation, he commented on the push notification. “The vast majority of push notifications are just distractions that pull us out of the moment,” he says. “They get us hooked on pulling our phones out and getting lost in a quick hit of information that could wait for later, or doesn’t matter at all.” Rosenstein explains further that by demanding more ethical design practices from companies - in the same way that we demand ethical environmental practices - we’ll force change and get back our free time (Morgans, 2017).

Bhargava and Velasquez (2020) argued that while the specific mechanisms social media companies use in designing their platforms in ways that have rendered them addictive have evolved over time, three design elements are common to point out: first, the use of intermittent variable rewards (or what is sometimes called the slot machine effect) (Griffiths, 2018; Harris, 2019; Williams, 2018; Wu, 2016) as demonstrated in Figure 3 (Rogers, 2021); second, design features that take advantage of our desires for social validation and social reciprocity; and third, platform designs that erode natural stopping cues (Alter, 2017: 9).

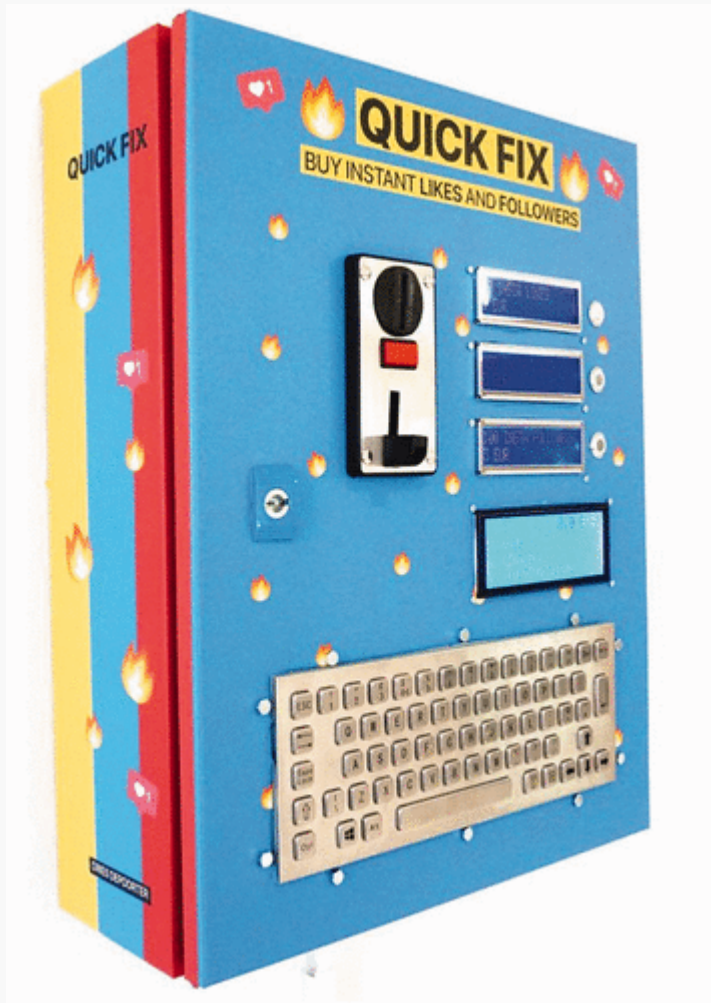


Figure 3. 'Quick fix: Machine selling likes and followers', interactive installation by Dries Depoorter. Source: Depoorter (2019), as cited in (Rogers, 2021).

From another critical design perspective, another common design feature - the 'News Feed' - which provides both personalisation and convenience, assembling a list of updates and bringing them together into a single location, begs fundamental questions about values, ideologies, and norms. (Dunne and Raby, 2001; Dunne, 2006; Bardzell and Bardzell, 2013, as cited in Munn, 2020). The infinite scrolling design feature relates back to the slot machine effect where users get variable 'rewards' from pulling the feed up then down in order to refresh content. You're unsure what will appear, but once the loading is finished, you'll likely be served a post you're interested in. Anticipation builds during the load time and the behaviour is reinforced (Wood, n.d.).

As (Case, 2018) pointed out, it will take many years of study and debate to understand and address the civic design flaws which help make social media so corrosively addictive. Although there can be a mutual benefit in using social media networks where people have built successful careers and relationships, addictive tendencies can diminish face-to-face social interaction and

the economic, social, and health outcomes resulting from it (Bekalu, McCloud and Viswanath, 2019).

Adam Alter, author of *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked*, draws on the words of Tristan Harris who says “there are a thousand people on the other side of the screen whose job it is to break down the self-regulation you have” (Wu, n.d.). This questions the moral dilemma taken on by the designers involved, between unethical practices and creating exciting experiences for users.

Claudine Derksen studied Contemporary Media Practice at University of Westminster and since graduating, she has worked in the creative media sector collaborating on wide-ranging marketing and social media campaigns. Claudine works with The Margate School, an independent nonprofit art school, leading their marketing strategies whilst studying part-time on their Visual Communication postgraduate course. She is interested in understanding the deeper psychology and ethics behind branding and marketing. When Claudine isn't working or studying, she continues to develop her own art practice and occasionally takes on commission work.

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