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**ANTISOCIAL
MEDIA**

How Facebook Disconnects Us
and Undermines Democracy

OXFORD
UNIVERSITY PRESS

2018

all too willingly click back to it at the next moment of stagnation or distraction in our day. If we post a photograph or message to our friends, perhaps crack a joke or render a comment that we hope others will find interesting, we engage with Facebook at a more immersive level than merely perusing others' posts. We then offer Facebook feedback. We change Facebook just a little bit with each interaction. It responds to us in subtle ways, offering us the possibility that our next interaction with Facebook will be slightly more pleasurable than the last. Now we are drawn back in. How many likes did my joke get? How many insightful replies did my political post generate? Did my GoFundMe appeal for help with my medical condition echo and generate donations? Did anyone I tagged take me up on the Ice Bucket Challenge? Does anyone get my jokes or care what I think? Do I matter?

It's easy to blame ourselves for this habitual return to the vortex of photos, jokes, news stories, appeals, and advertisements. I've certainly scolded myself for an hour or more blown on a flow of dog videos, family updates, shallow political expressions, and pleas for funds. Every one of those items has some value to me, just as each potato chip delivers some pleasure, some flavor. I savor them. But I lose count. And upon reflection I feel just horrible. But the thing is, snack foods are explicitly designed to make us behave this way. Food producers have studied, mastered, and tinkered with the ratios of salt, sugar, and fat to keep us coming back, even when the taste of much of the food is unremarkable. Facebook is designed to be habit-forming in just the same way.³

A SKINNER BOX

Facebook, as novelist and internet freedom advocate Cory Doctorow has explained, is like a Skinner box. It conditions us by intermittent reinforcement. "You give a rat a lever that dispenses a food pellet every time and he'll just get one when he's hungry," Doctorow told an audience in 2011. "But you give him a lever that only sometimes dispenses a food pellet, he'll just hit it until he runs out of steam because he's not sure what the trick is and he thinks he's going to get it if he just keeps on banging on that lever." Doctorow argues that Facebook's feedback mechanism is designed to work

like such a system. "The more you embroider the account of your life, the more you disclose about your personal life, the more reinforcement—intermittent reinforcement—you get about your life," Doctorow said. "Every now and again you will post something that you think will be quite a bombshell, like 'I'm thinking of dropping out of Maths,' and no one cares. But then you say something like 'Bought some lovely new shoes' and you put up a picture of them and you'll get a million of your mates turning up to tell you how awful they are." Doctorow argues that Facebook conditions us through instant, constant, low-level feedback.⁴

The psychologist B. F. Skinner achieved great notoriety in the 1930s and 1940s by proposing that animals, and thus humans, could be conditioned to engage in repetitive behavior through the delivery of stimuli—positive or negative. This concept, "operant conditioning," could be demonstrated by placing rats into what Skinner called an "operant conditioning chamber" and just about everybody else called a "Skinner box."⁵

Skinner and his followers demonstrated how operant conditioning could alter behaviors with some resilience, generating widespread concerns about potential political and commercial manipulation. Despite those concerns, Skinner's observations had great impact among designers who hoped to create machines and systems that captured attention. We see operant conditioning at work in casinos, especially in the design of electronic gambling machines. But we've not seen any operant-conditioning technology in widespread use among human beings work quite as well as Facebook.⁶

Like casinos, slot machines, and potato chips, Facebook is designed to keep you immersed, to disorient you just enough so you lose track of the duration and depth of your immersion in the experience, and to reward you just enough that you often return, even when you have more edifying, rewarding, or pleasurable options for your time and effort within your reach. This is not an accident.

Skinner's work has affected many areas of our lives, and it seems to be growing in influence. Technology scholar Natasha Dow Schüll describes both the design of casino floors and the video poker machines that now dominate the gambling industry as embodiments of Skinner's observations about operant conditioning. They are, she explains, immensely profitable

Skinner boxes. Like Skinner's rats, those who play electronic gambling machines receive cues: they sometimes win, and they often almost win. This triggers a feeling of "cognitive regret," as though the player herself failed instead of the machine tricking or failing the player. So the player immediately pumps more money and time into the system. "It makes you want to press the button and continue," one gambler told Schüll. "You live in hope because you got close and you want to keep trying. You get to learn the pattern and just get it right."⁷

In her book *Addiction by Design: Machine Gambling in Las Vegas*, Schüll describes how patrons of casinos find themselves enthralled, attached, entranced, and ultimately drained of time, money, energy, and ambition by gambling machines and the carefully designed rooms in which they sit. "In the beginning there was excitement about winning," one patron told Schüll. "But the more I gambled the wiser I got about my chances. Wiser, but also weaker, less able to stop. Today when I win—and I do win, from time to time—I just put it back in the machines. The thing people never understand is that I'm not playing to win."⁸

It's not completely fair to equate the coercive tactics and pernicious effects of casinos and gambling machines to those of mobile phones and Facebook. Facebook has never emptied anyone's retirement account or—to my knowledge—broken up families and rendered people homeless the way that casinos have. For individuals using Facebook, the stakes are lower in terms of potential harms, temptations, and rewards. In fact, the personal rewards of Facebook use are often significant and the harms to individuals slight at most. And despite the collective harms of Facebook usage that I assert throughout this book, gambling has done more damage to economies and politics this decade than Facebook would in a hundred years. Casinos contributed directly to the rise of Donald Trump, despite the fact that he seems to be the only casino owner in history unable to run one profitably. Casinos made him famous, and several wealthy casino owners funded his campaign. Facebook's influence on our current political dilemmas is, as we will see later, complex, subtle, and significant. Facebook, in contrast to casinos, is not directly responsible for much, even as it contributes to and amplifies many unfortunate phenomena.⁹

Nevertheless, the invocations of casinos and gambling machines here are still apt. We have seen a proliferation of casinos across the world along with video and algorithmically driven gambling machines at the very moment that other algorithmically driven machines have come to occupy our hands, our minds, our time, our work, our family obligations, and our money. Schüll posits that our comfort with the tactile omnipresence of electronic devices has contributed to the "cultural normalization" of video gambling machines. The interfaces are so familiar that our bodies seem to melt into them, making users more comfortable when using them than when they step away.¹⁰

Another comparison is in order. Facebook, like snack foods, cigarettes, and gambling machines, is designed for "stickiness." Unlike these other things, Facebook is designed for "social stickiness." Every acquisition that Facebook has made has been in the interest of keeping more people interacting with Facebook services in different ways to generate more data. Not long ago there were two interesting photography-based social media applications that were competing for users and investment, Hipstamatic and Instagram. Instagram ultimately overtook Hipstamatic as the dominant mobile-based photography sharing application, despite Hipstamatic's early entry into the market. Both applications offered similar filters and features, but Instagram had a social function. Friends and followers could tag each other and signal approval to each other. Mark Zuckerberg understood that this social feature would make Instagram irresistible to people. He had already seen photography and the social potential of images spike interest in Facebook. So he bought Instagram for \$1 billion in cash and stock.¹¹

The experience of posting images to Facebook and Instagram is habit-forming. People often desire approval, or at least acknowledgment, from their peers. Clicking "like" on a photo says, "I'm thinking about you." A comment could indicate even deeper attention. The commerce in attention—a sort of "gift economy" of time and energy—is powerful and valuable. Like a gambling machine, rewards (likes and comments) are intermittent and unpredictable. A photo posted to Instagram could garner dozens of responses, while the same one posted on Facebook could generate none. The algorithms that determine which photos pop up on whose feeds in both

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