

"Bernstein shows us how to
reclaim our power and our
humanity from Big Tech."

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UNWIRE



Gaining Control
over Addictive
Technologies

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Unwired

Our society has a technology problem. Many want to disconnect from screens but can't help themselves. These days we spend more time online than ever. Some turn to self-help measures to limit their usage, yet repeatedly fail, while parents feel particularly powerless to help their children. *Unwired: Gaining Control over Addictive Technologies* shows us a way out. Rather than blaming users, the book shatters the illusion that we autonomously choose how to spend our time online. It shifts the moral responsibility and accountability for solutions to corporations. Drawing lessons from the tobacco and food industries, the book demonstrates why government regulation is necessary to curb technology addiction. It describes a grassroots movement already in action across courts and legislative halls. Groundbreaking and urgent, *Unwired* provides a blueprint to develop this movement for change, to one that will allow us to finally gain control.

Gaia Bernstein is the Technology, Privacy and Policy Professor of Law, Co-Director of the Institute for Privacy Protection, and Co-Director of the Gibbons Institute of Law Science and Technology at Seton Hall University School of Law. She writes, teaches, and lectures on subjects at the intersections of law, technology, health, and privacy. Professor Bernstein developed a nationally recognized outreach program on technology overuse for school-aged children and their parents. She is also a mother of three children who grew up in the era of smartphones, screens, and social media.

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Unwired

Gaining Control over Addictive Technologies

Gaia Bernstein



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To my loves, Yonatan, Daniella, and Ytamar

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PROLOGUE

On a summer evening in 2019, I met a friend for dinner in an Italian restaurant in the Village in Manhattan. About halfway through dinner, our conversation turned to her 15-year-old daughter. Her daughter was always on her phone. When they had gone on a family ski trip that winter, she spent every moment posing for Instagram photos, editing them, and deciding which to post. She refused even to take a break during dinner to interact with the family. When her father took her phone away, she flew into a rage because she did not finish posting that day's skiing photos. My friend brought this up because she was planning a family trip to Los Angeles. She asked me what I thought of asking her daughter to leave her phone at the hotel and use it only at night before she went to bed. Would this be a good method?

Many people at that point expected me to have answers. A couple of years earlier, I had launched an outreach program about technology overuse and potential solutions. My friend thought I would support her idea and maybe offer some tweaks. But unfortunately, I couldn't. I had never thought I would find myself in this position. I had started out as a staunch believer in using methods to help ourselves and our children reduce our time on screens. But, on that summer evening in 2019, my answer was: "It is unlikely to work. It's too late to ask her to disconnect when Instagram and messaging are her whole world." It was a truth I didn't even want to admit to myself until I said

it. My friend looked confused and asked rather impatiently, “So what is the solution?” Deep down I knew the answer, but I was not yet ready to share it.

Our world has changed gradually, beginning around 2009 when smartphones and social networks became popular. I didn’t pay attention at first. I lived a very hectic life, working as a law professor and raising three small children in Manhattan. Around 2015, something clicked, and I started noticing more. The way I put my phone on the table whenever I sat with a friend to grab a cup of coffee, expecting and accepting its distractions. How I watched my kids’ end-of-year performances through rows of held-up phones and iPads. Eventually, I realized our reality had changed. We sit next to our loved ones, our friends, but we often do not talk. Our kids stare blurry-eyed at their screens. They barely glance up to respond to us, returning quickly to their phones. We are too rarely present; too often elsewhere.

I tried making different choices for myself. But by 2017, I wanted to do more than fight my personal battles. In my role as the director of the Institute for Privacy Protection at my law school, I launched an outreach program for school-aged children and their parents, which went beyond privacy to tackle technology overuse. I hoped to help kids and parents realize how much time they spent on screens and the price they paid for it. When I started speaking to parents, my main goal was to bring awareness to the topic. But by the second year, I had encountered a sense of guilt and helplessness I had not anticipated. Parents came to hear my talks because they were desperate. They felt personally responsible for losing their children to their screens.

I was conflicted about what should be done. Like many, I liked a lot of things about online technology. I opened every lecture pointing out the advantages of connectivity. I talked about kids speaking to grandparents on Skype; the convenience of shopping online; and the wonders of having so much information at our fingertips. I did not believe, and still do not believe, that technology is bad. I did think, though, that we needed a better online–offline balance. So, faced by despair, I offered self-help methods, suggesting ways to limit kids’ screen time. I suspected that technology companies purposefully designed their technologies to make sure we spend more time online.

Still, I did not explicitly say this in my lectures. I was a lawyer who shied away from conflict and opted instead to become a law professor. Unsurprisingly, I was reluctant to come out and say that Facebook, who sought “to connect the world,” or Google, whose motto was “Do no evil,” were the bad guys.

But then things changed. Inside information from the tech titans leaked out. Whistleblower after whistleblower explained how tech companies use known principles of psychology to manipulate our brains to addict us. They lure us to spend longer time online by giving us rewards intermittently, on an irregular schedule. When rewards are unpredictable, our brains release stronger surges of dopamine – the brain neurotransmitter responsible for pleasure. For example, tech companies designed the popular “pull to refresh” feature. On Facebook, we keep pulling to check if we got our “reward”: a like or a comment. Every time we get a “reward,” we receive a burst of dopamine; we then keep pulling to refresh in anticipation of our next dopamine infusion. Tech companies also took away our stopping signals. One of their popular design features is “autoplay.” On YouTube, when one video ends, the next automatically begins. This makes it harder to stop. These are just a few of the tools in tech companies’ kits to ensure we stay hooked.

While information trickled out about how the tech industry manipulates us to prolong our time online, data accumulated about the harms of extended screen time. Researchers published significant findings, based on psychological studies and brain scans, of how excessive screen time affects kids’ cognitive development and mental health; of how some of us become addicted and many, while not qualifying as clinically addicted, still manifest symptoms of overuse that resemble addiction. Other investigations uncovered the impact on our ability to connect with one another, and even worse the disconnection and social division. With all we now know, it seems increasingly unlikely that we would have opted for all of this, had we known this information around 2009, when we had the opportunity to choose.

This shed light on what I had observed. Our self-help efforts mostly failed to reduce our time online. The parents I lectured to felt desperate and powerless because their efforts had not helped their families. Self-help measures gave us the illusion that we were in control, while in fact we were not. Surveys reflected this, showing that screen

time had not decreased; if anything it was on the increase. I realized that, while we kept blaming ourselves, we were not really the choice-makers. The technology industry was calling the shots.

During the fall of 2019, following the dinner conversation with my friend, my lectures to parents changed. I wanted to alleviate their sense of helplessness, but I realized I should not reinforce their illusion of control by focusing on self-help strategies. I knew then that real change could only come if we shifted from focusing on personal responsibility to making technology companies accountable for their addictive design choices. I started talking more and more to parents, not about what they should do at home, but about what they could do in the outside world to pressure the technology industry and the government to fix the problem.

Then came 2020 and the COVID-19 pandemic. While technology preserved a semblance of normal life as we went into lockdowns, days spent on screens also underscored the harms. They illuminated the future we had mindlessly approached before the pandemic. We painfully felt the cost of no face-to-face interaction. We could no longer deny the price our children were paying. At the same time, the extremes of pandemic life also highlighted the possibility of a different trajectory. The option of changing tracks and taking action to prevent a future we never intentionally chose for ourselves.

Selecting the right moment to end scientific debate and formulate law and policy is always difficult. Making decisions too early, before all the facts are in, could be premature. But the pandemic underscored the other danger: we may err toward waiting too long and missing the window of opportunity for change. The realizations brought on by the pandemic occurred simultaneously with alarms from medical professionals and journalists alerting us to the escalating social and public health crises. Experts explicitly warned that we are running a dangerous uncontrolled experiment on a whole generation of children.

In this book I spell out what I was not ready to tell my friend that summer evening in 2019. I wrote this book to empower readers by laying out the other option: the collective action alternative to failing individual battles. Connectivity is here to stay. It has many advantages. But to regain what we have lost, we need to stop blaming ourselves and

engage in concerted legal action to exert pressure on governments and the real choice-maker – the technology industry – to redesign products and spaces in a way that will put us back in the driver's seat.

This book interlaces the human with the legal. While taking an in-depth look at what has happened to us, I outline the most promising legal strategies for developing a movement that would reassert our control over our time. This kind of movement could not depend on lawyers alone. We who pay the price of technology overuse need to push for change for ourselves and for our children. Change is possible. Today, we cannot picture a bar without phones consuming the attention of every patron. Neither could we imagine smokeless bars in the 1980s. But by the beginning of the twenty-first century, that had become our reality.

To envision the paths for the future I delve into the past – into the battles against tobacco and junk food. I show that our history of self-blame is repeating itself once again. We are still telling ourselves the same story. We blame ourselves for smoking too much, for eating too much junk food, for spending too much time on our phones. As I describe the figures who led these battles and the legal strategies they employed, I identify those that would transcend time and subject matter and will likely be part of the fight to contain technology overuse. Indeed, some of these strategies are already in play. The picture that emerges from this book is that no single course of action can serve as the magic bullet. Raising awareness is a first step, but it is insufficient by itself. Different players attempting diverse measures will be the best tactic to bring about change.

While outlining a framework for future action, I tell the story of the new movement that has already taken off. I describe the activity taking place in court houses and legislative halls across the country and around the world, sowing the seeds for a major movement for change. From parents suing game-makers for addicting their children; to anti-trust authorities acting to tame the titans of Big Tech; to governments outlawing addictive features and legislating to limit kids' time online. Doing nothing carries the danger of neglecting a whole generation of children. But if we fight, we do so for our kids and for ourselves: to preserve our own free will. This book is not just a call to arms; it is also a call to join those who are already in the trenches.

Part I

THE PRICE OF THE ILLUSION OF CONTROL

1 BECOMING THE CHOICE-MAKERS

Up to Our Necks

I always had a complicated relationship with technology. I would like it, then realize I like it too much, and then try to disentangle from it. I went through several cycles of this. As a young girl in the 1970s, I spent far too much time playing video games. Then in the 1990s, I spent every spare minute during one college semester playing a dungeon treasure hunt computer game. I stopped only after I convinced a friend to place a password on the game to prevent my access. Then came email. I simply could not stop checking it. In my first apartment in New York City as a graduate student, I endlessly connected and disconnected my modem to check my emails. But for me and for many others, 2009 was the year when things started changing. This was the year that smartphones and Facebook became popular.¹ Suddenly, we could text, email, access the Internet, and engage in social interactions practically anywhere and anytime.

These days, I am an academic. I spend much of my time researching and writing on my laptop. I am also the mom of three kids. I value efficiency. I can't really afford not to. For over a decade, I often sat down to write at my regular table at the coffee shop near my apartment. I took out my laptop, my iPhone, and my Kindle. I wrote down my list of tasks for the day. But then two and a half hours later, with little writing done and feeling drained, I wondered what happened. The answer was usually

texts and emails, but more than anything, uncontrollable Internet browsing: news sites, blogs, Facebook. Every click triggered another.

I no longer do this. At least, I try my best not to. It started in 2015, when I walked out of a yoga class into a busy New York café. About fifteen people stood in line in front of me. Everyone was looking down at their phones. Normally I would have pulled out my phone as well. Perhaps it was the impact of the yoga class. But for once I didn't. Instead, I looked at the people around me. No one met my glance. Many people crowded in the café's small space, but there was no talking, no smiling, not even eye contact. This was the first time something felt very wrong to me.

By now I know many feel the same way. They wish they did not spend so much time online. They keep surfing, texting, swiping, and playing. They report feeling drained and unsatisfied, but they seem unable to stop.² Some actually tried to restrict their time. Still, resisting screen time was practically futile. Despite increasing talk about maintaining a healthy online–offline balance, little has changed. Our self-help attempts did not work. Companies promised to add features that will help us help ourselves. These promises, unsurprisingly, did not offer much relief either.

The Illusion of Control

We spend five hours every day on our phones. But when asked: “Do you want to spend five hours a day on your phone?” for most of us the answer is “no.” Still we just do it over and over again. Day in and day out. What would happen if we paused and reflected on what we want to do with our time? Do we want to mindlessly squander our moments, hours, days, and years, or would we prefer to intentionally decide how we spend our time?

Of course, we do contemplate large life choices. Do I want to pursue a degree in social work? Do I want to get married? Do I want to work outside the home or be a stay-at-home mom? But when decisions seem less significant involving free-time and entertainment choices, we are likely to reflect less. This may seem rational. We cannot dedicate significant decision-making resources to every small decision. And not all

decisions are made equal. But what happens when we think we are only making small choices, but inadvertently we are making a huge one?³

My path to the café table surrounded by beeping and tempting screens was gradual. It was not one I paid much attention to. I got my first smartphone – a red Blackberry – in 2008. My oldest son was then 6 years old and my twins were infants. I lived in Manhattan and worked as a law professor at Seton Hall Law School in Newark, New Jersey. During workdays I left my children with different caregivers. I initially got a smartphone to text and coordinate my kids' days during my train commute. Replacing time-consuming phone conversations and phone tags with texts was a huge time saver. I then realized that using it to answer work emails on the train helped me maximize my workday once I reached the Law School. That year, I also joined Facebook because I wanted to keep in touch with other academics in my field. All of these were seemingly small decisions, but they started my trajectory toward a life immersed with screens.

Many of us made these small choices that led to a larger one. The numbers are quite staggering. Even leaving out time spent on tablets or computer screens, American adults spent 5.4 hours a day on their phone before the pandemic. This is 1,971 hours a year. Teens spend even more time online than adults. Forty-five percent of teens say they are “constantly online.”⁴ Through these seemingly small decisions we unintentionally completely transformed how we spend our time and how we interact with one another. Instead of interacting through conversation, eye contact, and a smile with those in our physical proximity, we are more likely to engage with others not present, through letters, symbols, and game strategies. While treating each small choice along the way as insignificant, we have unwittingly made a huge decision defining who we are and how we relate to one another. We felt in control as we opted for one app after another, but, unwittingly, we were lured into a place we may have never intended to reach had we really considered our options.

We fall into these traps too often in life. We make choices, intentionally or not, that may even seem in line with our goals at that moment. We assume we are in control, but these choices accumulate into a reality we never imagined for ourselves. The illusion of control blinds us from seeing where we are.⁵

Autonomy and Making Our Own Choices

Autonomy is a big word that is often tossed around. People mean different things when they talk about autonomy. For many people, and for me too, autonomy means making independent decisions about our lives. I have autonomy when I write my life story by making my life choices. In a perfect world, I would have the opportunity to think about each option, evaluate if it fits with my beliefs, desires, and commitments, and ultimately make a decision based on my own reasons.⁶ This is the ideal. Some people's decision-making lies in the other extreme. They lack autonomy to a point that they become a mere puppet. Their environment is so highly constructed their free will evaporates. This becomes evident when they can no longer give their own reasons for their choices. A wife whose abusive husband prohibits her from seeing her friends and family would often voice his rationales for staying away from her loved ones, but cannot articulate her own.⁷

How about my choices to use my devices? At least initially I was making small deliberate choices. I assessed how little time I had as the mom of three small kids and a law professor on the tenure track. I made choices to text and email during my commute that made sense in terms of efficiency and convenience. I chose to join Facebook because I realized that many colleagues in my field were active on the social network. I was a new academic and decided it was an effective way to get to know people better in between conferences. I could articulate my reasons for these specific choices. But, a decade later, as I tried to work, and realized I had wasted hours online, I could no longer express my reasons for my actions. My acts were no longer in line with my goals and preferences. The design choices of the devices, websites, and apps I was using influenced my actions.

In reality not all our decisions are ideal independent decisions, nor do we usually become puppets unable to make any decisions at all. Still, we are often constrained by our circumstances, our background, and the people that surround us. The question is how much? At what point do we lose our autonomy? A key indicator is whether we reflect upon a decision. We are autonomous as long as we exercise our will considering our choices.⁸ At some point, I stopped reflecting upon my choices. I then crossed over from the gray zone to the lack of autonomy zone.

Manipulating Choice

When someone manipulates us, they interfere with our ability to author the story of our lives. They decide for us how and why we ought to live. A unique feature of manipulation is that it is often covert. We are not aware that someone else is, in fact, controlling our decision-making.⁹ Businesses have strong incentives to manipulate consumers. The behavioral economist Dan Ariely described humans as “predictably irrational.”¹⁰ Businesses rely on this predictable irrationality and use human vulnerabilities to increase their revenues.¹¹

Legal scholar Cass Sunstein said: “Manipulation takes multiple forms. It has at least fifty shades.”¹² When I walk into a drugstore, and hear a song I like playing in the background, I tend to linger a bit longer and sometimes even end up buying a product I did not plan on purchasing when I walked in. This is no coincidence. The store owners hope to achieve exactly this result by playing music targeted at their clientele’s age and background.¹³ Some marketing strategies are more intricate, like advertisers’ use of subliminal advertising. They incorporate sounds and images that do not enter our consciousness but affect us. Both the music in the drugstore and subliminal advertising somewhat impair our ability to reflect on our decisions. But just as many decisions are not perfectly independent, neither does every commercial action aiming to influence consumer choice threaten human autonomy.¹⁴ At what point, then, does manipulation affect reflection to an extent that it is unacceptable?¹⁵

Highly manipulative actions are particularly unacceptable. These are actions that are hidden and hard to detect or fully grasp even once exposed. Covert manipulation is, unfortunately, central to the Internet economy. Its business model feeds on two crucial resources: users’ personal data and time. Online services are often offered for free to users. We do not pay for our basic Gmail account or to subscribe to Facebook or Instagram. But these companies sell our personal data to advertisers who use it to target us with ads we are more likely to respond to. Using and selling personal information for advertising is most effective when users maximize their time online and increase their exposure to the ads. Internet companies obscure their use of data and time because, unlike automobile manufacturers, they do not mine their resources underground. Instead, they harvest them from their customers

and their customers' social network, without these individuals' explicit consent and even awareness of the harvesting process.

In Chapter 3, I discuss in detail the ways in which tech companies take advantage of our cognitive vulnerabilities to hijack our time. We believe we are making the choice to spend hours on Instagram, while, in fact, unseen and powerful mechanisms keep us hooked. Tech companies use technology to covertly influence our decision-making of how to spend our time. They tempt us, through the likes, the endless scrolls, and the unexpected rewards. They influence us in ways we are consciously unaware of and cannot fully comprehend. We lose the opportunity to reflect autonomously on how we spend such a large part of our time. We make decisions that seem like they are our own, while they are driven by corporate decision-making.¹⁶

Manipulation though does not always dictate the result. Even when manipulation takes place, it is rarely that absolute. It seldom means that we have no say at all and completely lose self-control.¹⁷ Even though tech companies' product design manipulated me into spending much more time than I intended online, I could make some choices. When I had to prepare a class for the next day or to finish a draft of a paper for a conference or publication, I could resist the allure of the online world. It is actually the remnants of choice that are so misleading and reinforce the illusion of control.

We Are the Frogs in the Water

How did we get there? How did we give away our power to decide how we spend our time? People often bring up the fable of the frog in the boiling water.¹⁸ It is very relevant here. According to the famous fable, if you throw a frog into boiling water, it will jump out and stay alive. But if instead, you put it into tepid water and then slowly bring the water to a boil, it will not realize the danger and will be cooked to death.

How did we become the frog in the water? Many of us stepped into the lukewarm water when smartphones, texting, and social networks gained popularity. I started texting and emailing during my commute to maximize efficiency. But, the more I texted, the more texts

I seemed to receive. The topics became less urgent and more miniscule. Within a month I rarely took my eyes off my phone throughout the commute. I was often surprised to find out as I got off the train in Newark that a student or a colleague was on the same car throughout the ride. By the time I started thinking of writing this book, I had already made many small decisions that accumulated into a different lifestyle. I rarely took my eyes completely off my phone anywhere, whether I was standing in line to buy coffee or even having dinner with a friend. A doctor's waiting room was a signal to take out my laptop. My head was usually buried elsewhere.

Like me, many people gradually changed how they use their devices. We viewed our smartphones initially as communication devices for calling, texting, and emails. We never imagined we would use them for so many other functions, including social media, news reading, shopping, games, or even making payments. And that all of these options would be available everywhere and at any given time. Deciding to start using a new app often led to adopting a new habit. Many of these decisions made sense, either for convenience or to alleviate boredom. But we made each decision separately. We never contemplated the whole picture, nor did we reflectively endorse this way of life. Sometime, around 2009, we voluntarily stepped into the tepid water and under the illusion of control we adopted a very different way of being. We endorsed a choice many of us would have rejected had we reflectively evaluated it.¹⁹

We often become frogs in the water through small gradual changes. I did not decide in 2009 to prioritize screen time over live relationships. I did it gradually, and at least initially, through a series of specific decisions. But over time, I ended up spending an alarming part of my waking hours online. Technology makes us especially vulnerable to finding ourselves in unanticipated places. Once we get used to technology it often becomes invisible. It may be a refrigerator, a toaster oven, or a smartphone. We just stop paying attention to the device. We also usually do not see how they operate. This is particularly true for digital technologies, where much more is hidden than is seen. We are more likely to miss digital manipulation than other technological influences.²⁰

The Value of Making Choices

Why do we care about autonomy? Why throughout history have so many thinkers written books about autonomy? They did so because they considered autonomy crucial for human flourishing regardless of the specific political or economic system. To this day, many believe that autonomous people will make better decisions for themselves because they know themselves best and consider their own interests. Not only that, the hallmarks of our society – democracy and free market – rely on a collection of autonomous individuals. Markets are efficient because we are rational. Democracy works because people think for themselves and do not abide by the whims of an autocratic leader.

So would people choose differently if they had the opportunity to reflect and consider the detrimental impact of excessive screen time on their personal life? Would they try to minimize online interaction? Was our role as autonomous citizens in a democracy diminished when social networks used hate and incitement to prolong our time online? In Chapter 2, I examine the evidence that can help answer these riddles. But for now, I look at what we are losing by giving up the ability to be the choosers, regardless of the choices we end up making. To say it another way, even if maximizing time online would benefit our psychological well-being and democratic participation, would it still matter that we do not decide how much time we spend online?

Philosophers addressed this question early on. Aristotle wrote that the ability to choose is an important way in which humans are different from animals.²¹ Animals act voluntarily, but they do not choose. As a teenager, I used to feed my dog under the table. My dog would snatch the piece of chicken I handed it as soon as it could. I wanted the chicken just as much as my dog (my mother is a great cook), but decided to eat part of it and give up some to try and lose weight. My dog's actions were voluntary, while mine involved choice.

Humans are different because they can shape their own lives. Making our plans and shaping our lives according to the plans, regardless of the specific choices we make, gives meaning to our lives.²² The philosopher T. M. Scanlon wrote:

I want to choose the furniture for my own apartment, pick out the pictures for the walls, and even write my own lectures despite the fact that these things might be done better by a decorator, art expert, or talented graduate student. For better or worse, I want these things to be produced by and reflect my own taste, imagination, and powers of discrimination and analysis. I feel the same way, even more strongly, about important decisions affecting my life in larger terms: what career to follow, where to work, how to live.²³

Others emphasized the psychological benefits of personal growth and daily charging of emotional resources that come from the very act of choosing and striving to implement the choice.²⁴ Viktor Frankel, a psychiatrist and Holocaust survivor, explained how autonomy fosters personal growth. He stated: “. . . between stimulus and response there is a space. In that space lies our freedom and our power to choose our response. In our response lies our growth and our happiness.”²⁵ Frankel points out that by taking a pause and contemplating a situation, we can avoid making automatic decisions. We can instead make decisions that expand our psychological growth. By pausing we can refrain from making choices that are thoughtlessly triggered by external pressures (like a knee-jerk reaction to a mother-in-law's repeated nagging) or an internal one (a hounding memory of a past failure). By taking this pause we can make decisions that reflect ideas that we personally endorse.

We all struggle with choices we make, large and small. Even when we do take a pause and make a reflective decision about our preferences, we often have a hard time sticking by it. During the Coronavirus lockdown phase, I was cooped up in my Manhattan apartment. I made a plan that every afternoon, after I finished working on this book, I would complete a vigorous yoga set. It did not always work out. Too often, I just could not bring myself to do the yoga. By dinner time I realized I had instead wasted many hours aimlessly reading the news and scrolling through Facebook and Instagram. But on other days, I did follow through and completed my yoga set. On these days I felt better – not just because I exercised, but because I followed through on my decision. I had the satisfaction of fulfilling my original

goal for the day, even though it was a struggle. Acting with intentionality gave me a sense of fulfillment and recharged my emotional resources, despite the dreariness of life during the pandemic.²⁶

Studies also show that autonomous decision-making is important independent of the quality of the decisions that are made. Many people actually care about making their own decision even if they are not the most qualified people to make that decision. The importance of being the decision-maker increases when the stakes of the decision are high.²⁷ Some life decisions carry much more weight than others. For example, some years ago I taught a law student called Alice. Alice decided at the age of 40 to leave her career as a nurse and attend law school full-time. She gave up a solid career with a steady income and took student loans to pursue her dream of becoming a lawyer. For Alice, it was especially important that she independently considered all her options and costs and still decided to make this leap.

Being the authors of our life stories is precious. Regardless of how well we do it. This means that manipulating someone's decision-making process is harmful because it disrupts this important process. Tech companies designing products to maximize our time online are committing a wrong. It is a wrong even if eventually it turned out that spending extensive time online is beneficial for us. Hijacking our time is inexcusable because these companies are manipulating our decision-making powers. By taking advantage of our cognitive vulnerabilities, they are robbing us of our ability to pause and reflect. Instead, they intentionally expose us to stimulus designed to generate a predictable response. For example, getting likes on a Facebook post, which trigger us to react automatically by wanting more and waiting for the next like. Tech companies' actions to erode our autonomy are especially troubling because the stakes are high. We may be making small acts each time we install an app. But altogether through our online activity we are making a high-stake choice about how we spend huge increments of our time.

The Wound Is Where the Light Enters

The Sufi poet Rumi wrote: "The wound is the place where the light enters you."²⁸

Bad things happen to all of us. But sometimes they also serve the purpose of waking us up. We tend to be habitual creatures. We do not like change. These disruptive events, as painful as they may be, can force us to make changes we would not voluntarily make. They can make us see things differently and move on.

Some years ago, I read a book called *Accidents of Marriage*. The story stuck with me. Maddy, the main character, lives with her children and verbally abusive husband. At home she walks on eggshells fearing that she will cause his next outburst. Although she works as a social worker helping abused women, she fails to see how their stories reflect her own. But then a seemingly catastrophic event happens. Her husband's reckless driving causes a car accident. Maddy is injured and wakes up without any memory of her past life. Slowly she pieces her life back together. She finds her bathroom closet full of the sedatives she used to take to cope. She wonders why anyone would do this. As she regains her memory, she finally sees her old self and decides anew what life she will tolerate.²⁹

Not only individuals but also societies resist change. Jews remained scattered in the diaspora for 2,000 years until World War II and the Holocaust instigated the creation of the State of Israel. Some compare the Coronavirus pandemic to World War II. Like World War II, the Coronavirus pandemic destroyed lives and economies. We all wish it did not happen. Many blame governments for not preparing for this devastation. But regardless, it happened. We cannot choose the bad events or circumstances that come upon us, but we can change our attitude to them. We can acknowledge that sometimes catastrophic events can bestow sudden clarity.

In 2020, the Coronavirus pandemic accelerated our path into a technology-dominated future. We started using technology much more and in new ways. Live classes became online classes, work and social meetings became video conferencing. Cooped at home, with little to do, some adopted new technological pursuits, like playing online games or participating in e-sports. Others increased the time they spent on their favorite online pastimes. Teens and young adults, for example, spent significantly more time on YouTube and TikTok each day.³⁰ Reports indicated that kids' average time online doubled from three to six hours, with 26 percent of kids spending eight hours online compared to 4 percent previously.³¹

These trends could be here to stay. We are likely to continue operating remotely much more than before the pandemic. Consumption of online videos and entertainment activities boomed during the pandemic and users expected to maintain their viewing habits. Businesses also planned on keeping many employees working remotely from home to save on commercial rental space. The unique surge in the value of Big Tech companies' stocks during the pandemic reflected their revenues' increase and investors' predictions of future growth.³²

Even early on in the pandemic when technology showed up as the savior, only about one in four Americans thought remote communication was as effective as in-person contact.³³ When technology completely took over, we starkly felt what we took for granted. The importance of face-to-face physical interactions. A sense of drainage began dominating. It soon got a name: "Zoom fatigue." Experts explained that our brain naturally decodes non-verbal cues, like eye contact or body language. Our ability to do this online is limited. So, we need to intensely focus on the words that are spoken. When we use multiple screens, the task becomes even more exhausting.³⁴

By the time the pandemic erupted, online teaching had expanded in higher education for over a decade. Although some parts of academia resisted the trend, economic pressures, working adults' schedules, and the desire to spread education to less privileged groups prevailed.³⁵ During the pandemic, like every aspect of online life, online classes exploded. Online teaching became the norm for all university students, as well as school kids. Although some applauded the options, critical reactions soon followed. Educators described online teaching as diminishing what they do. It "transforms creative expression into dull repetitive drudgery." How can you share a joke if you can't hear anyone laughing? How can you know if your students understand when their videos are more often than not turned off? What about the loss of impromptu discussions between professor and students after class?³⁶

Students also revolted against the impoverished nature of online teaching. Incoming college students deferred instead of beginning their college careers online. The editors of the Harvard students' newspaper *The Harvard Crimson* wrote that education "... simply cannot be replaced by classes over Zoom. Without the physical gathering of students and professors, much is lost. Virtual technologies, no matter how

smooth and high-resolution, cannot replace dining hall conversations, the exchanges on the way in and out of classrooms, and the richness of body language. What remains, when you take these out, is a subpar educational, not to mention social, experience.”³⁷

The pandemic changed the technology overuse problem. On the one hand, it made it much more severe. It placed it on a trajectory that may not recede in the future. On the other hand, it suddenly highlighted the overall limitations of online communications. Like lightning that strikes in the middle of the night setting the skies alight, giving us a moment of clear vision. We may have a chance to reroute from what we thought was an inevitable path. An opportunity to make new choices. Looking back at the frog in the water fable, for the first time in years some of us felt the water boiling. This means that although we are worse off than before, more of us are on the alert. These are people who may want to jump out of the water and help others make the leap.

We spent over a decade obsessing over our screens at the expense of our real relationships. Instead of making ourselves the prisoners of our past technology choices, we can look at where we are and use these extreme circumstances to find freedom. Making a choice does not mean going back in time to a screenless and unconnected world. It means we can find a better balance between our online and offline lives. But we can do so only by finally making an autonomous reflective choice about what it is and how we want to get there.³⁸

NOTES

Chapter 1

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Unwired

Our society has a technology problem. Many want to disconnect from screens but can't help themselves. These days we spend more time online than ever. Some turn to self-help measures to limit their usage, yet repeatedly fail, while parents feel particularly powerless to help their children. *Unwired: Gaining Control over Addictive Technologies* shows us a way out. Rather than blaming users, the book shatters the illusion that we autonomously choose how to spend our time online. It shifts the moral responsibility and accountability for solutions to corporations. Drawing lessons from the tobacco and food industries, the book demonstrates why government regulation is necessary to curb technology addiction. It describes a grassroots movement already in action across courts and legislative halls. Ground-breaking and urgent, *Unwired* provides a blueprint to develop this movement for change, to one that will allow us to finally gain control.

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Unwired

Gaining Control over Addictive Technologies

Gaia Bernstein



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To my loves, Yonatan, Daniella, and Ytamar

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PROLOGUE

On a summer evening in 2019, I met a friend for dinner in an Italian restaurant in the Village in Manhattan. About halfway through dinner, our conversation turned to her 15-year-old daughter. Her daughter was always on her phone. When they had gone on a family ski trip that winter, she spent every moment posing for Instagram photos, editing them, and deciding which to post. She refused even to take a break during dinner to interact with the family. When her father took her phone away, she flew into a rage because she did not finish posting that day's skiing photos. My friend brought this up because she was planning a family trip to Los Angeles. She asked me what I thought of asking her daughter to leave her phone at the hotel and use it only at night before she went to bed. Would this be a good method?

Many people at that point expected me to have answers. A couple of years earlier, I had launched an outreach program about technology overuse and potential solutions. My friend thought I would support her idea and maybe offer some tweaks. But unfortunately, I couldn't. I had never thought I would find myself in this position. I had started out as a staunch believer in using methods to help ourselves and our children reduce our time on screens. But, on that summer evening in 2019, my answer was: "It is unlikely to work. It's too late to ask her to disconnect when Instagram and messaging are her whole world." It was a truth I didn't even want to admit to myself until I said

it. My friend looked confused and asked rather impatiently, “So what is the solution?” Deep down I knew the answer, but I was not yet ready to share it.

Our world has changed gradually, beginning around 2009 when smartphones and social networks became popular. I didn’t pay attention at first. I lived a very hectic life, working as a law professor and raising three small children in Manhattan. Around 2015, something clicked, and I started noticing more. The way I put my phone on the table whenever I sat with a friend to grab a cup of coffee, expecting and accepting its distractions. How I watched my kids’ end-of-year performances through rows of held-up phones and iPads. Eventually, I realized our reality had changed. We sit next to our loved ones, our friends, but we often do not talk. Our kids stare blurry-eyed at their screens. They barely glance up to respond to us, returning quickly to their phones. We are too rarely present; too often elsewhere.

I tried making different choices for myself. But by 2017, I wanted to do more than fight my personal battles. In my role as the director of the Institute for Privacy Protection at my law school, I launched an outreach program for school-aged children and their parents, which went beyond privacy to tackle technology overuse. I hoped to help kids and parents realize how much time they spent on screens and the price they paid for it. When I started speaking to parents, my main goal was to bring awareness to the topic. But by the second year, I had encountered a sense of guilt and helplessness I had not anticipated. Parents came to hear my talks because they were desperate. They felt personally responsible for losing their children to their screens.

I was conflicted about what should be done. Like many, I liked a lot of things about online technology. I opened every lecture pointing out the advantages of connectivity. I talked about kids speaking to grandparents on Skype; the convenience of shopping online; and the wonders of having so much information at our fingertips. I did not believe, and still do not believe, that technology is bad. I did think, though, that we needed a better online–offline balance. So, faced by despair, I offered self-help methods, suggesting ways to limit kids’ screen time. I suspected that technology companies purposefully designed their technologies to make sure we spend more time online.

Still, I did not explicitly say this in my lectures. I was a lawyer who shied away from conflict and opted instead to become a law professor. Unsurprisingly, I was reluctant to come out and say that Facebook, who sought “to connect the world,” or Google, whose motto was “Do no evil,” were the bad guys.

But then things changed. Inside information from the tech titans leaked out. Whistleblower after whistleblower explained how tech companies use known principles of psychology to manipulate our brains to addict us. They lure us to spend longer time online by giving us rewards intermittently, on an irregular schedule. When rewards are unpredictable, our brains release stronger surges of dopamine – the brain neurotransmitter responsible for pleasure. For example, tech companies designed the popular “pull to refresh” feature. On Facebook, we keep pulling to check if we got our “reward”: a like or a comment. Every time we get a “reward,” we receive a burst of dopamine; we then keep pulling to refresh in anticipation of our next dopamine infusion. Tech companies also took away our stopping signals. One of their popular design features is “autoplay.” On YouTube, when one video ends, the next automatically begins. This makes it harder to stop. These are just a few of the tools in tech companies’ kits to ensure we stay hooked.

While information trickled out about how the tech industry manipulates us to prolong our time online, data accumulated about the harms of extended screen time. Researchers published significant findings, based on psychological studies and brain scans, of how excessive screen time affects kids’ cognitive development and mental health; of how some of us become addicted and many, while not qualifying as clinically addicted, still manifest symptoms of overuse that resemble addiction. Other investigations uncovered the impact on our ability to connect with one another, and even worse the disconnection and social division. With all we now know, it seems increasingly unlikely that we would have opted for all of this, had we known this information around 2009, when we had the opportunity to choose.

This shed light on what I had observed. Our self-help efforts mostly failed to reduce our time online. The parents I lectured to felt desperate and powerless because their efforts had not helped their families. Self-help measures gave us the illusion that we were in control, while in fact we were not. Surveys reflected this, showing that screen

time had not decreased; if anything it was on the increase. I realized that, while we kept blaming ourselves, we were not really the choice-makers. The technology industry was calling the shots.

During the fall of 2019, following the dinner conversation with my friend, my lectures to parents changed. I wanted to alleviate their sense of helplessness, but I realized I should not reinforce their illusion of control by focusing on self-help strategies. I knew then that real change could only come if we shifted from focusing on personal responsibility to making technology companies accountable for their addictive design choices. I started talking more and more to parents, not about what they should do at home, but about what they could do in the outside world to pressure the technology industry and the government to fix the problem.

Then came 2020 and the COVID-19 pandemic. While technology preserved a semblance of normal life as we went into lockdowns, days spent on screens also underscored the harms. They illuminated the future we had mindlessly approached before the pandemic. We painfully felt the cost of no face-to-face interaction. We could no longer deny the price our children were paying. At the same time, the extremes of pandemic life also highlighted the possibility of a different trajectory. The option of changing tracks and taking action to prevent a future we never intentionally chose for ourselves.

Selecting the right moment to end scientific debate and formulate law and policy is always difficult. Making decisions too early, before all the facts are in, could be premature. But the pandemic underscored the other danger: we may err toward waiting too long and missing the window of opportunity for change. The realizations brought on by the pandemic occurred simultaneously with alarms from medical professionals and journalists alerting us to the escalating social and public health crises. Experts explicitly warned that we are running a dangerous uncontrolled experiment on a whole generation of children.

In this book I spell out what I was not ready to tell my friend that summer evening in 2019. I wrote this book to empower readers by laying out the other option: the collective action alternative to failing individual battles. Connectivity is here to stay. It has many advantages. But to regain what we have lost, we need to stop blaming ourselves and

engage in concerted legal action to exert pressure on governments and the real choice-maker – the technology industry – to redesign products and spaces in a way that will put us back in the driver's seat.

This book interlaces the human with the legal. While taking an in-depth look at what has happened to us, I outline the most promising legal strategies for developing a movement that would reassert our control over our time. This kind of movement could not depend on lawyers alone. We who pay the price of technology overuse need to push for change for ourselves and for our children. Change is possible. Today, we cannot picture a bar without phones consuming the attention of every patron. Neither could we imagine smokeless bars in the 1980s. But by the beginning of the twenty-first century, that had become our reality.

To envision the paths for the future I delve into the past – into the battles against tobacco and junk food. I show that our history of self-blame is repeating itself once again. We are still telling ourselves the same story. We blame ourselves for smoking too much, for eating too much junk food, for spending too much time on our phones. As I describe the figures who led these battles and the legal strategies they employed, I identify those that would transcend time and subject matter and will likely be part of the fight to contain technology overuse. Indeed, some of these strategies are already in play. The picture that emerges from this book is that no single course of action can serve as the magic bullet. Raising awareness is a first step, but it is insufficient by itself. Different players attempting diverse measures will be the best tactic to bring about change.

While outlining a framework for future action, I tell the story of the new movement that has already taken off. I describe the activity taking place in court houses and legislative halls across the country and around the world, sowing the seeds for a major movement for change. From parents suing game-makers for addicting their children; to anti-trust authorities acting to tame the titans of Big Tech; to governments outlawing addictive features and legislating to limit kids' time online. Doing nothing carries the danger of neglecting a whole generation of children. But if we fight, we do so for our kids and for ourselves: to preserve our own free will. This book is not just a call to arms; it is also a call to join those who are already in the trenches.

Part I

THE PRICE OF THE ILLUSION OF CONTROL

1 BECOMING THE CHOICE-MAKERS

Up to Our Necks

I always had a complicated relationship with technology. I would like it, then realize I like it too much, and then try to disentangle from it. I went through several cycles of this. As a young girl in the 1970s, I spent far too much time playing video games. Then in the 1990s, I spent every spare minute during one college semester playing a dungeon treasure hunt computer game. I stopped only after I convinced a friend to place a password on the game to prevent my access. Then came email. I simply could not stop checking it. In my first apartment in New York City as a graduate student, I endlessly connected and disconnected my modem to check my emails. But for me and for many others, 2009 was the year when things started changing. This was the year that smartphones and Facebook became popular.¹ Suddenly, we could text, email, access the Internet, and engage in social interactions practically anywhere and anytime.

These days, I am an academic. I spend much of my time researching and writing on my laptop. I am also the mom of three kids. I value efficiency. I can't really afford not to. For over a decade, I often sat down to write at my regular table at the coffee shop near my apartment. I took out my laptop, my iPhone, and my Kindle. I wrote down my list of tasks for the day. But then two and a half hours later, with little writing done and feeling drained, I wondered what happened. The answer was usually

texts and emails, but more than anything, uncontrollable Internet browsing: news sites, blogs, Facebook. Every click triggered another.

I no longer do this. At least, I try my best not to. It started in 2015, when I walked out of a yoga class into a busy New York café. About fifteen people stood in line in front of me. Everyone was looking down at their phones. Normally I would have pulled out my phone as well. Perhaps it was the impact of the yoga class. But for once I didn't. Instead, I looked at the people around me. No one met my glance. Many people crowded in the café's small space, but there was no talking, no smiling, not even eye contact. This was the first time something felt very wrong to me.

By now I know many feel the same way. They wish they did not spend so much time online. They keep surfing, texting, swiping, and playing. They report feeling drained and unsatisfied, but they seem unable to stop.² Some actually tried to restrict their time. Still, resisting screen time was practically futile. Despite increasing talk about maintaining a healthy online–offline balance, little has changed. Our self-help attempts did not work. Companies promised to add features that will help us help ourselves. These promises, unsurprisingly, did not offer much relief either.

The Illusion of Control

We spend five hours every day on our phones. But when asked: “Do you want to spend five hours a day on your phone?” for most of us the answer is “no.” Still we just do it over and over again. Day in and day out. What would happen if we paused and reflected on what we want to do with our time? Do we want to mindlessly squander our moments, hours, days, and years, or would we prefer to intentionally decide how we spend our time?

Of course, we do contemplate large life choices. Do I want to pursue a degree in social work? Do I want to get married? Do I want to work outside the home or be a stay-at-home mom? But when decisions seem less significant involving free-time and entertainment choices, we are likely to reflect less. This may seem rational. We cannot dedicate significant decision-making resources to every small decision. And not all

decisions are made equal. But what happens when we think we are only making small choices, but inadvertently we are making a huge one?³

My path to the café table surrounded by beeping and tempting screens was gradual. It was not one I paid much attention to. I got my first smartphone – a red Blackberry – in 2008. My oldest son was then 6 years old and my twins were infants. I lived in Manhattan and worked as a law professor at Seton Hall Law School in Newark, New Jersey. During workdays I left my children with different caregivers. I initially got a smartphone to text and coordinate my kids' days during my train commute. Replacing time-consuming phone conversations and phone tags with texts was a huge time saver. I then realized that using it to answer work emails on the train helped me maximize my workday once I reached the Law School. That year, I also joined Facebook because I wanted to keep in touch with other academics in my field. All of these were seemingly small decisions, but they started my trajectory toward a life immersed with screens.

Many of us made these small choices that led to a larger one. The numbers are quite staggering. Even leaving out time spent on tablets or computer screens, American adults spent 5.4 hours a day on their phone before the pandemic. This is 1,971 hours a year. Teens spend even more time online than adults. Forty-five percent of teens say they are “constantly online.”⁴ Through these seemingly small decisions we unintentionally completely transformed how we spend our time and how we interact with one another. Instead of interacting through conversation, eye contact, and a smile with those in our physical proximity, we are more likely to engage with others not present, through letters, symbols, and game strategies. While treating each small choice along the way as insignificant, we have unwittingly made a huge decision defining who we are and how we relate to one another. We felt in control as we opted for one app after another, but, unwittingly, we were lured into a place we may have never intended to reach had we really considered our options.

We fall into these traps too often in life. We make choices, intentionally or not, that may even seem in line with our goals at that moment. We assume we are in control, but these choices accumulate into a reality we never imagined for ourselves. The illusion of control blinds us from seeing where we are.⁵

Autonomy and Making Our Own Choices

Autonomy is a big word that is often tossed around. People mean different things when they talk about autonomy. For many people, and for me too, autonomy means making independent decisions about our lives. I have autonomy when I write my life story by making my life choices. In a perfect world, I would have the opportunity to think about each option, evaluate if it fits with my beliefs, desires, and commitments, and ultimately make a decision based on my own reasons.⁶ This is the ideal. Some people's decision-making lies in the other extreme. They lack autonomy to a point that they become a mere puppet. Their environment is so highly constructed their free will evaporates. This becomes evident when they can no longer give their own reasons for their choices. A wife whose abusive husband prohibits her from seeing her friends and family would often voice his rationales for staying away from her loved ones, but cannot articulate her own.⁷

How about my choices to use my devices? At least initially I was making small deliberate choices. I assessed how little time I had as the mom of three small kids and a law professor on the tenure track. I made choices to text and email during my commute that made sense in terms of efficiency and convenience. I chose to join Facebook because I realized that many colleagues in my field were active on the social network. I was a new academic and decided it was an effective way to get to know people better in between conferences. I could articulate my reasons for these specific choices. But, a decade later, as I tried to work, and realized I had wasted hours online, I could no longer express my reasons for my actions. My acts were no longer in line with my goals and preferences. The design choices of the devices, websites, and apps I was using influenced my actions.

In reality not all our decisions are ideal independent decisions, nor do we usually become puppets unable to make any decisions at all. Still, we are often constrained by our circumstances, our background, and the people that surround us. The question is how much? At what point do we lose our autonomy? A key indicator is whether we reflect upon a decision. We are autonomous as long as we exercise our will considering our choices.⁸ At some point, I stopped reflecting upon my choices. I then crossed over from the gray zone to the lack of autonomy zone.

Manipulating Choice

When someone manipulates us, they interfere with our ability to author the story of our lives. They decide for us how and why we ought to live. A unique feature of manipulation is that it is often covert. We are not aware that someone else is, in fact, controlling our decision-making.⁹ Businesses have strong incentives to manipulate consumers. The behavioral economist Dan Ariely described humans as “predictably irrational.”¹⁰ Businesses rely on this predictable irrationality and use human vulnerabilities to increase their revenues.¹¹

Legal scholar Cass Sunstein said: “Manipulation takes multiple forms. It has at least fifty shades.”¹² When I walk into a drugstore, and hear a song I like playing in the background, I tend to linger a bit longer and sometimes even end up buying a product I did not plan on purchasing when I walked in. This is no coincidence. The store owners hope to achieve exactly this result by playing music targeted at their clientele’s age and background.¹³ Some marketing strategies are more intricate, like advertisers’ use of subliminal advertising. They incorporate sounds and images that do not enter our consciousness but affect us. Both the music in the drugstore and subliminal advertising somewhat impair our ability to reflect on our decisions. But just as many decisions are not perfectly independent, neither does every commercial action aiming to influence consumer choice threaten human autonomy.¹⁴ At what point, then, does manipulation affect reflection to an extent that it is unacceptable?¹⁵

Highly manipulative actions are particularly unacceptable. These are actions that are hidden and hard to detect or fully grasp even once exposed. Covert manipulation is, unfortunately, central to the Internet economy. Its business model feeds on two crucial resources: users’ personal data and time. Online services are often offered for free to users. We do not pay for our basic Gmail account or to subscribe to Facebook or Instagram. But these companies sell our personal data to advertisers who use it to target us with ads we are more likely to respond to. Using and selling personal information for advertising is most effective when users maximize their time online and increase their exposure to the ads. Internet companies obscure their use of data and time because, unlike automobile manufacturers, they do not mine their resources underground. Instead, they harvest them from their customers

and their customers' social network, without these individuals' explicit consent and even awareness of the harvesting process.

In Chapter 3, I discuss in detail the ways in which tech companies take advantage of our cognitive vulnerabilities to hijack our time. We believe we are making the choice to spend hours on Instagram, while, in fact, unseen and powerful mechanisms keep us hooked. Tech companies use technology to covertly influence our decision-making of how to spend our time. They tempt us, through the likes, the endless scrolls, and the unexpected rewards. They influence us in ways we are consciously unaware of and cannot fully comprehend. We lose the opportunity to reflect autonomously on how we spend such a large part of our time. We make decisions that seem like they are our own, while they are driven by corporate decision-making.¹⁶

Manipulation though does not always dictate the result. Even when manipulation takes place, it is rarely that absolute. It seldom means that we have no say at all and completely lose self-control.¹⁷ Even though tech companies' product design manipulated me into spending much more time than I intended online, I could make some choices. When I had to prepare a class for the next day or to finish a draft of a paper for a conference or publication, I could resist the allure of the online world. It is actually the remnants of choice that are so misleading and reinforce the illusion of control.

We Are the Frogs in the Water

How did we get there? How did we give away our power to decide how we spend our time? People often bring up the fable of the frog in the boiling water.¹⁸ It is very relevant here. According to the famous fable, if you throw a frog into boiling water, it will jump out and stay alive. But if instead, you put it into tepid water and then slowly bring the water to a boil, it will not realize the danger and will be cooked to death.

How did we become the frog in the water? Many of us stepped into the lukewarm water when smartphones, texting, and social networks gained popularity. I started texting and emailing during my commute to maximize efficiency. But, the more I texted, the more texts

I seemed to receive. The topics became less urgent and more miniscule. Within a month I rarely took my eyes off my phone throughout the commute. I was often surprised to find out as I got off the train in Newark that a student or a colleague was on the same car throughout the ride. By the time I started thinking of writing this book, I had already made many small decisions that accumulated into a different lifestyle. I rarely took my eyes completely off my phone anywhere, whether I was standing in line to buy coffee or even having dinner with a friend. A doctor's waiting room was a signal to take out my laptop. My head was usually buried elsewhere.

Like me, many people gradually changed how they use their devices. We viewed our smartphones initially as communication devices for calling, texting, and emails. We never imagined we would use them for so many other functions, including social media, news reading, shopping, games, or even making payments. And that all of these options would be available everywhere and at any given time. Deciding to start using a new app often led to adopting a new habit. Many of these decisions made sense, either for convenience or to alleviate boredom. But we made each decision separately. We never contemplated the whole picture, nor did we reflectively endorse this way of life. Sometime, around 2009, we voluntarily stepped into the tepid water and under the illusion of control we adopted a very different way of being. We endorsed a choice many of us would have rejected had we reflectively evaluated it.¹⁹

We often become frogs in the water through small gradual changes. I did not decide in 2009 to prioritize screen time over live relationships. I did it gradually, and at least initially, through a series of specific decisions. But over time, I ended up spending an alarming part of my waking hours online. Technology makes us especially vulnerable to finding ourselves in unanticipated places. Once we get used to technology it often becomes invisible. It may be a refrigerator, a toaster oven, or a smartphone. We just stop paying attention to the device. We also usually do not see how they operate. This is particularly true for digital technologies, where much more is hidden than is seen. We are more likely to miss digital manipulation than other technological influences.²⁰

The Value of Making Choices

Why do we care about autonomy? Why throughout history have so many thinkers written books about autonomy? They did so because they considered autonomy crucial for human flourishing regardless of the specific political or economic system. To this day, many believe that autonomous people will make better decisions for themselves because they know themselves best and consider their own interests. Not only that, the hallmarks of our society – democracy and free market – rely on a collection of autonomous individuals. Markets are efficient because we are rational. Democracy works because people think for themselves and do not abide by the whims of an autocratic leader.

So would people choose differently if they had the opportunity to reflect and consider the detrimental impact of excessive screen time on their personal life? Would they try to minimize online interaction? Was our role as autonomous citizens in a democracy diminished when social networks used hate and incitement to prolong our time online? In Chapter 2, I examine the evidence that can help answer these riddles. But for now, I look at what we are losing by giving up the ability to be the choosers, regardless of the choices we end up making. To say it another way, even if maximizing time online would benefit our psychological well-being and democratic participation, would it still matter that we do not decide how much time we spend online?

Philosophers addressed this question early on. Aristotle wrote that the ability to choose is an important way in which humans are different from animals.²¹ Animals act voluntarily, but they do not choose. As a teenager, I used to feed my dog under the table. My dog would snatch the piece of chicken I handed it as soon as it could. I wanted the chicken just as much as my dog (my mother is a great cook), but decided to eat part of it and give up some to try and lose weight. My dog's actions were voluntary, while mine involved choice.

Humans are different because they can shape their own lives. Making our plans and shaping our lives according to the plans, regardless of the specific choices we make, gives meaning to our lives.²² The philosopher T. M. Scanlon wrote:

I want to choose the furniture for my own apartment, pick out the pictures for the walls, and even write my own lectures despite the fact that these things might be done better by a decorator, art expert, or talented graduate student. For better or worse, I want these things to be produced by and reflect my own taste, imagination, and powers of discrimination and analysis. I feel the same way, even more strongly, about important decisions affecting my life in larger terms: what career to follow, where to work, how to live.²³

Others emphasized the psychological benefits of personal growth and daily charging of emotional resources that come from the very act of choosing and striving to implement the choice.²⁴ Viktor Frankel, a psychiatrist and Holocaust survivor, explained how autonomy fosters personal growth. He stated: “. . . between stimulus and response there is a space. In that space lies our freedom and our power to choose our response. In our response lies our growth and our happiness.”²⁵ Frankel points out that by taking a pause and contemplating a situation, we can avoid making automatic decisions. We can instead make decisions that expand our psychological growth. By pausing we can refrain from making choices that are thoughtlessly triggered by external pressures (like a knee-jerk reaction to a mother-in-law's repeated nagging) or an internal one (a hounding memory of a past failure). By taking this pause we can make decisions that reflect ideas that we personally endorse.

We all struggle with choices we make, large and small. Even when we do take a pause and make a reflective decision about our preferences, we often have a hard time sticking by it. During the Coronavirus lockdown phase, I was cooped up in my Manhattan apartment. I made a plan that every afternoon, after I finished working on this book, I would complete a vigorous yoga set. It did not always work out. Too often, I just could not bring myself to do the yoga. By dinner time I realized I had instead wasted many hours aimlessly reading the news and scrolling through Facebook and Instagram. But on other days, I did follow through and completed my yoga set. On these days I felt better – not just because I exercised, but because I followed through on my decision. I had the satisfaction of fulfilling my original

goal for the day, even though it was a struggle. Acting with intentionality gave me a sense of fulfillment and recharged my emotional resources, despite the dreariness of life during the pandemic.²⁶

Studies also show that autonomous decision-making is important independent of the quality of the decisions that are made. Many people actually care about making their own decision even if they are not the most qualified people to make that decision. The importance of being the decision-maker increases when the stakes of the decision are high.²⁷ Some life decisions carry much more weight than others. For example, some years ago I taught a law student called Alice. Alice decided at the age of 40 to leave her career as a nurse and attend law school full-time. She gave up a solid career with a steady income and took student loans to pursue her dream of becoming a lawyer. For Alice, it was especially important that she independently considered all her options and costs and still decided to make this leap.

Being the authors of our life stories is precious. Regardless of how well we do it. This means that manipulating someone's decision-making process is harmful because it disrupts this important process. Tech companies designing products to maximize our time online are committing a wrong. It is a wrong even if eventually it turned out that spending extensive time online is beneficial for us. Hijacking our time is inexcusable because these companies are manipulating our decision-making powers. By taking advantage of our cognitive vulnerabilities, they are robbing us of our ability to pause and reflect. Instead, they intentionally expose us to stimulus designed to generate a predictable response. For example, getting likes on a Facebook post, which trigger us to react automatically by wanting more and waiting for the next like. Tech companies' actions to erode our autonomy are especially troubling because the stakes are high. We may be making small acts each time we install an app. But altogether through our online activity we are making a high-stake choice about how we spend huge increments of our time.

The Wound Is Where the Light Enters

The Sufi poet Rumi wrote: "The wound is the place where the light enters you."²⁸

Bad things happen to all of us. But sometimes they also serve the purpose of waking us up. We tend to be habitual creatures. We do not like change. These disruptive events, as painful as they may be, can force us to make changes we would not voluntarily make. They can make us see things differently and move on.

Some years ago, I read a book called *Accidents of Marriage*. The story stuck with me. Maddy, the main character, lives with her children and verbally abusive husband. At home she walks on eggshells fearing that she will cause his next outburst. Although she works as a social worker helping abused women, she fails to see how their stories reflect her own. But then a seemingly catastrophic event happens. Her husband's reckless driving causes a car accident. Maddy is injured and wakes up without any memory of her past life. Slowly she pieces her life back together. She finds her bathroom closet full of the sedatives she used to take to cope. She wonders why anyone would do this. As she regains her memory, she finally sees her old self and decides anew what life she will tolerate.²⁹

Not only individuals but also societies resist change. Jews remained scattered in the diaspora for 2,000 years until World War II and the Holocaust instigated the creation of the State of Israel. Some compare the Coronavirus pandemic to World War II. Like World War II, the Coronavirus pandemic destroyed lives and economies. We all wish it did not happen. Many blame governments for not preparing for this devastation. But regardless, it happened. We cannot choose the bad events or circumstances that come upon us, but we can change our attitude to them. We can acknowledge that sometimes catastrophic events can bestow sudden clarity.

In 2020, the Coronavirus pandemic accelerated our path into a technology-dominated future. We started using technology much more and in new ways. Live classes became online classes, work and social meetings became video conferencing. Cooped at home, with little to do, some adopted new technological pursuits, like playing online games or participating in e-sports. Others increased the time they spent on their favorite online pastimes. Teens and young adults, for example, spent significantly more time on YouTube and TikTok each day.³⁰ Reports indicated that kids' average time online doubled from three to six hours, with 26 percent of kids spending eight hours online compared to 4 percent previously.³¹

These trends could be here to stay. We are likely to continue operating remotely much more than before the pandemic. Consumption of online videos and entertainment activities boomed during the pandemic and users expected to maintain their viewing habits. Businesses also planned on keeping many employees working remotely from home to save on commercial rental space. The unique surge in the value of Big Tech companies' stocks during the pandemic reflected their revenues' increase and investors' predictions of future growth.³²

Even early on in the pandemic when technology showed up as the savior, only about one in four Americans thought remote communication was as effective as in-person contact.³³ When technology completely took over, we starkly felt what we took for granted. The importance of face-to-face physical interactions. A sense of drainage began dominating. It soon got a name: "Zoom fatigue." Experts explained that our brain naturally decodes non-verbal cues, like eye contact or body language. Our ability to do this online is limited. So, we need to intensely focus on the words that are spoken. When we use multiple screens, the task becomes even more exhausting.³⁴

By the time the pandemic erupted, online teaching had expanded in higher education for over a decade. Although some parts of academia resisted the trend, economic pressures, working adults' schedules, and the desire to spread education to less privileged groups prevailed.³⁵ During the pandemic, like every aspect of online life, online classes exploded. Online teaching became the norm for all university students, as well as school kids. Although some applauded the options, critical reactions soon followed. Educators described online teaching as diminishing what they do. It "transforms creative expression into dull repetitive drudgery." How can you share a joke if you can't hear anyone laughing? How can you know if your students understand when their videos are more often than not turned off? What about the loss of impromptu discussions between professor and students after class?³⁶

Students also revolted against the impoverished nature of online teaching. Incoming college students deferred instead of beginning their college careers online. The editors of the Harvard students' newspaper *The Harvard Crimson* wrote that education "... simply cannot be replaced by classes over Zoom. Without the physical gathering of students and professors, much is lost. Virtual technologies, no matter how

smooth and high-resolution, cannot replace dining hall conversations, the exchanges on the way in and out of classrooms, and the richness of body language. What remains, when you take these out, is a subpar educational, not to mention social, experience.”³⁷

The pandemic changed the technology overuse problem. On the one hand, it made it much more severe. It placed it on a trajectory that may not recede in the future. On the other hand, it suddenly highlighted the overall limitations of online communications. Like lightning that strikes in the middle of the night setting the skies alight, giving us a moment of clear vision. We may have a chance to reroute from what we thought was an inevitable path. An opportunity to make new choices. Looking back at the frog in the water fable, for the first time in years some of us felt the water boiling. This means that although we are worse off than before, more of us are on the alert. These are people who may want to jump out of the water and help others make the leap.

We spent over a decade obsessing over our screens at the expense of our real relationships. Instead of making ourselves the prisoners of our past technology choices, we can look at where we are and use these extreme circumstances to find freedom. Making a choice does not mean going back in time to a screenless and unconnected world. It means we can find a better balance between our online and offline lives. But we can do so only by finally making an autonomous reflective choice about what it is and how we want to get there.³⁸

NOTES

Chapter 1

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