#### **Stolen Focus**

# What's in it for me? The tale of how we lost the ability to focus - and how we can get it back.

We've all been there. You sit down, ready for work, and you get a text. As you're texting back, a news alert appears - so you shift over to read what's happening. But as you're halfway through reading the headline, you get another ping: someone's liked the photo that you posted last night. And after checking who it was, you realize they've also posted new photos . . . is that a new partner?! As you start swiping through the images, a Slack notification chimes. Wait, what were you doing again? Oh, right: work. If you're wondering what's happened to your capacity for concentration, you're not alone. Collectively, our attention spans seem to be dwindling at an alarming rate. And every year, there are more and more distractions and interruptions added to the pile. Sadly, that's not a coincidence. From Silicon Valley to the structure of the contemporary workplace, forces beyond our control are constantly working to deplete our ability to focus deeply and resist distraction. But how did we get here? And is there any way to escape this dizzying attention spiral? These are the questions we'll be covering in the blinks to Johann Hari's Stolen Focus. So, set your devices to airplane mode, and try to give your full attention to these five blinks as we uncover the story of a crisis that's reached a global scale. In these blinks, you'll learn

how social media is actually designed to sap your focus; what 1950s animal experiments have to do with Instagram's "like" button; and why spending less time at work might actually boost your productivity.

### It's not just you - everyone is struggling to focus.

Unless you're living off the grid, you've probably noticed that it's getting increasingly difficult to focus. You're busy all the time, yet you struggle to actually get anything done. In 2016, Sune Lehmann was having these exact problems. His capacity for deep focus was dwindling, and he was more susceptible to distractions than ever before. Lehmann is a professor at Denmark's Technical University - so he didn't simply dismiss the nagging feeling that his concentration was waning. Instead, he spearheaded a study to find out if there was actually evidence to back up his suspicion. By analyzing various metrics across online platforms, he and his team discovered something interesting: In 2013, conversation topics trended on Twitter for an average of 17.5 hours before people lost interest and moved on to a new topic. By 2016, that number had dwindled to 11.6 hours. That's a six-hour decrease in only three years. The study records similar results across platforms like Google and Reddit as well. In short, the more time we've spent in online spaces, the shorter our attention spans have become. So, is it really just the internet that's eroding our focus? Well, yes. But also no. It's not quite as simple as ones and zeros. See, Lehmann also analyzed every book that's been uploaded to Google Books between the 1880s and today. And he found that this phenomenon actually predates the internet. With every passing decade, trending topics appear and fade with increasing speed. Lehmann's study is indicative rather than comprehensive, of course. And measuring these metrics isn't a definitive way to map our evolving attention spans.

But, if we accept the premise that our concentration is suffering, the next question is: Why? It's difficult to pinpoint precisely, but a good jumping-off point is what think-tank director Robert Colvile calls "The Great Acceleration." Essentially, the way we receive information is speeding up. In the nineteenth century, for example, news could take days to travel from place to place. Then, technologies like the telegraph, radio, and television sped up the spread of information. On top of this, our information inputs - the different modes through which we receive information - have multiplied. In 1986, the average Westerner ingested the equivalent of 40 newspapers a day through the various available information inputs. By 2004, that figure had risen to an astonishing 174 newspapers worth of information. Today, that figure is almost certainly much higher. The internet has undeniably supercharged this acceleration. Now, information is not only available to us all the time; it actually intrudes on our lives through the ceaseless pings and notifications coming from our laptops and smartphones. And our brains just haven't caught up with this acceleration. Research suggests they never will. Our capacity for focus is an emergent field of study. But research in the area of speedreading suggests that there's a finite limit to how quickly we can process information. And, as neuroscientists point out, the cognitive capacity of the human brain has not significantly changed in the last 40,000 years. The amount of information we put into our brains has, however, stratospherically increased. It's really no wonder we sometimes find it difficult to focus.

## Apps and online platforms are addictive by design, not by accident.

Facebook, Instagram, Twitter - the fact that these apps and other online platforms suck so much of your time isn't a design flaw. They're supposed to be addictive. After all, there's a reason Silicon Valley calls its customers "users." And where did this design originate? That's easy: the Persuasive Technologies Lab at Stanford University. In the early 2000s, the lab asked whether the theories of influential behavioral psychologists could be incorporated into computer code - in other words, it asked whether tech can change human behavior. And the answer, as you might have guessed, was yes. Here's an example. One of the psychologists studied in the lab was B. F. Skinner. Skinner was famous for the experiments he conducted on rats. He'd present a rat with a meaningless task, like pushing a button. But the rat showed no interest in doing this - why would it? So Skinner modified the task. Now, every time the rat pressed the button, it would be rewarded with a pellet of food. Rewards would motivate animals, Skinner found, to carry out tasks that had no intrinsic meaning to them. Can't relate to the rat and the button? Well, Skinner inspired the creation of other buttons you might recognize: like buttons, share buttons, and comment buttons. Those little hearts and emojis and retweet buttons aren't design quirks; they're programming us to use social media in addictive ways by rewarding us for the time we spend on the platforms. These buttons keep us engaging longer. But they're only one of the many design elements geared at keeping us online. Here's another one: the infinite scroll. Back in the early days of the internet, web pages were just that: pages. Sites often comprised multiple pages; when you got to the bottom of one, you clicked through to the next. The bottom of each page offered a built-in pause. If you wanted to keep browsing, you had to actively decide to click ahead. That is, until Aza Raskin stepped in. Raskin invented the infinite scroll - the endlessly refreshing feed of content that now features on the interface of nearly every social media platform, giving the impression that there is a never-ending supply of content. If likes and shares encourage users to stay online longer, the infinite scroll

encourages users to stay online in perpetuity. Raskin, however, has come to regret his invention. At first, he thought the infinite scroll was elegant and efficient. But he became troubled when he noticed how it was changing online habits – including his own. Noticing that he was spending longer and longer on social media, Raskin started to do the math. He estimates that the infinite scroll induces the average user to spend 50 percent more time on platforms like Facebook and Twitter. The business model of most of these platforms is predicated on time – or, as they call it, engagement. This refers to how much time a user spends interacting with a product. That's the metric tech companies use to measure their success – not money, but minutes. But money does play a part, too. Because the longer you spend "engaging," the more chances the companies have to sell advertisements. The more you engage, the more companies track your behavior and build a profile uniquely designed to target you with specific ads. We don't pay for platforms like Facebook and Instagram with our money. But we do pay with another precious, finite commodity: our attention. In Silicon Valley, time equals money. The money is theirs. And the time – the attention – is yours.

### Algorithms privilege outrage over community.

Online platforms erode our focus and exploit one of our most precious resources - our attention - for their own financial gain. But these same platforms can be a force for good, strengthening community and driving collective action. To better understand this potential, let's travel to the Complexo do Alemão favela in Rio de Janeiro, Brazil. The Brazilian government takes a militant approach to this crowded, low-income area, routinely sending in tanks to suppress unrest. And it's an open secret that the police shoot to kill. When innocent kids get in the way of their bullets, the police plant drugs or weapons on them and claim self-defense. Raull Santiago lives in Alemão. He also runs the Facebook page "Coletivo Papo Reto," which collects and disseminates videos of the police shooting innocent people. The page has galvanized many favela-dwellers to rally against their treatment. And it has shifted the tide of public opinion in Brazil, where favelas like Alemão are often reviled. But the situation in Alemão has only gotten worse since the election of Brazil's far-right president, Jair Bolsonaro. And here's the thing: Bolsonaro's victory, like Coletivo Papo Reto's success, can also be partly attributed to Facebook. Bolsonaro's campaign inundated social media with clickbaity, fear-mongering campaigns - and he ended up getting elected. So, what connects us can also divide us. Lately, it feels like online platforms have been much more intent on dividing than connecting. And it all has to do with algorithms. Remember the infinite scroll? The content you see on this infinitely refreshing page isn't ordered chronologically. It's arranged by an algorithm that is programmed to feed us content that keeps us scrolling longer. It's easier to disengage from calm, positive content. But if something strikes us as outrageous or controversial, we tend to keep looking. It's part of a psychological phenomenon called negativity bias - that is, negative experiences impact us more than positive ones. So it's in social media's interest to literally provoke its users. The algorithm has no ethics. It doesn't condone or condemn; it just codes. But the people watching it feel, believe, and judge. For some, the more they're exposed to misinformation, the more normal - even credible - it seems. A 2018 study that analyzed extreme right-wing militants in the US found that the majority of them were initially radicalized on YouTube. You may not engage with misinformation online. You might put down your phone or close your laptop when you feel outraged by what you see online. You may choose not to spend your attention on provocative content. But this still affects

you. See, when online platforms privilege divisive, shocking content, they also corrode our power for collective attention - our ability, as a society, to focus on issues that affect us. Back in the '70s, scientists discovered that there was a hole in the Ozone layer. It had been created by a group of chemicals called CFCs, which are commonly used in hairsprays. The scientists issued a warning: if the hole in the ozone grew, we would lose a crucial layer of protection against the sun's rays. Life on earth as we knew it was at risk. Activists campaigned against the use of CFCs. They persuaded their fellow citizens to join the cause. Eventually, they put enough pressure on governments that the use of CFCs was banned. This is an environmental success story. But the outcome might have been different if we hadn't focused our collective attention - first on the science, then on the arguments of our fellow citizens, and finally on the group effort of lobbying the governments for a total ban on CFCs. Would we be able to collectively train our focus on a similar issue today? We already know the answer to this question. Climate change poses a real and present danger to life on earth. But as a species, we can't seem to absorb the science - or even agree on whether we should be listening to scientists in the first place. Social media can be a powerful force for good. But rather than harness this force, platforms like Facebook are intent on exploiting our attention - and, as a consequence, they're sowing division and controversy. Recently, Facebook conducted an internal investigation called "Common Ground." Its aim was to uncover whether the company's algorithms really did promote controversy and misinformation to keep users engaged. According to the report, the findings were very clear: "Our algorithms exploit the human brain's attraction to divisiveness." Facebook hasn't done very much about this disturbing finding, however. And neither have we. We're too busy infinitely scrolling.

### Ditch multitasking - recovering focus is about finding flow.

How many things are you doing right at this second? You might be listening to this Blink - and nothing else. If that's you, then you're monotasking. More likely, you're doing a range of things: listening to this blink, cooking dinner, scrolling through the news, or chatting with your roommate or partner. It's easy - and not inaccurate - to blame our shrinking attention spans on our devices and the easy access they offer to an attentionsucking online world. But, like an artfully cropped Instagram snap, that's not the whole picture. See, there's a fundamental flaw in the way we frame "focus." We live in an accelerating, consumerist society - one that values speed and output. And in this climate, we're encouraged to "quantify" our attention in terms of what immediate results it yields. Our focus is a resource that allows us to produce, to earn, to tick items off our to-do lists. And that's where multitasking comes in. The more we can simultaneously achieve, the better our focus is spent. So why not distribute our attention across several tasks at once? Well because, as it turns out, humans are really bad at multitasking. The word "multitask" was coined by computer scientists in the '60s to describe the function of computers with multiple processors. It was never meant to be applied to humans. After all, we only have one processor: our brain. When we multitask, we're not simultaneously performing several tasks at once. We're switching between them at hyperspeed. And every switch incurs what's called a "switch-cost" effect. When you switch between tasks - or when you're interrupted mid-task - your brain needs to recalibrate, which decreases your mental performance. A study commissioned by Hewlett Packard compared a group who worked on a task uninterrupted with a group that was distracted during the course of their task. The

study found that members of the distracted group temporarily dropped an average of ten IQ points while they were completing their task. In a work climate that values multitasking as a sign of peak productivity, distraction is practically encouraged. We're constantly answering emails, participating in multiple conversations about multiple projects, and working across three or four different computer screens. In fact, in the US, the average white-collar worker spends 40 percent of their time engaging in socalled multitasking. Luckily, there is an antidote to multitasking - a way of approaching tasks that cultivates deep focus. The psychologist Mihaly Csikszentmihalyi first identified this state, which he called "flow." You find your flow, Csikszentmihalyi theorized, when you become so absorbed by a task that you lose all sense of your surroundings and are able to access a deep well of internal focus. If you've ever concentrated so hard on something - whether that's rock-climbing, coding, painting, or simply doing a jigsaw puzzle - that you lose track of time, then you've been in a flow state. In flow, your focus becomes deeper and better, and you're far less susceptible to distractions. The good news, according to Cskiszentmihalyi, is that everyone can access flow - as long as they meet a few key conditions. First, the task you're tackling needs to be intrinsically rewarding; when you're in flow, it's the process rather than the product that engages you. So, unless you're passionate about data entry, you're unlikely to find flow filling out spreadsheets. Second, the task should be challenging enough to demand your full attention - but not so difficult that you're tempted to give up on it. Finally, monotasking is essential. To tap into that wellspring of focus, you need to direct all your mental energy toward a single task. High-performing individuals like athletes, musicians, and scientists often attribute their achievements to their ability to access flow states. But in a society that has decided multitasking is a virtue - and that values speed and output over deep focus - the average person is finding it harder and harder to achieve flow.

#### We can get our attention back.

In a world obsessed with multitasking, making room for other forms of focus, like flow, is a radical act. And it's possible - but it's not as simple as slowing down and switching off. Activating airplane mode won't do much as long as you live and work in a system that encourages you to multitask, privileges productivity at all costs, and encourages you to spend increasing amounts of time in online spaces designed to sap your focus. It's the system itself that needs to change. Luckily, change may be on the horizon in Silicon Valley, where disillusioned designers are beginning to push back against our attention crisis. Former Google engineer Tristan Harris, as well as Aza Raskin - yes, the same Aza who designed the infinite scroll - want to see a non-predatory social media rise from the ashes of our current attention spans. Social media was designed to steal our attention. But Harris and Raskin are certain it could be redesigned to give our attention back. What would this new social media landscape look like? They have a few ideas. The infinite scroll would be turned off, for one thing. All those little "rewards" like hearts and likes and shares might be turned off, too. You could instead receive a daily roundup of what's happened on your feed, designed to discourage you from checking multiple times a day. And technology's power to influence human behavior could be used for good. You could tell the platform how much time you wanted to spend online, and it could work with you to achieve that goal. It could help you achieve other goals, too. Want to try going vegan? The platform could connect you with online groups that share vegan recipes. Concerned about climate change? The platform could link you up with local activist groups, both on and offline. This is all hypothetical, of course. But around the globe, real pushback against our collective attention crisis is seeing

inspiring results. Perpetual Guardian, a New Zealand company, instituted a four-day work week. Employees have since reported a better work-life balance, the ability to focus deeper for longer, and decreased susceptibility to distractions. And it's not just employees who are reaping the benefits. Shorter workdays and workweeks enable deep focus instead of performative multitasking, and they encourage workers to avoid workplace distractions - like sneaking a scroll through social media when the boss isn't looking. In fact, when a Toyota factory in Gothenburg cut its workday by two hours, workers actually produced at 114 percent of their previous capacity, and the factory reported 25 percent more profit. In France, the escalating demands on our focus are seen for what they are: a health crisis. French doctors grew concerned about the rising number of patients experiencing "le burnout" and took those concerns to the government. Now, companies with over 50 employees have to formally agree on the limits of their workweek - meaning it may actually be illegal for a French boss to send their employees emails over the weekend. In the big picture, these are all small changes. But they should leave us feeling optimistic. They show that there are solutions to this collective attention crisis. We can reclaim our attention . . . if only we can focus on the task at hand.

#### **Final summary**

The key message in these blinks is that: Our attention spans are shrinking as a result of our accelerated pace of life and speed of communication. The internet – especially the rise of apps and platforms that prey on our focus – has supercharged this attention drain. And it's not due to a personal flaw or individual weakness. Most of these attention-grabbing methods are intentional; they're elaborately designed for the very purpose of keeping you distracted. To combat them we need large-scale, systemic change – on an individual level, as well as from the tech designers that invented these systems in the first place. And here's a quick piece of actionable advice: Don't focus harder on your task – instead, let your mind wander. Doing nothing is actually a valuable form of focus because it facilitates creativity, which arises when you make unexpected mental connections and associations. The longer you can let your thoughts drift, the more unexpected associations your mind can create – which just might help you reclaim some of your stolen focus.