

Beginning with radio, each new medium would attain its commercial viability through the resale of what attention it could capture in exchange for its “free” content. Advertising turned the cash crop of attention into an industrial commodity.

In the summer of 1833, the *New York Sun* appeared with the promise of a broad readership by featuring stories from which no one could look away. The longterm social consequences of a newspaper for the masses were profound. It was a new phenomenon dependent on the growing attention industry. In the ensuing contest with other newsprints, we see the attention merchant’s basic modus operandi to draw attention with apparently free stuff and then resell it. Attention almost invariably gravitates to whatever stimulus engages our “automatic” attention as opposed to our “controlled” attention, the kind we direct with intent.

All complex organisms suffer from information overload. The ability to focus is referred to as paying attention. We are always paying attention to *something*. If we think of attention as a resource, then it is always being “spent.” There is no saving it for later. But the perpetual quest for growth ensures that forms of backlash are inevitable.

Before the 20th century the Church was the one institution whose mission depended on galvanizing attention. Only the Church systematically sought and used access to the mind. All secular rationalism and technological advances since then have worked to achieve potential surrender to the charms of magical thinking that remains embedded in the human psyche, awaiting only the advertiser to awaken it.

The drive-in movie was born in 1918 by the existential threat of Hitler and the need to screen films for military enlistment on large walls around the country. “To succeed, propaganda must be total,” was the mantra launched by the US government to repeat what Lord Kitchener’s campaign had successfully done in Britain. It would be copied by others for the rest of the century in the Soviet Union, communist China, and Nazi Germany. The American version would be much bigger than the British version.

The “Committee on Public Information” was the world’s greatest adventure in advertising. They wrote, “the will-to-win of a democracy depends on the degree to which each one of all the people of that democracy can concentrate and consecrate body and soul and spirit in the supreme effort of service and sacrifice.” Propaganda in the true sense of the word, meant the ‘propagation of faith.’ The printed word, spoken word, motion picture, telegraph, cable, wiles, post, sign-board—all were used in our campaign to make our own people and all other peoples understand the causes that compelled us to take up arms.

We overestimate our own capacity for independent thought. The only communications truly without influence are those that we learn to ignore or never hear at all. Intellectuals, who read everything, insist on having opinions and think themselves immune to propaganda are, in fact, easy to manipulate. Those who won our independence believed that the final end of the State was to make men free. They valued liberty both as an end and as a means. They believed liberty to be the secret of happiness, that courage is the secret of liberty, and that the greatest menace to freedom is an inert people; that public discussion is a political duty. With the government campaigns as proof-of-concept for what mass advertising campaign might achieve, the British and American use of advertising for official purposes cleansed the practice of its earlier reputation tainted by hucksters.

“Reason why” advertising bringing subconscious anxieties to the fore were behind the great campaigns for mouthwash and tooth paste, 2 products largely unknown before the 1920s. “Halitosis” was a largely unheard-of word when Listerine introduced it. The leading advertising firms of the time put their faith in the behavior school of psychology. In advertising, we call the process selling. Engineering of reputation was also known as branding.

Companies, run mostly by men, came to see cracking the code of the female consumer as the key to commerce. “The proper study of mankind is man...but the proper study of markets is women.” Eventually, it jettisoned the conventional ‘angel-idiot’ conception of women. Traditional ads offered a cure for a problem. New ads held out the promise of a better life. Advertisers began to imbue products with traits and associations that consumers could identify with. Paid endorsements of the rich and famous spread to all products. Through its variously “scientific” techniques like demand engineering, branding, or targeting, the advertising industry had become an increasingly efficient engine for converting attention into revenue. The skilled propagandist could be an engineer of demand and a maker of manners, bringing a multiplier effect to the commercial use of attention capture.

As the 1920s closed, advertising had grown from a dubious activity and negligible industry into a major part of the economy—about 3% of GDP. Many of the most talented copywriters came from families steeped in organized religion. Then a period of consumer resistance to high-handed advertising set in as, with all American industry, it was damaged by the Depression.

The true value of advertising informs about differences in price and quality. Information cannot be acted upon without attention and this attention capture and information

are essential to a functioning market economy or a competitive process. So, as a technology for gaining access to the human mind, advertising can serve a vital function by telling us what we need to know about our choices.

True brand advertising is an effort not so much to persuade as to convert. At its most successful, it creates a product cult whose loyalists cannot be influenced by mere information. Companies like Apple, Hermes, and Porsche achieve this kind of immunity to competition. What is offered is not merely a good product, but something more fulfilling—a sense of meaning that comes with the surrender of choice.

By the end of 1929, *Amos 'n' Andy* had become a craze and the first hit serial on broadcast history. They mastered the trick of creating suspense, which soap operas later copied. NBC considered itself a way to demonstrate the excellence of RCA's radios, but the attention ever after was the broadcaster's product to develop and resell to the highest bidder. *Amos 'n' Andy* brought an unlikely merger between the business of entertainment producers and that of advertisers, creating a business model by which any medium could "sell eyeballs." *The Rise of the Goldbergs*, a 15-minute serial about a Jewish family living in the Bronx discovered the fascination with the perceived hilarity of blacks and Jews. *Amos 'n' Andy* demonstrated that an industry could "own" a part of the day—in this case, 7 p.m. Having planted the flag in the evening hours, broadcasters would colonize other parts of the day. Daytime soap operas targeted women at home with little to do, thanks to all the modern conveniences they had been sold. The recipe for female listeners was appeal to the instinct for self-preservation, sex, and the family instinct.

The invention of "Prime time" was a momentous cultural and commercial innovation. It transformed not only the industries equipped to capture attention, but also the lives of those whose attention was now there for the taking. Prime time was a massive ritual of collective attention, a force drawing people together.

There is a delicate art to sustaining an audience. A continual diet of the sensational wears audiences out. In 1938, William Paley aired Orson Welles. With *Mercury Theater on the Air*, he reimagined commentary and pulled his legendary *War of the Worlds* prank. (A series of dramatized news bulletins described an alien invasion of the US, which caused panic among listeners who missed the show's disclaimers.) He found Jack Benny and the couple George Burns and Gracie Allen. He proactively set limits on CBS's advertising: among them, he cut its share of airtime to 10% and banned commercials considered offensive. He showed a shrewd awareness of the attention merchant's eternal dilemma: too little advertising and the business can't grow; too much, and the listener grows resentful and tunes out.

News coverage made it clear that the network had the power to favor or ignore individual politicians, making CBS a political force. CBS set high standards and made CBS radio news respected. It became the first network to hire its own reporters—hundreds of them. Charles Neilson developed an "audiometer" to measure audiences and more accurately value the airtime he was selling. Edward Murrow broadcast the progress of WW2 from London and was able to convey the experience of the British which he insisted on knowing firsthand.

On 3/17/1935 Hitler orchestrated a countrywide radio event where he announced the reintroduction of military conscription, and with it the rebuilding of a standing German army. His words reached an estimated 70% of German households, the largest audience to that point in history. Through technical devices like the radio and loudspeaker, 80 million people were deprived of independent thought. Hitler had an alarmingly intuitive understanding of how to appeal to a mass audience. In the 1920s, while living in Vienna, he made money as a freelancer, drawing advertising posters for products like hair tonic, soap, and foot powder. Imprinting information in the memory requires a constant repetition of simple ideas. "All effective propaganda has to limit itself to a few points and use them like slogans until the very last man is able to imagine what is intended by such a word." To teach or persuade is far more difficult than to stir emotions. What the audience most wants is an excuse to experience fully the powerful feelings already lurking within them but which their better selves might lead them to suppress.

Hitler's understanding of how to command and use attention came from his career as a popular public speaker in Munich's many beer halls, which had become popular venues for political speeches. His intense, emotionally charged style was punctuated by unwavering certainty and unremitting bile. Over time, he developed a winning and invariant structure. His speeches began with a long silence, broken by a soft, almost intimate tone of great personal pain and vulnerability, in which he described his difficult upbringing, service in the war, and despair at German's defeat. He would, with rising fury, begin to assign blame, and denounce all that was wrong in the present. In an incredibly intense finish, he bellowed a flood of unrestrained hatred for Jews, plans for renewed greatness and a great call for German unity.

A loss of individual responsibility makes the individual in a crowd more malleable. The brain's attentional faculties operate differently when one is in a group, all paying attention to the same thing. When individuals pay attention jointly to a mental rotation test, each actually solves it faster than in isolation. Almost everyone who heard the fuhrer agreed that his speeches were mesmerizing. "What Hitler was able to do to a crowd in 2 ½ hours will never be repeated in

10,000 years.” His annual rallies in Nuremberg were total theater and Goebbels would exceed Hitler in understanding how to capture attention on a mass scale and what to do with it. Hitler’s speeches turned a party with 55 members into the Nazi moment. They furnished its spiritual dimension. The limits of mass attention had been defined by the size of a physical venue—so the triumphal parade or mass rally was the outer bound. Using radio and film, however, enabled the intimate joint attention of millions. Goebbels said, “it is the most influential and important intermediary between a spiritual movement and the nation, between the idea and the people.” As such, it was the center of the Nazi project. The Third Reich had grasped the lessons of 1920s propaganda and advertising and put them to its own use.

In the 1920s, the BBC was the most advanced state-owned radio system in the world. Lenin’s regime took over Russian radio soon after the communist revolution and made Radio Moscow the most powerful station in the 1930s. Choice may be the cornerstone of individual freedom, but the urge to surrender to something larger and to transcend the self can be just as urgent. The greatest propagandists and advertisers have always understood this.

With the war over in the US, all eyes turned to TV. The migration of the screen into the home of every family was an event of unparalleled significance in the history of the attention industries and their influence. The most basic dividing line is likely between *transitory* and *sustained* attention. Selling us things relies mainly on the former, but our happiness depends on balancing them.

Senator McCarthy was a typical 20th century propagandist. By exposing him, Murrow and CBS demonstrated courage and the power of the private sector, and in particular the attention industries, to defeat official propaganda.

In 1952 *I Love Lucy* with Philip Morris as its sponsor struck gold. The show revolved around Lucy’s serial failure. The mid-1950s achieved more regular attention to the same set of messages at the same time than ever before or since. This resulted from a confluence of the prime-time ritual, the novelty of TV, and industry concentration. Peak attention continued through the 1970s, producing a kind of social convergence. It was as if the whole nation had gathered at a gigantic 3-ring circus. Everybody was engaged in the same act at the same time, but doing it alone. The 1950s would be remembered as a decade of conformity and would be the industry’s golden age. In the future contest for attention, all claimants would have to mold themselves as an alternative to TV.

Sylvester “Pat” Weaver of NBC invaded the breakfast hour with news and entertainment in 1952 with the *Today* show and late night with the *Tonight* show. The 1958 NFL championship game introduced the “magazine” format. Here-

tofore shows had been sustained by a single sponsor. He came up with the idea of repeated commercial breaks, during which each of several advertisers would have a clear 1-minute shot at the viewing audience. CBS introduced a game show in 1955 with *The \$64,000 Question*. Quiz shows followed, while programs’ flight from quality assaulted taste and decency, ceding ever more programming control to Neilson.

The flush toilet may be the most civilized invention, but the remote control is the next most important. It armed a new popular resistance against the industrialized harvest of attention. It was a way to defend oneself against what had become easy access to the mind. In 1957, the book *The Hidden Persuaders* topped the best sellers list. It showed commercials as not merely annoying but extremely effective, and to a degree that most readers would not have suspected. It stirred conspiracy consciousness in the public. Viewers of TV had conditioned themselves to believe that their choices were still their own, whatever commercials might be telling them to do. “Fixing scandals” on gameshows spread like a stain as contestants came out of the woodwork and TV was caught perpetrating a fraud. TV networks had squandered their power over American attention, as it became known that their pleasant arrangement with the American consumer was essentially a confidence game.

In 1966, Tim Leary gave a speech centered on the infectious refrain: “Turn On, Tune In, Drop Out,” which became the motto of the counterculture, youth movement. He called for a complete attentional revolution. The battle of Pepsi, as the underdog against Coke, used the Pepsi Generation as an image of themselves and liberation to reach comparable market share with Coke.

Over the 1960s the countercultural Beatles, Rolling Stones, and Doors would all reach their largest audiences by appearing on *The Ed Sullivan Show*. Toymakers created toys specifically designed to be advertised on TV. *Sesame Street* was built around the insight that if you can hold the attention of children, you can educate them. NPR’s launched *All Things Considered*. CBS canceled every show about the rural/urban divide. Now came a whole new kind of program like *The Mary Tyler Moore Show*, *All in the Family*, and *M*A*S*H*. The business model remained the resale of human attention. Capitalism is powerful because of its resilience and adaptability. Individualism became the dominant American ethos, even of capitalism itself. By the early 1970s TV viewing had increased to an average of 6 hours/day per household.

Frederick Taylor, George Nielson and Jeff Bezos all came to believe deeply that the world’s problems could be solved by better data and management. “Geodemography” is the notion that approaches which predict urban crime could also help advertisers improve marketing of their products. The

Zone Improvement Plan (ZIP) codes created by the Post Office enabled granular targeting of “blacks,” “youth,” or “Southerners.” The tens of thousands of new zip codes were sorted into 40 clusters of like-minded areas. For the advertising industry, it proposed a vast new horizon of targeted campaigns and billings. In the late 1980s a dozen cable networks launched, each targeted at a demographic fragment. Audience fragmentation was the new paradigm that followed advances in technology. It aligned commercial interests with those of a society now diverse enough to require a variety of choices. The exercise of that choice was facilitated by the now ubiquitous and reliable remote control, the scepter by which the new sovereign decreed his destiny. 1985 began the age of zapping—channel switching on remote controls or fast-forwarding through commercials. Print advertising has always been less unpopular than TV or radio, for it is more under the control of the reader who can avert the eyes.

Ray Tomlinson developed email. Within a year it went viral and gave the Internet arguably its most powerful reason to exist—to connect people. It endowed the network with a social and human purpose—and in that sense, a soul. Email was the Internet’s first killer app—the first program that might justify the cost of the entire network. It would begin devouring human attention and grow into the greatest collector of it since the invention of TV. The check-in would eventually become a widespread attentional habit, a form of “operant conditioning,” as B. F. Skinner called it. The most effective way of maintaining a behavior is not with a consistent, predictable reward, but rather rewards that vary in frequency or magnitude. Behavior consistently rewarded is more prone to “extinction” than behavior inconsistently rewarded.

Atari, in the 1970s, built a cabinet with a computer inside. But it wasn’t until Japanese developers got involved that computer games really hit the mainstream at arcades. The themes of addiction and engrossment could be found in video games from their debut. The business model was cash for an experience. Games aimed for complete capture by the urge to match one’s skills against the machine in the hope of finding that perfect balance between their abilities and the monsters chasing them. Only a few games seem to have successfully achieved that balance. The best players could sustain excitement, or even induce a “flow state” at the peak of their abilities. *Pac-Man* became an even more lasting and profitable hit than *Space Invaders*. Having conquered, and then diversified, the arcade, Atari consoles were the first computers to enter the home. Video games were arguably the killer app of multiple computers in the home.

The business model of “computer information services” was not that of attention merchant, but solely subscription-based. They offered customers access to proprietary net-

works and primitive Internet-like spaces. To go online required the purchase of a modem, into which one had to enter a string of byzantine commands, while occupying the family phone line.

America Online (AOL) offered sources of comfort with their infamous chat rooms. AOL had, over the 1990s, decisively proven that the allure of the new computer networks was social. It suggests how incomplete the conquest of human attention was from the 1910s through the 1960s, even after TV had entered the home. The domain of the interpersonal remained inviolate. But AOL faced price competition from both Microsoft and other “bare-bones” internet services that were offering “all you can eat” for \$19.95 a month or even less.

The path of attention merchants is risky, for it can call for compromises in quality and ethics. There was no empirical evidence that Internet advertising worked. It lacked the data that advertisers had grown to crave, and the basis on which it made buys with established attention merchants. AOL replaced the limited content and services that subscribers were paying for with sponsored content and services. Then AOL began to systematically loot internet ventures by those seeking an advertising deal. It sometimes left partner companies so cash-strapped that they began collapsing. It sold its users’ mailing addresses to direct mail companies and was going to sell the phone numbers to telemarketers as well. This hastened the site’s loss of allure to the Internet, whose open design was the opposite of AOL’s, and which by now offered a greater variety of things to see and do. Despite a \$164 billion merger with Time Warner, it was ultimately brought down by the rise of the popular, open Internet and its fast-multiplying attractions.

We have followed the progression of the individual in society as the attention industries shifted focus from the mass of consumers to a diverse range of identities and market segments. The first great harvester of attention was religion. The impulse to idolize has not faded in our secular age, only gone seeking after strange gods.

Time, in the 1920s launched the notion that news could and should be told through stories about people—the day’s most interesting and famous personalities. People just aren’t interesting in the masses—it’s only individuals who are exciting. The important personalities were men of power or achievement. (Women would appear only rarely in *Time*, and even more rarely on the cover). *Time* would put a different notable face on the cover every week and, late in the autumn, announce a “Man of the Year.” *Time didn’t start this emphasis on stories about people; the Bible did.*

People’s magazine devised the rule that young, pretty, rich, TV, music and movies were preferred fare. Strength

of feelings about our celebrity culture is often linked with older traditions of worship, an essential craving of all humanity to be connected with the extraordinary. Particular to modernity is the idea of constructing an industry based on the demand for feeling some communion with such individuals and on our willingness to idolize them—an industry that monetizes their capacity to capture our rapt attention. Celebrities became attention merchants in their own right. Fame was their professional capital. Oprah cast her professional choices, persona, and style as *moral* ones, and the talk show as a group therapy session. The show's prescriptions for personal growth always included consumption as a means of self-actualization and self-reward. Advertising was her main revenue source.

MTV got nearly all of its content for free or better than free, since music labels wanted MTV to play their videos. They were in the enviable position of selling advertisements off the attention captured from advertisements.

Reality TV industrialized the manufacture of celebrity for the pure sake of attention capture and built a system to ensure that everyone could be famous, or have a chance to be. This would sustain the system. For ordinary people, reality TV seemed almost like a lottery and became the dominant form of programming.

The long-term winners were those who used the medium to deliver information and entertainment. The emerging market was created by convergence, a world called Internet-TV. Google, whose specialty was search, became a major application as the Internet got more populated and was too vast to tune in to like a TV channel. It was soon clear that Google did search better than anyone else; its inventors were smart, its algorithm wicked, and its code tight. If radio had promised a “relaxed” audience, this was better: people who really wanted something and were ready to tell exactly what—“intentional traffic.” Brin, one of Google's founders, coauthored a piece insisting that “advertising funded search engines will be inherently biased towards the advertisers and away from the needs of the consumers.” **Search engine bias is particularly insidious.**

But the time had come when Google had to show it could make money somehow. The founders sought to create a form of ad that improved the product instead of degrading it—advertising that *adds* value. The attention merchant had always tried to reach as broad an audience as possible and bombard them with as many ads as they'd stand before revolting. The new system only showed relevant advertisements at the moments when people were plainly expressing a commercial intent: when someone types in “drug rehab,” “male pattern baldness,” or “find a mortgage.” And stay out of the way otherwise. The technological implementation was called “AdWords.” With their direct proof of clicks and tracking of customers, advertisers could see a direct link between their ads

and eventual purchases. **Google would become the most profitable attention merchant in the history of the world.**

Ironically, it was contempt for advertising (on the part of the founders and chief engineers) that would ultimately pave the way to the company's unrivaled success as an attention merchant. The key was in renegotiating the terms under which the public was asked to tolerate ads. It presented what seemed a reasonable trade-off. So unintrusive was AdWords that some people didn't even realize that Google was ad-supported. The public got the best search ever and other goodies as well, like free email with unlimited storage, peerless maps, the world's libraries, and even research devoted to exciting innovations like self-driving cars.

Internet audiences were fragmented to a degree that made cable TV look like the days of *The Ed Sullivan Show*. Bloggers sometimes claimed they were creating geographical communities, aggregations purely by common interest and passion. At first, they had no expectation of making money, so there was no temptation to compromise standards or temper opinions. When Wikipedia came to its own choice, it chose to remain free of advertising, effectively forsaking billions in potential revenue. YouTube became the Internet's first successful challenge to TV, creating a new genre. Collectively, the blogs exerted the influence of a kind of national conversation. Conversation was king, not distribution or content. The erasure of barriers to entry in markets for speech released an outpouring, attracting billions of hours of attention which no one had the chance to resell. But it took ever more work to keep a blog up to date and engaging. By the end of the 2000s everyone either blogged as part of his job or had hung up his guns. New sites called themselves “social media,” and keeping up on one was much easier than maintaining a blog. The time to craft sharp, witty blog prose was better spent expressing yourself on Flickr, Facebook, or Twitter.

The greatest procrastination aid ever devised was the World Wide Web. Contagious media is the kind you immediately want to share with all your friends. This requires that you not only take pleasure in consuming the media but also in the social process of passing it on. Anything inessential constituted a ‘payload’ that the contagion must drag along as it spreads. Clickbait was sensationally headlined articles, paired with provocative pictures, which the *Huffington Post* mastered. AOL bought the site in 2011.

The term “facebook” traditionally referred to a booklet produced at American universities to promote socialization in the way name stickers do at events. Zuckerberg, a freshman at Harvard, hacked their student picture database while under the influence, which landed him on academic probation. “They planned to set up a residential computing directory, and everyone talked about a universal face book within Harvard”

Zuckerberg said. “I think it’s kind of silly that it would take a couple of years to get around to it. I can do it better than they can, and I can do it in a week.” He did a dual concentration in psychology and computer science. “Understanding people is not a waste of time,” he said. He was never cool, exactly, but he understood what makes things seem to be. In business, invention is often overrated as compared with execution. No other firm, save Google, has harvested as much attention from the Internet, or commercialized it as effectively. Where Google prevailed by offering the best search, Facebook did so, thanks to stable code and “network effects.”

For the early web, online content was circumscribed only by the imagination of its users. The most serious problem was trolls who ruined nearly every online environment, including AOL. A troll abuses the terms of the attention agreement by violating decorum and expressing opinions for the purpose of provoking an emotional response.

Nothing validates your social existence like the knowledge that someone else has approved you or is asking for your permission to list them as a friend. Facebook offered users an augmented representation of themselves. The profile was the attentional bait. The “like” button was first activated in 2009. Zuckerberg, like Google’s founders, had the technologist’s wariness of advertising and its tendency to ruin websites. The Holy Grail was advertising that people actually wanted to see. A credible claim to being a social necessity was the most important thing that Facebook achieved. But they’re also building an image and identity for themselves, which in a sense is their brand. It supplanted the holiday card as the means for cultivating the perimeter of one’s acquaintance. Google’s search revenues per pageview is 100-200x Facebook’s. The “like buttons justified Facebook’s heavy investments in tracking technologies, which allowed it to follow users wherever they wandered online. It relied on those tracking technologies to improve the data on each user. Much of the energy formerly devoted to blogs was now channeled into upgrading one’s Facebook profile and the value of Facebook itself, creating a virtual attention plantation.

The “Research in Motion” pager had a small monochrome screen, a well-designed keyboard, the capacity to retrieve emails automatically, and was powered by a single AA battery. It was a hit. Called the “BlackBerry,” it remained the instrument of a certain elite who pioneered an attentional habit that would define the coming century. **Where the human gaze goes, business soon follows.** On Twitter, one shared a message; a photo was optional. Conversely, Instagram made the photo mandatory and the message optional. The “like” feature was the heart of Instagram and Facebook. Instagram’s killer app was the self-portrait, the “selfie.” **Attention is power.** Calling it a business model as opposed to mere narcissism pro-

vides an excuse for labor intensive, good Instagram feed—like the Kardashians. Technology doesn’t follow culture so much as culture follows technology. 18 months after its debut, Instagram was purchased by Facebook for \$1 billion.

What was meant to be “relevant” to your wishes and interests turned out to be more of a studied exploitation of weaknesses. The problem was as old as the original proposition of seizing our attention and putting it to uses not our own. Your time is scarce and your technologies know it. By design, both Google and Facebook acquired the best data on just about every consumer on earth, as well as the best tools for collecting more of it.

By 2011, all commercial Internet content was driven by advertising. Netflix took the bold and seemingly foolhardy decision to forgo advertising altogether as part of a strategy of putting the viewer “in control of the experience.” It rediscovered a lost trove of human attention filled with an evident hunger for more engaging, immersive content. 61% of their viewers defined their viewing style as binge watching. Immersing in multiple episodes or seasons of a show over a few weeks is a new kind of escapism that is welcomed today. Good storytelling is perhaps the most dramatic statement one could make about what was happening to TV.

Purveyors of high-quality, commercial-free programs suddenly began to prosper and attract audiences that approached the size of those attending prime time. Faithful, regular audiences who were lovers of baseball, football, soccer and other sports demonstrated immunity to the laws governing other kinds of programming and renew themselves in every generation. In all other formats, however, attention and audiences were declining for free TV.

When an online service is free, you’re not the customer. You’re the product. Content Blocking gives your extensions a quick way to block cookies, images, resources, pop-ups, and other content. Adblockers became the most popular of apps. Once people get used to avoiding advertisements, it’s hard to accept the terms of the old arrangement. With “wearables,” Apple turned the check-in habit into a bodily function. The closer a technology feels to being part of us, the more important that we trust it. What seems shocking to one generation is soon taken for granted by the next.

By the late 2010s the rich or tech-savvy cord-cutters watched commercial-free TV on Netflix or Amazon and read eBooks or web-browsed on an ad-blocked phone or computer web. Advertising is an industry left for dead at least 4 times over the past 100 years, until people rediscover their taste of “free” stuff. Periodic revolts against the arrangement are predictable and necessary. The past half-century has been an age of unprecedented individualism, allowing us to live in ways not possible before. But with the new possibilities has come

the erosion of private life's perimeter. Most of us have passively opened ourselves to the commercial exploitation of our attention anywhere and anytime.

Over the coming century, the most vital human resource in need of conservation and protection is likely to be our own consciousness and mental space. The first stirrings can be seen in the practices of "unplugging" or taking "digital Sabbaths." And any place where we mean to interact with one another or achieve something that requires a serious level of concentration. The goals of the attention merchants are generally at odds with ours--the very opposite of those cultivated by the monastics, whose aim was precisely to reap the fruits of deep and concentrated attention. The future will be nothing more than the running total of our individual mental states. Our life experience will ultimately amount to whatever we have paid attention to. We must reclaim ownership of the very experience of living.

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