

ATTENTION SEEKING

Distraction as a Cultural Dilemma in the Digital Age

by

Alastair Woods

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ABSTRACT

Since the introduction of the internet into mainstream use, there has been growing concern over the impact of digital media and technology on our attention. This anxiety is based on a material theory of distraction, which posits that our attention is being pushed, pulled and depleted by technology that is intentionally designed to be distracting. Investigating this premise through history, literature, popular culture, philosophy, science and art reveals that distraction may not be a material problem, but a cultural one that is deeply embedded in the fabric of Western society.

Using Sohail Inayatullah's Causal Layered Analysis (CLA) method, this project argues that our perceptions of attention and distraction can be traced back to Judeo-Christian morality that posits attention as virtue and distraction as sin. This rigid binary has shaped our philosophical, systemic and material orientation toward distraction as a failure of character. A future-state CLA is then built to articulate an alternative vision of attention not as a finite resource, but a mutual construction between ourselves, others and the world. In reframing what it means to pay attention in the digital age, it is argued that distraction does not have to be a turning away from the world, but rather a deeper engagement with it.

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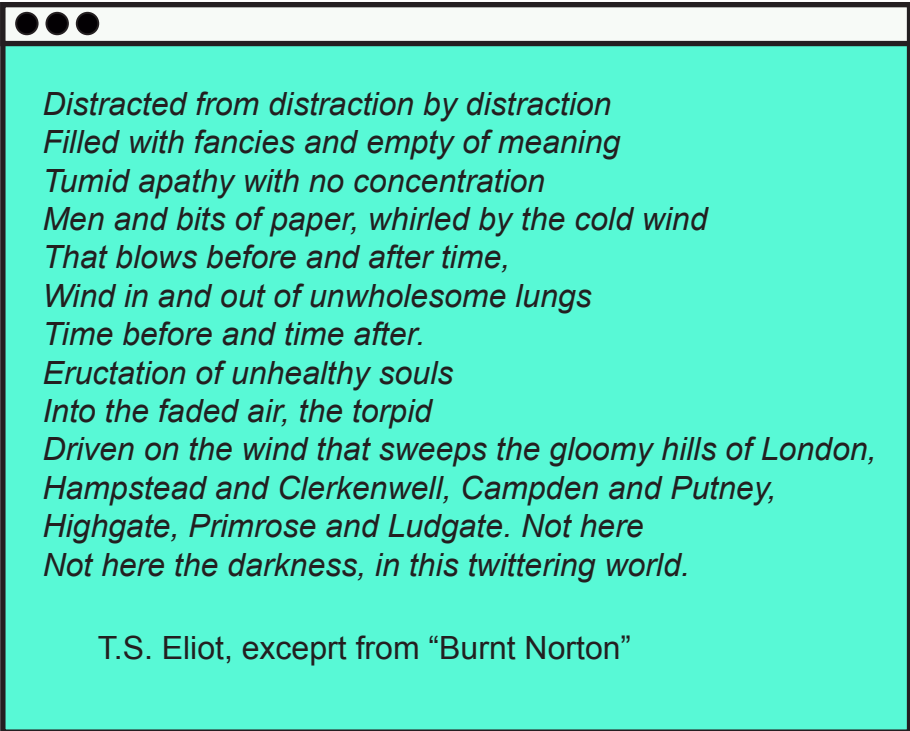
Finally, thank you to HP - for slowing me down so that I could, finally, pay attention.

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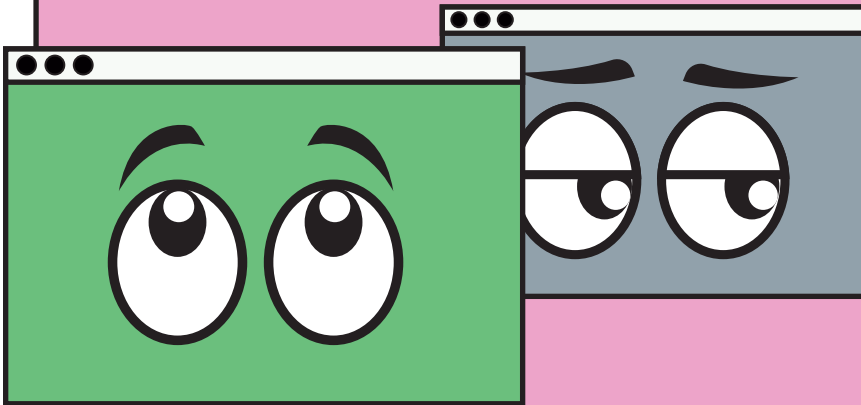
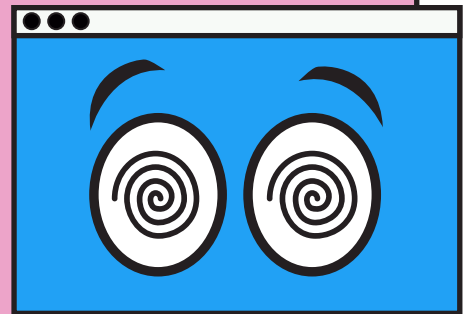
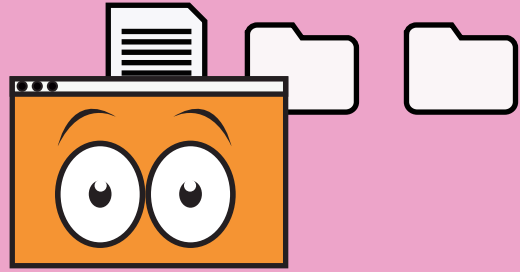
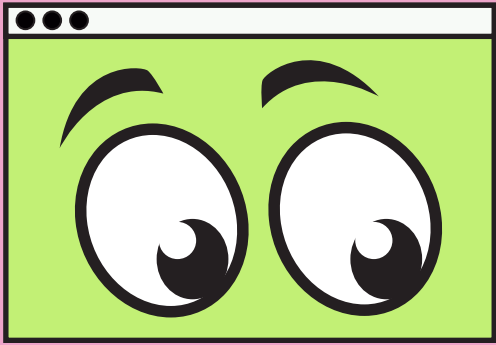
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*Distracted from distraction by distraction
Filled with fancies and empty of meaning
Tumid apathy with no concentration
Men and bits of paper, whirled by the cold wind
That blows before and after time,
Wind in and out of unwholesome lungs
Time before and time after.
Eruption of unhealthy souls
Into the faded air, the torpid
Driven on the wind that sweeps the gloomy hills of London,
Hampstead and Clerkenwell, Campden and Putney,
Highgate, Primrose and Ludgate. Not here
Not here the darkness, in this twittering world.*

T.S. Eliot, excerpt from "Burnt Norton"



“Everyone knows what attention is.”

William James

In 2015, Microsoft Canada’s Consumer Insights department released a study on the effects of digital technology use on attention. The report concluded that frequent use of social media and other technologies was eroding the human capacity to engage in sustained focus (Microsoft Canada; 2015). The study was widely circulated in the media, which chose to hone in on one particularly shocking and bizarre statistic: that the “average” human attention span was now shorter than that of a goldfish; reduced from 12 seconds in 2000 to 8 seconds in 2013. The “average” goldfish attention span was 9 seconds. That the human attention span was outperformed by that of the most colloquially forgetful animal on the planet served as further confirmation of what everyone already felt was true: technology was making us dumb and distracted.

However, the source of the offending information was not Microsoft, but a website called Statistic Brain. When a BBC reporter contacted Statistic Brain, as well as other reputable sources listed in the study, such as the National Center for Biotechnology Information at the US National Library of Medicine, no one could find any research to back up

the claim. Other experts in psychology and neuroscience outright refuted it (Maybin; 2017).

The goldfish story may not reveal much about our actual attention spans, but it is reflective of a deeper cultural truth: a widespread belief, taken as fact, that our engagement with digital media and technology is inherently damaging to our brains. This anxiety is reflected in our behaviour and discourse around technology: people using productivity apps to limit their social media screen time; pundits and bloggers churning out think-pieces about living in the “Age of Distraction”; governments banning digital devices in classrooms.

Yet for all the attention being paid to paying attention, it is surprising how little clarity there is on what attention actually is. Is it a property or a state? Do we control it or does it operate subconsciously? Is it an innate quality or a learned competency refined over time? The motivating premise of this research was not necessarily to answer definitively the question of what attention is, but to ask different questions: Why do we valorize attention? What is so objectionable about distraction? And what, exactly, are we being distracted from?

The twenty-first century is not the first period in human history to grapple with the question of attention. As we will see in the coming inquiry, attention

has been pondered by scientists and philosophers; channeled by mystics and holy people seeking to meet the divine; served as muse to writers and artists; and fretted over by the chattering classes each time a new technology expands the boundaries of thought, expression and connection. While the question of attention has been asked across the globe and over thousands of years, the problem of attention seems to be one unique to the Western world. According to the writer Joshua Cohen, many other cultures across the globe would regard the Western world's obsession with identifying, developing, protecting and enhancing the utility of a singular, integrated system of attention as "a condition bordering on mania":

"A deficit of attention is, perhaps, just a surplus of fear-mongering...creating an artificial resource, only to create an artificial scarcity: a scare, a run on the bank of attention." (Cohen; 2018)

Perhaps the antidote to our so-called crisis of distraction might be in questioning its parameters and assumptions. What if the crisis is not in distraction's presence in our lives, but in the absence of our ability to appreciate and work with it? Sensing the potential of having our priorities backwards, Jonathan Rothman of the New Yorker once quipped: "What if, in fact, we're not very good at being distracted? What if we actually don't value distraction enough?" (Rothman; 2015)

This project seeks to understand our anxieties over the effect of digital technologies on our attention by unearthing the assumptions that underpin them; by paying attention to what it means to pay attention in the digital era. Investigating the relationship between technologies of communication and attention through history, literature, popular culture, philosophy, science and art reveals that distraction may not be a material problem, but a cultural one that is deeply embedded in the fabric of Western society, and rooted in uncertainty over what attention is, how we use it and why it is valuable.

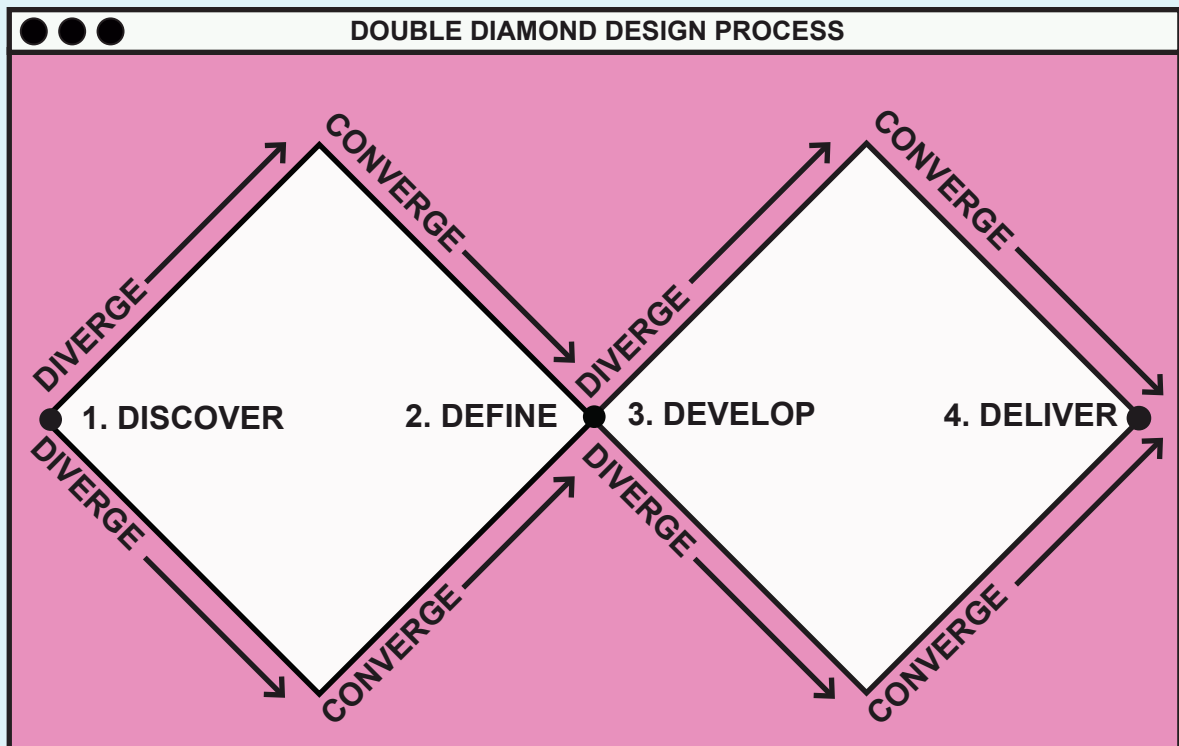
The pioneering American psychologist William James wrote in 1890 that "Everyone knows what attention is."

But what if we don't?

METHODOLOGY

This project was staged according to the British Design Council's "Double Diamond" process, which breaks up a project into four distinct phases:

1. **Discover:** Initial discovery phase that leverages a wide array of research methods and resources to identify challenges and opportunities in the topic area.
2. **Define:** Insights from the discover phase are organized and analyzed to build a clearer picture of the project's scope.
3. **Develop:** Solutions or interventions are developed, tested and iterated.
4. **Deliver:** Project is finalized and released to the public (Design Council; 2016).



METHOD (PROJECT PHASE)

- LITERATURE REVIEW (1, 2, 3)
- HORIZON SCAN (1,2)
- STEEP-V ANALYSIS (2)
- PRIMARY INSIGHT GENERATION (2,3)
- CAUSAL LAYERED ANALYSIS (3)
- PARTICIPATORY FORESIGHT WORKSHOP (3)
- SECONDARY INSIGHT GENERATION (3)
- KNOWLEDGE SYNTHESIS (3)
- FINAL REPORT & PRESENTATION (4)

Literature Review

An extensive literature review was conducted to better understand the topics of attention, distraction and technology. Literature included primary and secondary academic and popular sources such as journals, articles, books, magazines and essays. These sources came from a wide range of disciplines, including, but not limited to: history, philosophy, cultural studies, psychology, art, literary criticism, religious studies, science, society and technology.

Horizon Scan

A horizon scan was also conducted to identify signals and trends that would be relevant to the topics of attention, distraction and technology. Signals were collected from a variety of primary and secondary sources, including, but not limited to: academic journals, news media, books, movies, blogs and social media posts.

Insights Generation & Analysis

The insights gathered from the literature review and environmental scan were organized under a STEEP-V framework. By categorizing insights under the thematic areas of society, technology, economics, environment, politics and values, a more robust and holistic picture can emerge of how our understandings of attention, distraction and technology are manifesting and

changing across space and time (See Figure 1). Through this analysis, key findings were uncovered that drove research in new directions, areas for intervention were identified and the topic as a whole was framed.

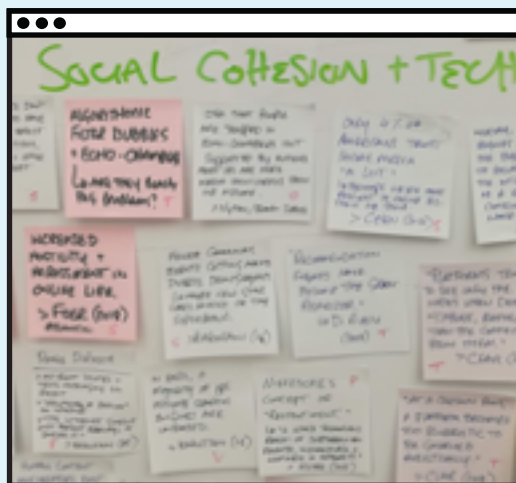


Figure 1: Generating Insights from literature review and horizon scan

Causal Layered Analysis

Causal Layered Analysis (CLA) is a critical futures method developed by Sohail Inayatullah that seeks to understand particular issues of discourse as they manifest in deeper layers of culture. While many futures studies methods are concerned with making predictions based on empirical evidence or generating scenarios through interpretive methods, Inayatullah is keen to stress that CLA has more in common with poststructuralism through its interest in “creating distance from current categories”:

“This distance allows us to see current social practices as fragile, as particular, and not as universal categories of thought—they are seen as discourse, a term similar to paradigm but inclusive of epistemological assumptions.”
(Inayatullah, 1998)

CLA sets aside interest in prediction or meaning making in favour of “making units of analysis problematic” (Inayatullah; 1998) This highlights the strength of CLA: its ability to make visible the unacknowledged assumptions behind our ways of seeing, experiencing and understanding the world. Inayatullah

argues that the role of CLA is to “undefine the future” by questioning the premises upon which it is defined. It asks us to interrogate who gets to set the boundaries of knowledge; what are the conditions under which “reality” is constructed and presented to us; where is the power to define knowledge located; what bodies and institutions benefit from a particular way of knowing and how are they actively complicit in shaping it? As Inayatullah writes:

“The role of the state and other forms of power such as religious institutions in creating authoritative discourses—in naturalizing certain

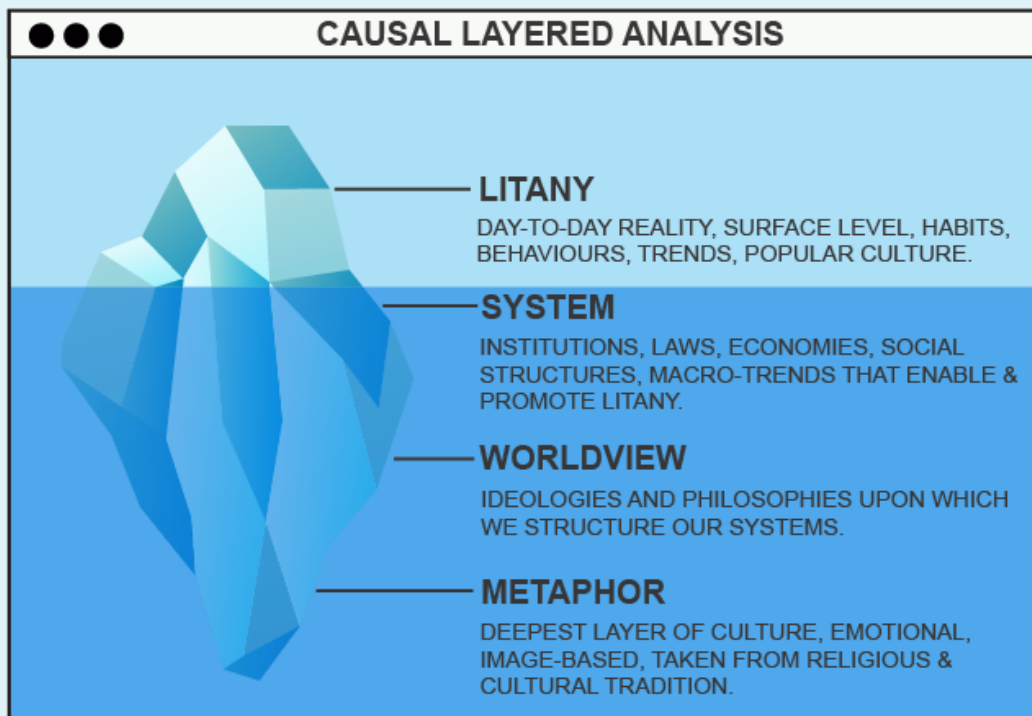


Figure 2: The four levels of Causal Layered Analysis (CLA).

questions and leaving unproblematic others—is central to understanding how a particular future has become hegemonic. But more than forms of power, are epistemes or structures of knowledge which frame what is knowable and what is not, which define and bind intelligibility.”
(Inayatullah; 1998)

This method of deconstructing knowledge reveals the “constitutive discourses” that shape our understanding of particular phenomena, casting a critical eye on their sources as a way of problematizing them and, ultimately, reimagining them.

A typical CLA is conducted in four layers (See Figure 2). The first level is the litany, which is the most obvious and surface-level manifestation of phenomena. This is how certain concepts manifest in our day-to-day lives: media headlines, patterns of behaviour, popular culture. Below this level is the system, which is the social, political, economic, ecological and cultural structures and institutions that enable the litany. The system level takes place on a more societal scale; it can include law and regulation, infrastructure, larger quantitative and qualitative trends, economic structures and technological developments. The third level is the worldview, which articulates the “civilizational discourses” that underpin the systems. In other words, the ideological and

philosophical values and premises from which the systems operate. These worldviews can be familiar categories of political and economic orientation such as capitalism, or they could reflect more intangible philosophical concepts such as individualism, or nature versus nurture. The final level of the CLA is the myth or metaphor, which Inayatullah describes as “the deep stories, the collective archetypes, the unconscious dimensions of the problem or the paradox” (Inayatullah; 1998). This level is murkier and more intuitive than the other levels, appealing to emotions and morality, using language that is “less specific, more concerned with evoking visual images, with touching the heart instead of reading the head” (Inayatullah; 1998). This is why myths and metaphors are often drawn from religious and spiritual traditions, or culturally specific idioms, aphorisms or maxims.

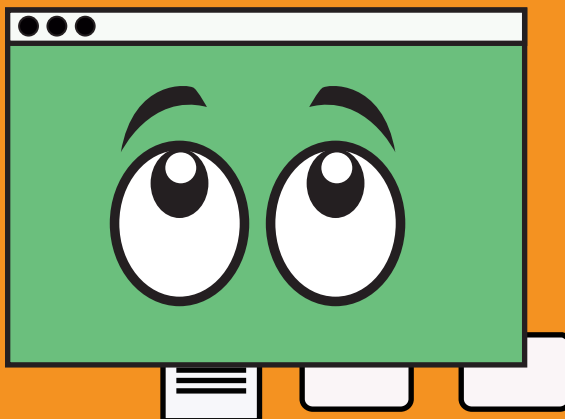
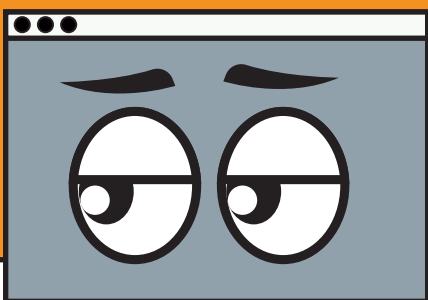
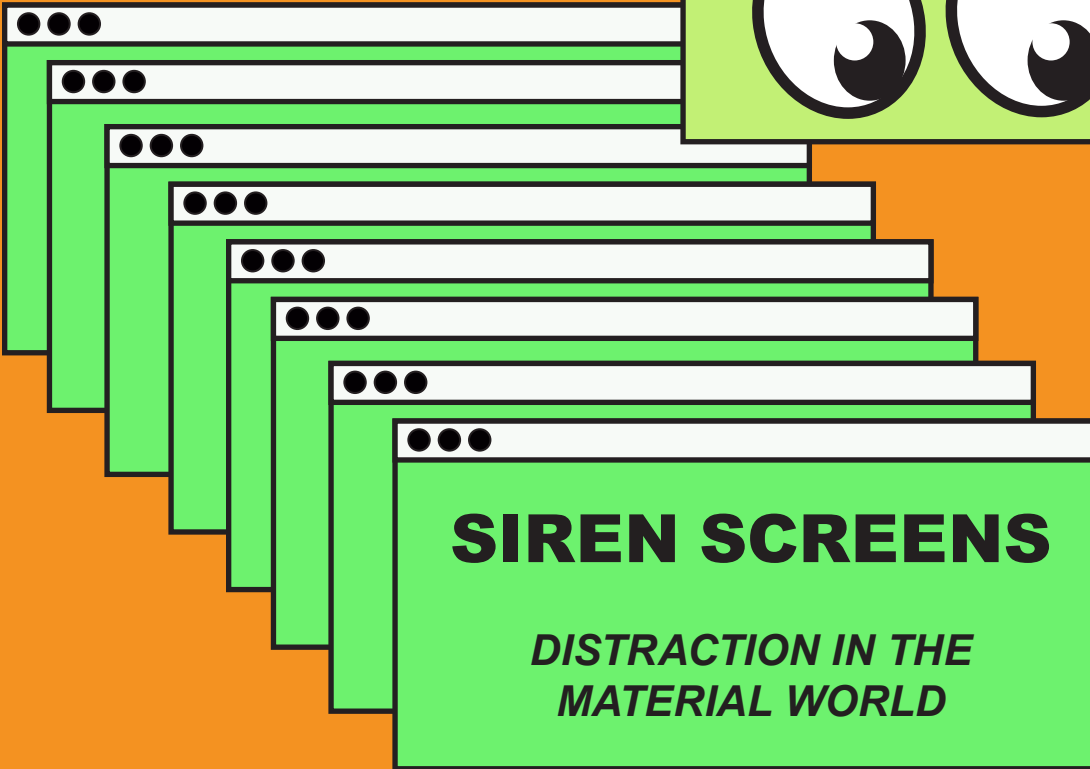
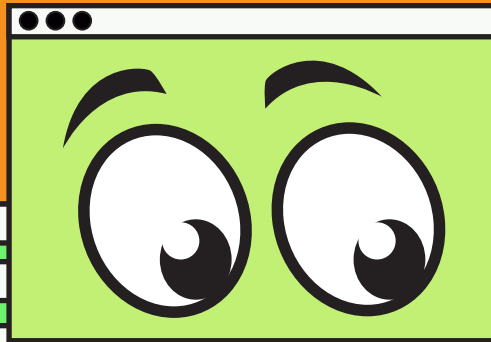
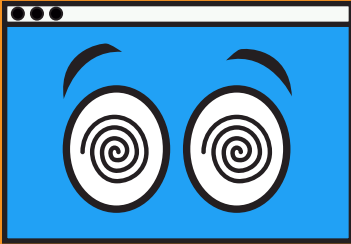
The CLA is a systemic approach to futures in that it articulates the cause and effect of each level on the others as a way of building a comprehensive picture of a problem or paradox across space and time, “opening up the present and past to create alternative futures” (Inayatullah; 1998). In this sense, Causal Layered Analysis mines our past and present interpretations of a particular issue and uses what it unearths as a jumping off point for shaping the future. In revealing how we understand attention, distraction

and technology today; and in acknowledging how that interpretation has been shaped by the past; we are more able to imagine robust, durable, dynamic and diverse alternatives for the future.

This method was instrumentalized in this project in two distinct phases. First, leveraging the insights and analysis from previous stages of research, a “present state” CLA was constructed that articulated the problem of attention, distraction and technology in the digital age, specifically within the context of the Western world. Second, a participatory foresight workshop was held with 20 participants who were recruited through social media as well as professional and personal networks. Participants were given an overview of the research and the CLA method, before being presented with the “present state” CLA for critique and feedback. Participants were then sorted into small, mixed groups and were asked to construct “future state” CLAs that served as a contrast or alternative to the “present state.” Each group came up with unique and thought-provoking CLAs, which they presented to all participants for further discussion. These CLAs, as well as notes from the subsequent discussions were taken from the workshop for further analysis by the researcher.

Final Insights Generation & Analysis

Taking the output from the CLA workshop, information was organized and synthesized to produce final versions of present-state and future-state CLAs. For the present-state CLA, participant feedback was reviewed and integrated into the final product. The final future-state CLA was produced by identifying common themes, patterns, linkages and gaps between the four participant-produced versions. While each version showcased a novel reinterpretation of attention and distraction, there was a remarkable amount of continuity between them. In particular, almost all of the group CLAs touched upon motifs of how to represent reality on our screens, redefining the social currency of social media, changing the terms of engagement with technology, shifting attention from utility to experience. These insights helped in producing the final future-state CLA, and pointed towards important real-world examples from which to draw inspiration.



“I can’t blame modern technology for my predilection for distraction, not after all the hours I’ve spent watching lost balloons disappear into the clouds.”

Colson Whitehead


In his 1903 essay *The Metropolis and Mental Life*, the German sociologist and philosopher Georg Simmel sought to understand the shifting cognitive states of a rapidly modernizing, urban-dwelling populace at the turn of the century. The psychological foundation of this new “metropolitan individuality,” he argued, was “the intensification of emotional life due to the swift and continuous shift of internal and external stimuli” in the modern city (Simmel; 1903). He noted how in urban areas, “stimulations, interests and the taking up of time and attention, present themselves from all sides...in a stream which scarcely requires any individual efforts for its ongoing” (Simmel; 1903), which he contrasts with the “slower, more habitual, more smoothly flowing rhythm of the sensory-mental phase of small town and rural existence” (Simmel; 1903). For Simmel, the relentless march of modernity - urbanization, new technologies, emerging media landscapes - created an unyielding deluge of visual, audio

and cognitive stimulation that the pre-industrial, bucolic lifestyle did not have to contend with. Distraction, then, became a byproduct of material progress: the hi-tech, modern world was designed to distract us.

More than a century on from Simmel’s influential lectures, the material theory of distraction still holds us in its grip. In the twenty-first century, we find ourselves saturated with information, images, sounds, likes, retweets, news, opinions, videos and more, overflowing from our smartphones and laptops, tablets and electronic billboards - it seems that there is no escape from the siren song of distraction emanating from our screens. Writing for the *New Yorker* in 2015, Joshua Rothman quipped that “no person needs advice about how to be distracted. Like typing, Googling and driving, distraction is a universal competency. We’re all experts” (Rothman; 2015).

The term attention comes from the Latin word *attendere*, which translates as “to stretch toward”; it is an encounter with something external to the self. This definition seems to reinforce the material theory of distraction: the outside world is competing for our attention, and in the digital era, this competition has become ever-more sophisticated.

There seems to be widespread consensus that we live in an “Age of Distraction”; and that the ubiquity of



digital media and technology is what has ushered us there. But examined against history; interrogated by science; and interpreted through literature and popular culture, the material theory of distraction begins to be on shakier foundations.

This section will first examine the the history of technology and distraction, demonstrating how people have historically feared technology's potential to render us forgetful, stupid and inattentive. Next, this section will turn to the contemporary circumstances in which these historically familiar anxieties have arisen: examining what, if anything, makes "digital" distraction unique. Finally, it will cast a critical eye on the concept of the "attention economy"; arguing that this framework narrows our understanding of attention and distraction, and limits our ability to find a better, more human relationship to technology.

Taken together, these investigations seek to cast doubt on the material theory of distraction, instead arguing that how we understand attention and its absence in the digital age is a reflection not of technology, but of culture.

A BRIEF HISTORY OF DISTRACTION

On November 18, 1999, tech entrepreneur Eric Schmidt, who two years later would become the CEO of Google, took the stage at the Internet World Trade Show in New York City to declare that “[t]he internet is the first thing that humanity has built that humanity doesn’t understand; the largest experiment in anarchy that we have ever had.”

From today’s vantage point, his remarks seem eerily prophetic. The latter half of the 2010s has made clear that we either could not or did not anticipate the impact the internet would have on our individual and collective lives.

The adoption of any mass technology has usually resulted in a prolonged period of adjustment in which chaos seems to reign. The sociologist Zeynep Tufekci noted in 2018 that society needs time to develop the “political, institutional and cultural antibodies” to the upheaval produced by the internet in the same way we have developed frameworks through which other technologies have been made safer (Tufekci; 2018).

But our anxieties around technology are actually part of a long history of skepticism, fear and panic that has surrounded the introduction of new mediums of communication in the Western world - one that begins in 360 BCE with the written word.

In Plato’s *Phaedrus*, he recounts a debate between Socrates and the titular interlocutor on the merits of the written word. Socrates suggests that the effect of writing on the human mind is corrosive to the faculties of attention and memory:



Figure 3: Impressions (2018), an installation of excerpts from Plato’s *Phaedrus* on the controversial legacy of the written word.

“[It] will create forgetfulness in the learners’ souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves...[T]hey will be hearers

of many things and will have learned nothing; they will appear to be omniscient and will generally know nothing; they will be tiresome company, having the show of wisdom without the reality.”
(Plato; 1952)

Socrates believed that to engage in writing was to submit to its corrupting influence, and in doing so, to lose a valuable part of oneself (See Figure 3).

Socrates is in good historical company in this regard. In 1477, the Venetian editor Hieronimo Squarciafico wrote a scathing critique of the mass literature made possible by Gutenberg's printing press, arguing that the "abundance of books will make men less studious; it destroys memory and enfeebles the mind by relieving it of too much work" (Lowry; 1979). Friedrich Nietzsche commented on the typewriter's ability to shape our minds when he said "Our writing tools are also working on our thoughts" (Cohen; 2018). At a 1909 conference on child welfare, speakers issued dire warnings of the potential of cinema to "sap the mental and moral strength" of young people, equating it with stupidity and criminal activity (Starker; 2017). The Columbia University professor Lyman Bryson called unrestrained public radio "one of the most dangerous elements in modern culture" (Chen; 2017). The era of television ushered in the concept of "infotainment," sparking discussion on how to encourage responsible and informed TV viewing (See Figure 4). In an excerpt from his book *Amusing Ourselves to Death* that bears an uncanny resemblance to Socrates, the American media theorist Neil Postman wrote of television that:

"[It] is altering the meaning of 'being informed' by creating a species of information that might properly be called disinformation. Disinformation does not mean false information. It means misleading information - misplaced, irrelevant, fragmented or

superficial information - information that creates the illusion of knowing something, but which in fact leads one away from knowing." (Postman; 1985)

Two thousand years after Socrates lamented the stultifying effects of the written word, the American writer Nicholas Carr would decry the internet's "chipping away at my capacity for concentration and contemplation" even as he admitted that the science is inconclusive as to whether the internet really is making us terminally distracted (Carr; 2008).

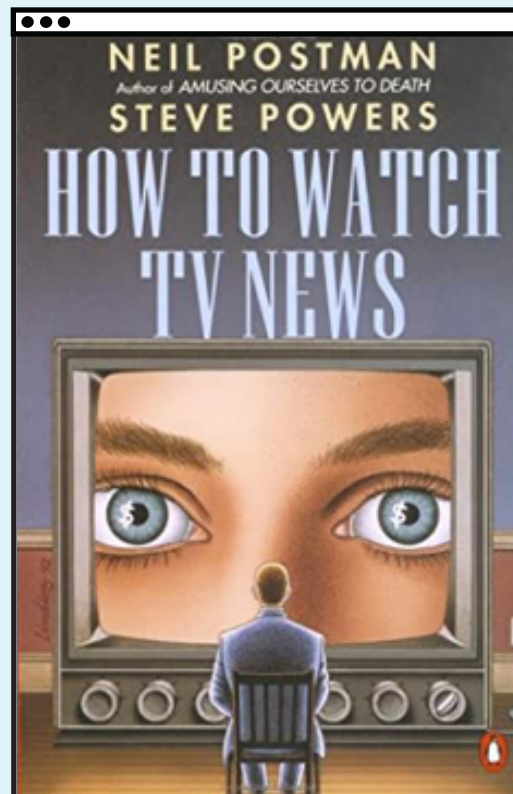



Figure 4: A 1992 book by media critic Neil Postman and journalist Steve Powers on how to effectively watch TV news.



The emphasis on the ability - or lack thereof - to read something with continuous concentration is the closest thing to a measurement of the internet's supposed impact on our ways of thinking that most critics can offer. But this line of reasoning appears to be a postulation that attending to something with sustained focus is our baseline state of being. But even this assumption is suspect. The French physiologist, ophthalmologist and Sorbonne professor Louis-Emile Javal once conducted an experiment by laying a mirror over the facing page of a book and noticed that his reading was not linear but “nervous, neurotic”; prone to jumps, pauses, “fixations” and sudden leaps (Cohen; 2018). It would seem that even in 1878, the human capacity to pay attention could be, at best, naturally tenuous.

To point out the parallels between our public discourse around the internet and those of previous communications revolutions is not to dismiss the concerns they raise. The internet, like all mediums of communication, likely influences human behaviour in ways we don't yet fully understand; some of which are bound to be negative. But the persistence of the same allegations against different technologies over time should make us question the assertion that we face unprecedented challenges with the internet, or that the digital tools with which we conduct our daily lives have ushered us into an “Age of Distraction” that had not existed before.

The other important lesson from this historical analysis is the lack of a coherent and concrete definition of what it means to actually have attention - in most accounts of technology-enabled distraction throughout the ages, attention seems only defined by its absence (Cohen; 2018). As we will see, this is a unifying thread that runs through our anxieties around digital technology and distraction: attention defined by its lack - which suggests, ironically, that we shouldn't seek to reduce or mitigate distraction, but perhaps have a deeper engagement with it.

MADE YOU LOOK: INTERROGATING DIGITAL DISTRACTION

As the historical analysis above demonstrated, people have always been suspicious of technology's impact on our thinking, but today's anxieties stem from what we feel are uniquely contemporary circumstances: the application of behavioural science to the design of digital technologies seems to make them intentionally distracting, even addictive, while unprecedented access to information leads many to conclude that we are being overwhelmed by stuff daily, turning distraction into our resting state of awareness. It is worth putting these modern circumstances under the microscope to determine what, if anything, is different about "digital" distraction.

DESIGNED FOR DISTRACTION

Among the many critiques of digital technology, the most common seems to be that many of these mediums are designed to be distracting. There is evidence to back up the economics of this argument: the business models of many major internet and social media companies are based on prompting sustained user engagement (Mozilla Foundation; 2019). The writer Jia Tolentino framed it more

"There are things known and there are things unknown, and in between are the doors of perception."

Aldous Huxley

bluntly, noting Facebook's "incentive to continually trigger heightened emotional responses in its users" as a way of keeping them on the platform (Tolentino; 2019). Of course, the business models don't rely on attention alone: attention is the conduit through which these platforms generate value; either by selling user data, engaging in advertising or both. That platforms like Facebook and Twitter are designed and refined to capture and hold your attention is not in dispute. As the digital culture critic Tom Chatfield wrote in 2013:

"If you're using a free online service, the adage goes, you are the product. It's an arresting line, but one that deserves putting more precisely: it's not you, but your behavioural data and the quantifiable facts of your engagement that are constantly blended for sale, with the aggregate of every single interaction (yours included) becoming a mechanism for ever-more-finely tuning the business of attracting and retaining users."
(Chatfield; 2013)

Chatfield notes that while these business models do indeed make money from our participation, the assumptions that frame them are worth questioning; because whether or not technology is making us terminally distracted depends a great deal on how you define “attention.” One of the differences between digital technologies and previous mediums of communication is the agency that the internet grants users. Unlike reading a newspaper, listening to the radio or watching TV, being on Facebook or Twitter makes you both a giver and receiver of attention – it is a two-way street.

But engagement with a medium requires you to accept its logic. As Chatfield admits: “[E]ither I play by the rules of the system — likes, links, comments, clicks, shares, retweets — or I become ineligible for any of its glittering prizes” (Chatfield; 2013). The software engineer David Auerbach articulated a similar notion in his 2012 essay “The Stupidity of Computers,” published in *n+1*. For Auerbach, understanding digital technology as a mechanism for the transaction of attention requires a narrowing of reality’s complexity and messiness into the simple, one-dimensional format that a computer can understand. “[B]ecause computers cannot come to us and meet us in our world,” he writes, “we must continue to adjust our world and bring ourselves to them” (Auerbach; 2012). What we

count and how we count it depends on the instrument of measurement. If social media is designed to capture, manipulate, command and monetize our attention; it does so because we accept the premise that the modes of participation these technologies make possible - likes, links, comments, clicks, shares, retweets - are analogous with paying attention.

This complicity should cast some doubt on the stories we tell ourselves about digital technology and social media’s manipulative power over our attention spans. Indeed, we should be wary of the “vision of puppeteers effortlessly pulling everyone else’s strings” (Chatfield; 2013) on social media because, as the Irish sociologist Kieran Healy points out, such criticisms rely on the same logic used by Silicon Valley to peddle its products:

“Social-scientific critiques of information technology are like mirror images of the moralizing hype that comes with the technology. Like a mirror, they reverse left and right, so that cheerful hype becomes a harsh critique of the all-consuming power of technology. But—also like a mirror—they do not reverse up and down. The technology is still assumed to work, even though it probably doesn’t, most of the time.” (Healy; 2016)

The question of whether digital technology is our master or our saviour can only be answered if one assumes

that technology actually works as advertised - which, as Healy stresses, is rarely the case. One good example of the gap between expectation and reality in this regard is what is often considered the linchpin of attention-based platforms: the algorithm. To true believers and critics alike, the content algorithms of social media platforms are transformative and revolutionary: delivering personalized content to individual users through the power of Big Data or surveillance, depending on who you ask.

To the techno-utopians, this kind of algorithm is a way of giving us more relevant, personalized and interesting content. But for the critics, it is a mechanism of attention capture and manipulation; responsible for all kinds of anti-social internet phenomenon (Vaidhyathan; 2018). Whether the algorithm is convenient, nefarious, both or neither may depend not on one's particular views on technology, but rather on one's particular views of the self. It was the American philosopher and psychologist William James who posited that what we consider real is simply what we pay attention to (Nixon; 2018). Reflecting this logic, content algorithms capture our attention - for better or worse - by understanding the things that interest us, and then offering them back to us. It reflects the self by giving us the things that we tend to pay attention to, the sum of which make up who we are. But the artist Jenny Odell

challenges this understanding by noting how "an algorithmic 'honing in' would incrementally entomb [us] as an ever-more stable image of what [we] like and why" (Odell; 2019). Odell notes that while this understanding of selfhood as something stable and static, with concrete needs and desires which platforms like Facebook can satisfy through its swift and seamless delivery of personalized content, is valuable from a business perspective; it quickly comes up against the messiness and complexity of real identity:

"If I think I know everything I want and like, and I also think I know where and how I'll find it...I would argue that I no longer have a reason to keep on living. After all, if you were reading a book whose pages began to seem more and more similar until you were reading the same page over and over again, you would put the book down." (Odell; 2019)

Odell echoes the cautions of Chatfield and Healy: content algorithms reflect ourselves only insofar as we buy into the assumption of a fixed, unchanging core identity; they capture our attention only if we believe that the things we like, and by extension who we are, do not change. Figure 5 outlines this process by using a systems map to illustrate how content algorithms take user choices and their profile to recommend content that reinforces the user's sense of self; generating a self-

reinforcing feedback loop of technology
validating cultural assumptions
validating technology.

Content algorithms “know” who we are because we accept the premise of selfhood as something permanent, a notion that, while deeply ingrained in Western culture, is at odds with science and the philosophical underpinnings of self in other cultures across the globe. This presents not only a technological problem, but a metaphysical one too. The development of predictive algorithms – the kind that supposedly pre-empt your queries by giving you what you think you may want in the future based on your past behaviour – have consequences for how we understand ourselves and others. Predictive algorithms not only reinforce our conceptions of a stable self, but actively shape its future. In submitting to the logic of these technologies, we not only give up some agency to define ourselves in the present, but forego opportunities to discover more about ourselves in the future.

As the mathematician Cathy O’Neill and many other scholars have pointed out, technologies do not exist in some separate, neutral, objective reality free from the biases and assumptions of the culture that makes them (O’Neill; 2016). They are created by people in that culture; and they reflect and reify its beliefs and values. If content algorithms do capture our attention, it is only because

they are designed, operationalized, lauded and critiqued by a society that understands selfhood as the sum of definite needs and desires that can be known and satisfied with exacting precision.

The design of digital technology is often blamed for creating an “Age of Distraction,” but it seems that the relationship we have to the platforms and devices we use is more complex and nuanced than transactional or manipulative. Any given technology is influenced by the ideological underpinnings of its time and place; designed and built not just from code and hardware, but from the philosophical, economic and political assumptions upon which a society rests - assumptions from which our praise and criticism leap with equal zeal. We trap ourselves in a mutually reinforcing feedback loop of technology validating culture validating technology validating culture.

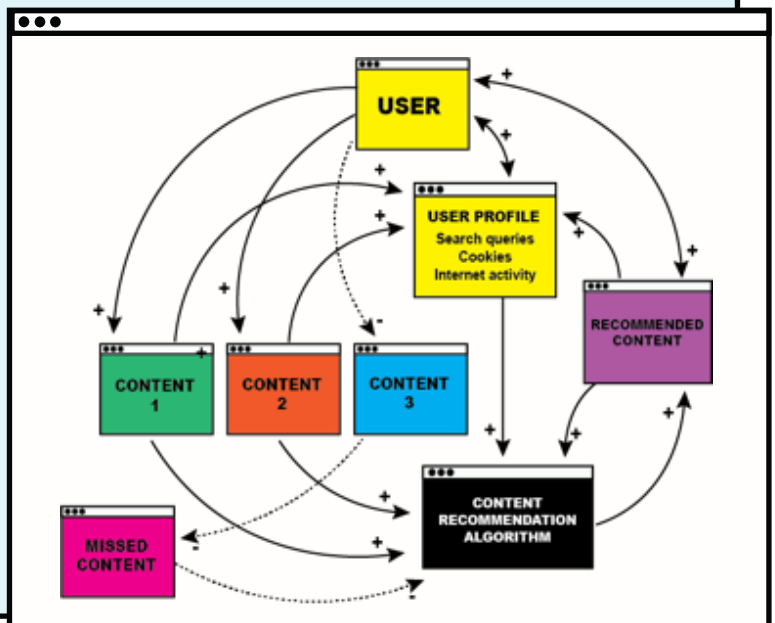


Figure 5: Content recommendation algorithm systems map.

ADDICTION

One outcome of our belief in the inherently distracting quality of digital technology is a rising fear that distraction will cross over into pathology. As digital media and technology has become more and more enmeshed into our daily lives and routines, the concern that we are becoming “addicted” to our devices has grown in equal measure. The terms “tech addiction” and “screen addiction” have become colloquial in popular culture; showing up in books, blogs, think pieces and mainstream media, such as a *New Yorker* cartoon featuring a man using a dog cone to prevent himself from looking at his phone (See Figure 6). There can indeed be problematic technology use, but as the Stetson University psychology professor Christopher Ferguson has argued, the fixation on framing problematic technology use as addiction “resembles a moral panic, giving voice to scary claims based on weak data” (Ferguson; 2018).

In June 2018, the World Health Organization (WHO) added “gaming disorder” to the International Compendium of Diseases (ICD-11). The decision reflected broader public concern with the supposedly addictive qualities of digital technology, but it wasn’t without controversy. The Media Psychology and Technology Division of the American Psychological Association released a statement

critical of the classification, arguing that problematic technology use was a symptom of other, more common mental illnesses such as depression (APA Media Psychology and Technology Division; 2018); a letter of protest was released by 28 global scholars in the areas of psychology and addiction (Espen et al; 2018); and even UNICEF, a sister organization of WHO, released a report in 2017 cautioning against using the term “addiction” to describe problematic technology use in children because of a lack of evidence (UNICEF; 2017).

An extreme variation of the “designed for distraction” argument proposes that some technologies are purposefully designed to be “addictive.” The cultural anthropologist Nastasha Dow Schüll has written extensively about how casino slot machines are designed to hold the attention of players in order to keep them playing, pulling them into what she calls “the machine zone” (Schüll; 2012). Building upon Schüll’s arguments about machine gambling, many commentators have argued that the same principles have been applied to the design of digital media and technologies. But as the Mozilla Foundation’s 2018 Internet Health Report has pointed out “[s]uch intents on the side of companies have been documented, but there is still inconclusive evidence of how much control they actually wield over users” (Mozilla Foundation; 2019). While this investigation is looking at the

relationship between technology and attention through social and cultural lenses, it is worth examining what the scientific record does - and doesn't - say about technology addiction.

In a 2019 analysis of hundreds of data sets, University of Oxford professors Amy Orben and Andrew Przylski concluded that there was no significant positive or negative correlation between technology use and adolescent well-being outlined in existing studies (Orben and Przylski; 2019). Other studies complicate the negative association between technology use and the release of dopamine in the brain, which is held up as evidence of technology's similarities with other addictive substances like cocaine (Koepp et al; 1998). The release of dopamine in the brain happens when we engage in any pleasurable activity or form of consumption - from taking a walk in nature to getting high on

drugs. The increase in dopamine levels when engaging with digital technologies are similar to many other pleasurable activities, and nowhere near the increases recorded in people using addictive substances (Ferguson; 2018). The brain reacting to a pleasurable activity doesn't mean that activity is inherently negative or damaging - and certainly not "addictive," even when it becomes excessive.

Yet the lack of evidence hasn't slowed the deluge of blog posts, books and newspaper opinion pieces comparing problematic digital technology use with addictive substances, leading with sensationalist headlines like "It's 'digital heroin': How screens turn kids into psychotic junkies" (Kardaras; 2016). The language of addiction may not be practically useful in understanding our relationship with digital technology, but it makes sense as a reflection of our contemporary anxieties around how these technologies are impacting our attention and, by extension, our quality of life. The writer and recovering alcoholic Leslie Jamison recounts how a clinician she once spoke to referred to addiction as a "narrowing of repertoire" an increasingly intense and frenzied focus on one thing until attention is paid to it at the expense of everything else - you're always drinking, and if you're not drinking, you're always thinking about it (Jamison; 2018). It is a definition that at first appears to fit comfortably within



Figure 6: A "tech addiction" cartoon from the New Yorker.

the technology addiction narrative: all we want to do is look at our phones, refresh our feeds, post our statuses even while we should be attending to other, supposedly more important things in the “real” world. But if we are concerned that digital technology is leading us into an era of perpetual stimulation and distraction, then the addiction analogy reveals the inherent confusion of its own premise: addiction is not distraction, it is fixation.

INFORMATION OVERLOAD

Among the nominees for the 2019 Booker Prize was Lucy Ellman’s *Ducks, Newburyport*, a stream-of-consciousness fiction that follows the frenetic, perambulating thoughts of one Ohio housewife through eight near-run-on sentences that total almost 1000 pages. The narration is unpredictable, contradictory, confusing, funny, alarming and poignant; with the narrator pontificating on everything from how much candy corn is sold every year to the pain of losing loved ones to the police shootings of unarmed Black men in America. It is what the critic Edward Mendelson would have termed “encyclopedic narrative”; a style of writing that seeks to “render the full range of knowledge and beliefs of a national culture” (Waldman; 2019). For many reviewers, part of the appeal of *Ducks, Newburyport* is how it reflects a twenty-first century society overwhelmed by information, with the narrator’s

internal monologue standing in for our constantly-chattering Twitter feeds. Parul Sehgal of the New York Times wrote that the “book has its face pressed up against the pane of the present; its form mimics the way our minds move now: toggling between tabs,” arguing that the novel’s deluge of information was both a reflection and critique of our over-saturated digital lives (Sehgal; 2019).

The abundance of information that digital technology and media make available to us has been cited as the source of all kinds of individual and collective neuroses. For the artist James Bridle, information overload is responsible for “worse decisions, fractious politics and [the] panic and paranoia” that seem to be so ubiquitous in our time (Bridle; 2018). As far back as 2007, the entrepreneur Andrew Keen cautioned that the “wisdom of the crowd” enabled by the internet would blur the distinctions between opinion and fact (Keen; 2007). The literary critic Michiko Kakutani fears that it takes advantage of our brain’s tendency to privilege the first information it receives, and therefore gives momentum to fake news and conspiracy theories (Kakutani; 2018). Calling our information environment “unprecedented,” a 2020 report from the Institute for the Future recommends “upgrading” our “cognitive immune system” to defend our democracy from the “parasitic” elements of the information age that

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seek to undermine social cohesion and democracy (Gorbis and Monaco; 2020).

The idea of information overload is as old as information itself. Harvard history professor Ann Blair notes that fears about the negative effects of “too much information” go back almost 2300 years, first appearing in antiquity (Blair; 2011). It is safe to say, then, that our present-day anxieties are hardly new; and they’re certainly not the outgrowth of an information ecosystem brought about by digital technology. And much like the belief that technology is designed to capture, hold and manipulate our attention; the idea that an overabundance of information has a corrupting influence on our attention comes primarily from culture.

The most often used analogy when discussing information overload is to compare our brains to computers. Humans have always attempted to draw parallels between our brains and their era’s prevailing technologies. The Greeks compared the functioning of the brain to a hydraulics system; 18th century philosophers preferred the mechanical clock; early neuroscientists built a framework of cognition based on electric wires or telephone polls, transmitting different signals (Vlasits; 2017). Putting aside the fact that the science behind the theory of computational thinking is far from settled (Epstein; 2016), the brain-as-

computer metaphor is just that - a metaphor. The irony of using it as a way of understanding our anxieties of information overload is that it is a simplified representation of the complex, uncertain reality of human consciousness; the same kind of ontological exercise we must engage in render our world understandable to computers (Auerbach; 2012).

If we accept the metaphor of the brain as a computer, then it can be easy to understand the argument that information overload poses a real and present danger to our attention spans - and, by extension, our individual and collective well-being. In *Uncanny Valley*, Anna Wiener’s memoir about her time working at start-ups in New York and San Francisco, examples of information overload’s existential threat abound. Recounting how Big Tech’s values of efficiency and speed were bleeding into the analog world, Wiener writes:

“Sometimes I would worry about my internet habits and force myself away from the computer, to read a magazine or a book. Contemporary literature offered no respite: I would find prose cluttered with data points, tenuous historical connections, detail so finely tuned it could only have been extracted from a feverish night of search-engine queries. Aphorisms were in; authors were wired.” (Wiener; 2020)

In this narrative, nothing escapes technology's insatiable and accelerating drive for more information; even the noble art of literature is stripped of its meditative ethos and rendered nothing more than a sloppy Google-search made tangible in the material world. But the pressure to condense vast quantities of information into a single, comprehensive source isn't new. In the 13th century, the Dominican Vincent de Bauvais lamented "the multitude of books, the shortness of time and the slipperiness of memory" when confronted with the supposed overabundance of information available in his medieval world. As a service to humanity, de Bauvais undertook the writing of a "massive book (of some 4.5 million words) in which he gathered the 'flowers' or best bits of all the books he was able to read to spare others the costs (in time, effort and access to books) of doing so themselves" (Blair; 2011). The writer Joshua Cohen notes the appearance of "Continued on the next page..." below newspaper articles in the early 1900s as a sign of a newfound fixation on accommodating as much information on the front page as possible. "There was too much to read, in too many forms," Cohen writes, lamenting that "[a] concerned citizen's only hope was to read faster. To skim, scan, cluster, chunk" (Cohen; 2018).

The concept of information overload is also a fear based on a narrow definition of "information" as the sensory output of our screens. But our brains are always processing information, and our worlds - both natural and built, material and digital - are constantly trying to catch and hold our attention. The colours of flowers, the movement of people and traffic, changes in air pressure and weather, our own internal monologues are all examples of non-digital information that is constantly presented to us, even if we don't consciously recognize them as such. Our brains must pick and choose which information is relevant to us at any given moment - and the science shows that they are incredibly good at it. University of Virginia psychology professor Timothy Wilson estimates that our brains receive almost 11 million pieces of information per second; and only 40 of those bits of information can be consciously processed (Wilson; 2004).

The American technology journalist Clay Shirky locates the problem not in the volume of information we receive but rather an inadequate filtering system to present us with information that is useful, validated and valuable (O'Reilly Partners; 2008). He defines information overload as having "more information in one place than one human being could deal with in one lifetime" (Juskalian; 2008). As Shirky points out, during the time of the printing press, and even through to

public radio and television, there was a kind of quality control enacted by the publishers and producers - it wasn't simply that just anyone could publish a book or broadcast a show (O'Reilly Partners; 2008). Digital technology erases distinctions between author and publisher, which has the benefit of unleashing the creative potential of anyone with access to a computer. But the downside to this is that traditional standards of "quality" no longer apply: anyone can do anything, increasing the risk of biased, misleading or false information becoming indistinguishable from the truth - with the potential for dire social, political and economic consequences (Deb et al; 2017).

Take, for example, the anxiety over information "echo chambers" online, in which people of similar political and personal persuasions produce and consume information that only confirms their values and beliefs (Deb et al; 2017). The problem with this perspective is that there is little evidence to back it up: a 2018 report by the Knight Foundation concluded that most people have diverse media diets that expose them to competing viewpoints, with only a very small subset of the population likely to visit the same sources of information consistently (Guess et al; 2018). Indeed, a 2020 study on the media ecosystem of social media platforms found "strong evidence that intermediaries foster more varied online news diets...call[ing] into

question fears about the vanishing potential for incidental news exposure in digital media environments" (Scharkow et al; 2020). Ironically, the studies suggest that people are more likely to experience the "echo chamber effect" in their offline social lives, because exposure to differing points of view are much more limited in this context, since friends and family are already likely to share our beliefs and values (Guess et al; 2018). If we are more likely to find ourselves confined to information bubbles at our kitchen table than on our Twitter feeds, then the popular anxieties around digital echo chambers are not only misplaced, but perhaps a reflection of a different kind of fear. As the psychoanalyst Adam Phillips has pointed out, our contemporary era "always claims to be widening our attention (and sympathy) without always being able to know what to do with the attention it has made possible" (Phillips; 2019). The internet was meant to be a medium of connection, understanding and empathy; but the fear is always of the wrong kind of connections, understandings and empathy - either by willful selection, as in the case of alt-right internet trolls ; or by unintentional exclusion, when algorithms give us information that reinforces our viewpoints. The pernicious myth of the digital echo chamber then is a reflection of a deeper cultural anxiety around the different kinds of attention that digital technologies make possible. As Phillips

reminds us: “The catastrophe is always of people being too interested in the wrong things, in the wrong ways” - and in our era of unprecedented access to information, the opportunities for such catastrophic interest seem limitless (Phillips; 2019).

ITS THE (ATTENTION) ECONOMY, STUPID

All of these fears and anxieties about the distracting nature of digital life are predicated on understanding attention as a kind of finite resource which circulates in an economy. Some view the “attention economy” as simply a reflection of late capitalism’s relentless drive to monetize human experience. Writing in 2006, Jonathon Beller decried the “commodification of the sensorium,” arguing that “[l]ike clean air, attention is something that once could be had for free but is now being encroached upon as the next and perhaps final frontier. Attention is now a commodity, and a special kind of commodity at that” (Beller; 2007). There is much evidence that Big Tech leverages design thinking and behavioural science to fine tune their platforms to keep us interested (Schulson; 2015). In 2014, Facebook came under fire after publishing a study conducted with academics at Cornell and Columbia Universities which revealed it had intentionally filtered the newsfeeds of almost 700,000 users to determine if it could change their emotional state based

on what they saw (Booth; 2014). Experiments like these reflect the fact that “social media networks” are really just advertising platforms: 98.5% of Facebook’s revenue - about \$55 billion - comes from selling ads (Mozilla Foundation; 2019). But for all the “attention economy” narrative tells us about how digital media platforms are sophisticated mechanisms of transaction, it tells us little about what is being exchanged - what exactly are we “paying” when we are “paying attention”?

In 1996, long before the rise of social media and the ubiquitous presence of the internet in our daily lives, Thomas Mandel and Gerard Van der Leun’s book *Rules of the Net* declared that “[a]ttention is the hard currency of cyberspace” (Van der Leun and Mandel; 1996). More than two decades later, we’re no closer to describing what this currency actually is - despite it supposedly serving as the economic fuel of the World Wide Web.

Michael H. Goldhaber, writing for *Wired* in 1997, highlighted the importance and value of attention on the internet when he warned “It really is scarce, and the total amount per capita is strictly limited” (Goldhaber; 1997). But curiously, in the same article, Goldhaber produces a list of the abundant forms this supposedly scant resource can take alongside its myriad functions, acknowledging that attention comes in many formats, all

of which are highly context dependent. Such confusion over attention's definition should cast doubt upon the argument that the mediums of digital technology are what cause our distraction and the problems we believe are its byproducts. How do we define a transaction of attention in the digital age? As previously articulated by David Auerbach, we can only define the transaction with the options afforded to us by the technologies we engage with, technologies we built. This means that the material reality of paying attention in the attention economy is likes, retweets, shares, views, comments and clicks. This is what attention's myriad forms - love, criticism, care, heeding, recognition, etc - get reduced to (See Figure 7).

The digital culture critic Tom Chatfield argues that such frameworks for understanding attention confuse targets and measures, blurring the distinction between courting attention and manufacturing it, asking: "What are we actually talking about when we base both business and mental models on a 'resource' that, to all intents and purposes, is fabricated from scratch every time a new way of measuring it comes along?" (Chatfield; 2013). The prominence of 'click farms' (Mendoza; 2014) and bulk purchasing of followers on social media (Lieber; 2014) are two examples of the attention economy's confused logic: if attention is a currency, then what does it mean to buy attention with actual currency?

Chatfield proposes that perhaps we are using the wrong analogies to understand the attention economy, arguing that a more useful metaphor is not to posit the singular value of "attention," but rather to focus on the different kinds of attention certain technologies make possible:

"Attention-engineers are effectively distributing printing presses for a private currency — and with everyone else desperate to churn out as much as possible, by any means possible, what's going on is more a chaotic scramble for advantage than a rational trade in resources." (Chatfield; 2013)



Figure 7: A chart outlining what happens in 60 seconds on the internet shows how complicated it is to define "attention" in the co-called attention economy.

At first glance, the analogies we use to understand distraction in the digital age seem to reduce attention to a scarce and narrowly-defined commodity, while distraction is abundant. But a closer, more critical look seems to reveal the opposite: attention is abundant, diverse, dynamic, situational and kaleidoscopic. If attention can take different forms, through different mediums, under different circumstances, then it is worth considering distraction not as attention's absence, but as its flowering; something the psychoanalyst Adam Phillips alluded to when he wrote "undevoted attention is presumably attention devoted elsewhere" (Phillips; 2019).

DISTRACTED BY DISTRACTION

The answers to the question of what digital technology is doing to our attention are complex and nuanced. As the history of communications technology has shown, it is not until long after a medium is introduced that we come to fully appreciate the ways in which it has shaped our experience. The only disadvantage we have relative to the world of writing, printing, radio or television is that digital media and technology are still relatively young mediums of communication, and they offer much more agency to consumers. Zeynep Tufekci has pointed out that Google, Facebook and Twitter are more or less teenagers by technological standards. At the

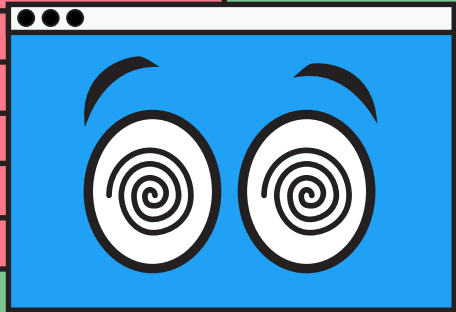
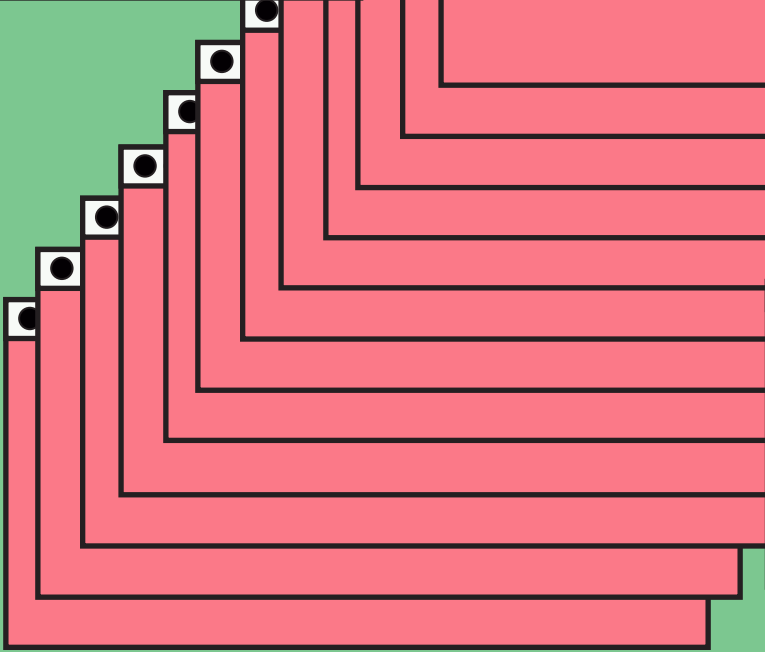
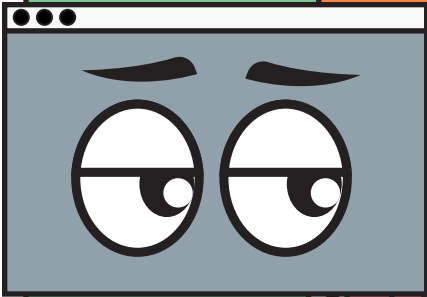
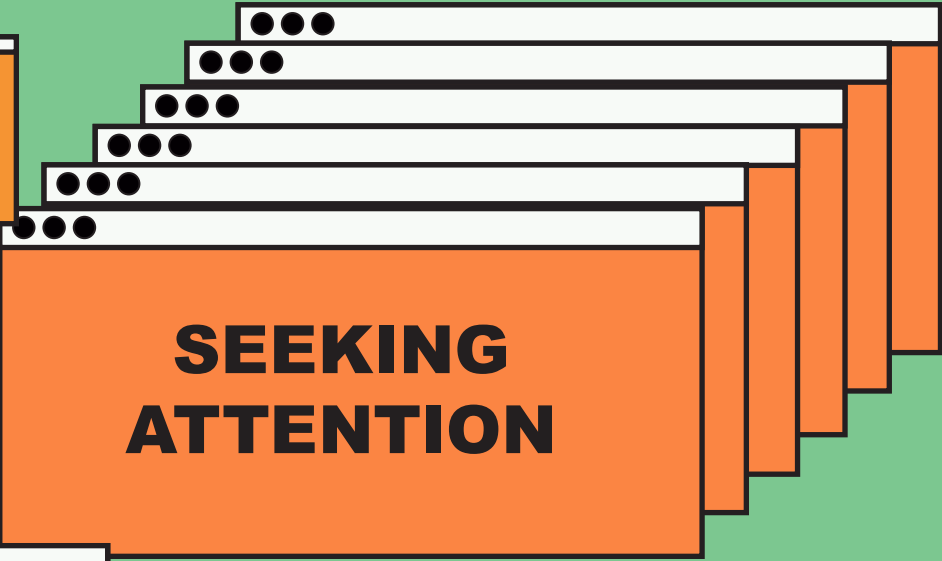
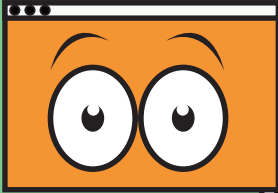
same stage in the evolution of the auto industry, there were no seatbelts, airbags, emissions controls or crumple zones (Tufekci; 2018). This should put our anxieties about digital technology in perspective: with enough time, it is more likely that we will adjust to these technologies in ways that are far less damaging than we are afraid of. But that adjustment requires us to know what we are talking about; we need to be able to identify the real challenges these mediums pose without sinking into utopian denial or dystopian cynicism.

This is why it is so important to question both digital technology itself and the critiques of it: that they are designed to be addictive or to sap our finite attention; that digital media and technology pose unprecedented challenges to social cohesion and well-being; that we are lost within what the writer David Foster Wallace would have termed the "Total Noise" of information overload, "the seething static of every particular thing and experience" (Chatfield; 2013). Unpacking these arguments has revealed that they stand on shared cultural assumptions more than hard evidence.

These assumptions seem to be where the problem lies. We speak of technology capturing, stimulating, warping, monetizing and commercializing our attention as if we know what attention is. We understand



attention as a kind of transaction, and fear that when it comes to digital technology, we're not getting a fair deal: we're giving away too much for too little, freely or unconsciously. This transaction leaves us with less attention for other, ostensibly more important things - though what those things are is usually left unsaid. Under these assumptions, the problem becomes not our understanding of what is being exchanged (attention), but the mechanisms through which it is exchanged (technology). But how can we talk about regaining control of our attention if we don't even know what it is? It would seem, therefore, that a better articulation of our relationship with technology requires first that we pay attention to what we mean when we talk about paying attention.



“There is nothing deep down inside of us except that which we have put there ourselves.”

Richard Rorty

What is attention?

This is the question that lies at the heart of our ambivalent relationship to digital technology. And yet for all the attention we are directing towards “attention,” we don’t really know what we mean by the term. Our disorientation can be seen in the deluge of books and opinion pieces, tweets and ‘hot takes,’ podcasts and blog posts about the malaise of contemporary digital life. The writer Joshua Cohen articulated this confusion in his 2013 book-length essay *Attention! A (Short) History*:

“You think attention is important, though maybe not important in and of itself as much as it’s important to everything else that is important, like carbon or chlorophyll...[Y]ou’re not sure how you’ve come to regard attention as both a ‘spiritual principle’ and ‘a commodity.’ You believe our sensoria have become an ‘unregulated marketplace’... You believe that this ‘commodification’ - or ‘commoditization’ - has led to a state of existence that ‘increasingly’ - or ‘exponentially’ - resembles a ‘battle

for consciousness,’ a ‘resource war,’ the most important war of our time... You’re bewildered by the new drugs that are regularly synthesized ‘to engage’ ‘attention,’ but to or for what you aren’t sure; you aren’t even sure of what exactly is being ‘engaged’... You don’t know which to believe, whether your experience - which tells you that attention is something abstract, a state or condition - or your schooling or online - which tells you attention is something concrete, a measurable neurological response to stimulus - or both. You want to know what happens when we ‘attend,’ and whether it’s something of which only humans are capable.” (Cohen; 2018)

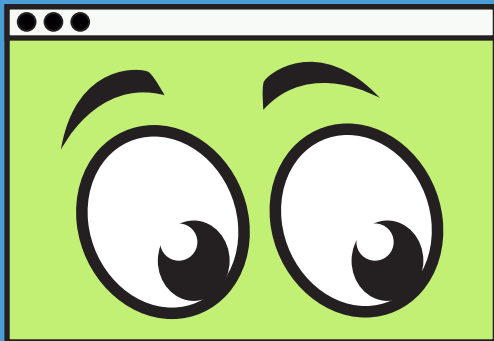
The definition of attention, then, is malleable, evolving, context-driven and always incomplete; constantly circling around some deeper truth but never quite landing. In that sense, it might be impossible to come up with any kind of definition that can serve as a starting point for the debates we can and must have about digital technology in our lives. Indeed, as Adam Phillips has argued, attention is by nature something that resists definition; and any attempts to describe it in language are artificial and ultimately, self-defeating:

“Once you have defined the nature of need, you have limited the repertoire of forms of attention; and over-defined the quest romance of attention-seeking by explaining its aims and

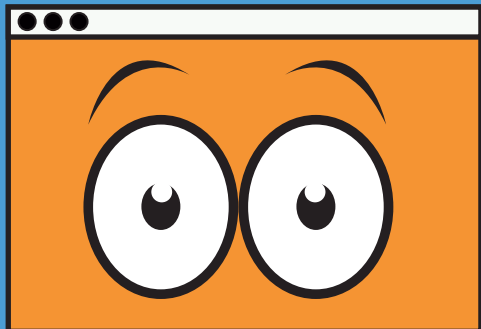
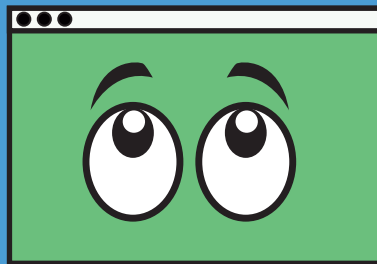
objectives. So-called attention-seeking behaviour ceases to be an experiment in living; it becomes a project rather than a probe, a programme rather than a form of curiosity.” (Phillips; 2019)

Phillips’s insistence on the fundamental impossibility of truly knowing attention may actually point to a better way of understanding it; not as something which can be succinctly or accurately defined, but something that can be approximated through different ways of looking - like the contents of a map. What we need to advance the discussion is not a definition of attention, but a guide for its different peaks and valleys; a framework through which we can better understand it, and language through which we can talk about it.

Developing a framework through which we can better understand attention and distraction then requires us to articulate how these concepts manifest themselves at different layers of culture: from the surface-level, day-to-day patterns of thought and behaviour; to the systems that enable them; and to the philosophical, moral and ideological foundations that underpin it all. Using Inayatullah’s Causal Layered Analysis (CLA) method, a rich and nuanced picture emerges of how we understand attention and distraction. This “present state” CLA serves as a jumping off point; telling the story of our complicated relationship with attention and the deeply-embedded beliefs that shape it, giving us the opportunity to develop alternative narratives that point to different ways of paying attention.

A stack of four overlapping windows with white title bars and three black dots. The top window is yellow and contains the text:

ATTENTION:
*A Causal Layered
Analysis*



LITANY

LOSING FOCUS IN A FRACTURED WORLD

Attention as utility. Feeling overwhelmed in a world of too much. Desire to regain control by eliminating distraction.

PRESENT ATTENTION

OK

SYSTEM

INFRASTRUCTURE AS DISTRACTION'S SOURCE AND SALVE

A world seemingly built to distract and then admonish us for losing focus.

WORLDVIEW

TECHNOCRATIC CAPITALISM AND INDIVIDUALISM

Emphasis on productivity, innovation and monetization. Managerial centralization. Primacy of autonomy, freedom and choice.

METAPHOR

LEAD US NOT INTO TEMPTATION


Distraction as character defect and moral failure. Attention as analogous to virtue.





FUTURE ATTENTION


OK



LITANY

PAYING ATTENTION TO INTUITION


Attention as experience. Worldfulness: meeting the outside world on its own terms. Relinquishing control in exchange for possibility.



SYSTEM

RANDOMNESS AS A FEATURE, NOT A BUG


A world intentionally built to distract and delight by making us experience the novel in the familiar.



WORLDVIEW

DEMOCRATIC COLLECTIVISM AND GESTALT

Emphasis on collaboration and mutual construction of attention. Dispersed, directionless and multi-perspective.



METAPHOR

THE LIVING IMPRESSION

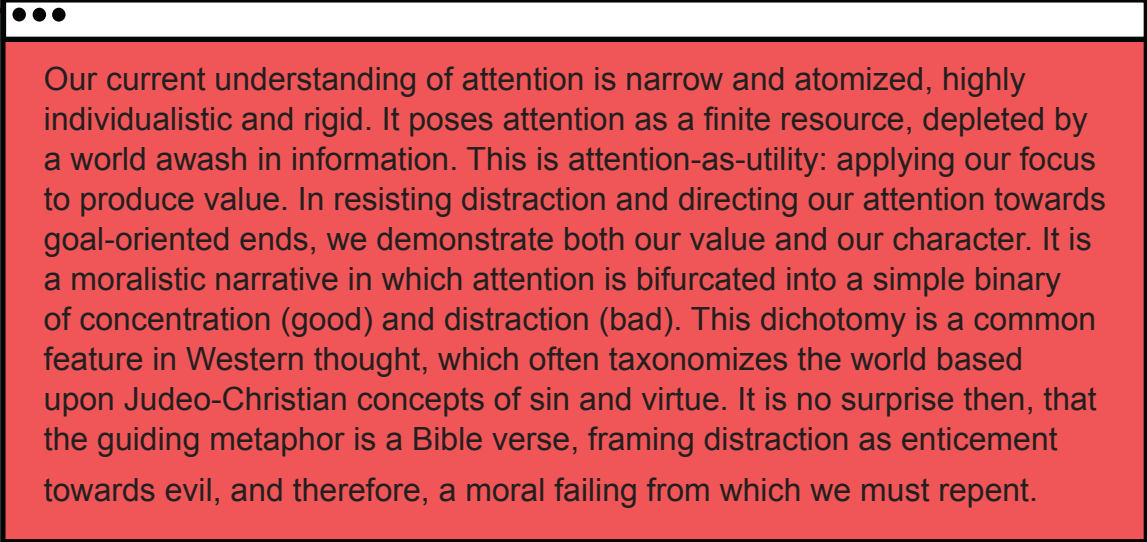
Attention as holistic representation of experience. Not associated with morality. Abiding to the objects of distraction as collaborators, not conspirators.





PRESENT ATTENTION

OK



Our current understanding of attention is narrow and atomized, highly individualistic and rigid. It poses attention as a finite resource, depleted by a world awash in information. This is attention-as-utility: applying our focus to produce value. In resisting distraction and directing our attention towards goal-oriented ends, we demonstrate both our value and our character. It is a moralistic narrative in which attention is bifurcated into a simple binary of concentration (good) and distraction (bad). This dichotomy is a common feature in Western thought, which often taxonomizes the world based upon Judeo-Christian concepts of sin and virtue. It is no surprise then, that the guiding metaphor is a Bible verse, framing distraction as enticement towards evil, and therefore, a moral failing from which we must repent.

LITANY: LOSING FOCUS IN A FRACTURED WORD

Daily life tells us a lot about how we understand attention and distraction. There is a sense that we are trapped in between abundance and scarcity; that there is too much to attend to and not enough attention for it all. Media headlines and reports about tech addiction and rising screen time frame life in the digital world as uniquely distracting.

The popular, though false, statistic that average human attention spans have dropped below those of goldfish attests to a fear that whatever attention is, it is finite (Microsoft Canada; 2015). Signals and trends show how keen we

are to protect this supposedly limited cognitive resource. There has been a resurgence of minimalism as the antidote for a world of “too much.” As the writer and critic Kyle Chayka has suggested, asceticism and minimalism have historically gained prominence during times of perceived chaos or uncertainty as a way of regaining some sense of control (Chayka; 2020); and in our era of accelerated technological change, it is hardly surprising that the act of decluttering our lives - materially, emotionally and digitally - has become an almost spiritual practice.

Against this background all sorts of behaviours and common beliefs flourish that reinforce the idea that attention is a scarce resource in a

world overwhelmed by distraction. This accounts for the emergence of mindfulness and sensory deprivation into the mainstream as therapeutic exercises (Chayka; 2020). At individual and collective levels, there has been a desire to discipline wandering attention, whether that be through productivity apps that help us temporarily disable social media accounts (Tolentino; 2019) or elaborate tools of workplace surveillance programs that follow employees' digital movements through keystroke trackers and screen monitoring (Solon; 2017). Digital detox movements invite adults to come for summer camps that prohibit the use of digital technology, proselytizing the virtues of life unplugged (Camp Grounded; 2020). The "Phone Stack" game became popular in the early 2010s, asking groups dining out to stack their phones on the table and resist the urge to pick them up for the duration of the meal; the first person to give in is usually asked to pay for the meal (Ayrouth; 2015). This impulse to valorize and privilege offline experience can often seem paternalistic, such the growing trend of wifi-less cafes that ban the use of digital devices in favour of direct conversation (Herd; 2018). The San Francisco company Yondr takes this disciplinarian approach a step further, offering pouches with proprietary locks to concert and event organizers who wish to prohibit participants from using their smartphones (Gregory; 2018).

Running parallel to this frenzied attempt to banish distraction is an equally feverish and obsessive gathering of information for the purposes of proving a point. The queer theorist Eve Kosofsky Sedgwick referred to this as "paranoid reading," which believes that amassing more and more information will eventually uncover the truth (Sedgwick; 2002). Paranoid reading valorizes the power of exposure; it is not interested in solutions because it presupposes that revelation is analogous to resolution. While Sedgwick's theory was presented in the context of the AIDS crisis, it is eerily prescient for the world of social media; where Twitter and Facebook feeds overflow with outraged "revelations" about politicians, celebrities, institutions, the media and society at large. The writer Jia Tolentino worried that this was constraining our ability to take action on pressing political issues, opining that she felt "there was almost nothing I could do about ninety-five percent of the things I cared about other than form an opinion" on them (Tolentino; 2019). Paranoid reading reveals the inherent contradictions of attention in the digital age: we fear technology is distracting us, yet often use it with laser focus in futile attempts to prompt change through exposure – hoping to draw the attention of others to our revelations.



In these examples, digital technology is regarded as something that impedes our humanity, pulling our attention away from the intrinsically more valuable experiences in the “real” world. We are compelled to not only protect our reserves of attention with vigilance, but to deploy it in specific ways towards specific things that are considered inherently valuable and morally superior.

SYSTEM: INFRASTRUCTURE AS DISTRACTION'S SOURCE & SALVE

How we feel about attention and distraction, and how these feelings are manifested in the world, are reflections of the systems in which we conduct our lives. Laws and regulations; public and private institutions; the medical and educational systems; business models and financial markets; digital and physical infrastructure - these are all systems which shape our understanding of attention and distraction.

Many of our contemporary systems operate under the assumption that attention is a kind of transaction. This assumption is a powerful influence in the systems that organize our society. When it comes to digital technology and attention, the most obvious example is attention-based business models. Many social media platforms operate under this business model, in which continuous user-engagement is the goal.

While we associate these kinds of business models with Facebook and Twitter, there is nothing uniquely digital about them. In the 1860's, a Parisian printer's apprentice began creating the first pieces of commercial art in the form of massive, colourful posters that were printed and pasted across the city (Wu; 2016). From there, advertising has come in many formats: radio and TV commercials, newspaper ads, digital posts. The systemic difference of the digital age is the massive technological infrastructure that makes unprecedented levels of mass engagement possible. As of January 2020, there were over 4.5 billion internet users; 3.8 billion of whom were active users on social media (Kemp; 2020). The tremendous reach and diversified portfolios of tech companies - from manufacturing of personal digital devices, to advertising, retail and data brokerage - explain how digital technology has become so ubiquitous and vital to our lives (Mozilla Foundation; 2019). Beyond the technological infrastructure, internet and social media companies employ a wide variety of technological systems that allow for tracking, data mining and the personalization of content through data analytics.

Digital infrastructure is a mirror of our physical and social realities; and in these systems, too, there is the proliferation of distraction as we understand it. Consider Georg

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Simmel's observations about the never-ending wave of stimulation that characterized city life at the turn of the twentieth century (Simmel; 1903). Today, over half of the world's population lives in urban areas, with one in eight people living in a megacity; all numbers that are expected to rise (UN; 2019). In a 2013 study published in the *Journal of Experimental Psychology: Human Perception and Performance* concluded that "urban environments prioritize exploration at the expense of attentional engagement and cognitive control of attentional selection" (Linell et al; 2013). In other words, living in a city makes you more distracted. Our declining social infrastructure has also aided and abetted distraction. A 2019 review of emerging research on parental distraction found that while phone use by parents around their children had become common, the reasons for it were more complex: work pressures, social obligations, boredom, stress, habit, loneliness and mental illness were all motivators (McDaniel; 2019). Other studies have shown that children in particular are spending more time at home rather than outside, with one researcher suggesting that declining government investment in public spaces and amenities has led to a situation in which there are fewer safe places outside the home for children to congregate, encouraging screen time (Anderson; 2019).

Similarly, our educational systems - byproducts of the industrial era - reinforce the rigid binary between attention and distraction (ie. dichotomy between teacher and students; the architecture and organization of classrooms, etc). Some have also argued that our medical and scientific systems pathologize distraction (Cohen; 2018). For example, procrastination used to be seen as solely the product of laziness, but recent studies have shown that it has more to do with an inability to regulate our emotional state in the short-term (Leiberman; 2019). This frames distraction as both a failure of self-control and as an imbalance in neurochemistry; a problem that needs to be solved in order to remain productive. This obsession with paying attention was captured succinctly by Joshua Rothman when he wrote:

"The modern world valorizes few things more than attention. It demands that we pay attention at school and at work; it punishes parents for being inattentive; it urges us to be mindful about money, food, and fitness; it celebrates people who command others' attention. As individuals, we derive a great deal of meaning from the products of sustained attention and concentration—from the projects we've completed, the relationships we've maintained, the commitments we've upheld, the skills we've mastered. Life often seems to be "about" paying attention—and the general trend seems to be toward an ever more attentive way of life." (Rothman; 2015)

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Much of this stems from systems that, by design, reinforce the opposition between attention and distraction. For some thinkers, distraction is a material problem: we are distracted by things in the world around us - traffic, advertisements, smartphones. There is a growing sense that modernity is making it harder for us to pay attention; we are bombarded by information, increasingly clustered in chaotic and busy urban centres, riddled with the anxieties produced by inequality, climate change, economic fragmentation and all of the uncertainty that accompanies these realities.

Who wouldn't want to escape reality through their smartphone?

WORLDVIEW: TECHNOCRATIC CAPITALISM & INDIVIDUALISM

The ascetic disciplining of attention outlined in the litany and the rigid binaries facilitated by the systems share ideological foundations in technocratic capitalism and individualism. Capitalism's privileging of productivity, innovation and monetization can be seen as the guiding principles behind our systems: urbanization as a reflection of capital's centralization in cities; the increasing fragmentation of economic life through "innovation"; and the emphasis on productivity that increasingly blurs the lines between personal and professional time, impacting family and community connection. As the artist

Jenny Odell has observed, there is a cultural imperative under capitalism to be productive not only in a material sense, but also existentially - you must always be making something of yourself (Odell; 2019). To do "nothing" is to be nothing.

The technocratic edge of this ideology stresses centralization and efficiency; society is seen as a machine in constant need of management and optimization. This perspective can be seen in our industrial-era education systems that prepare students to be productive members of the workforce; or in the medical interventions seeking to treat "attention deficit" disorders and return focus to the afflicted. The American historian and sociologist Lewis Mumford pointed out that ideological underpinnings of a technocratic society "date back to a period before even the wheel had been invented" (Mumford; 1964). Mumford emphasizes the danger of this mechanistic orientation towards the world, arguing that it frames "control over physical nature, ultimately control over man himself, the chief purpose of existence" (Mumford; 1964).

This desire for control is the byproduct of an uncompromising individualism unique to Western culture. The philosopher Matthew Crawford highlights this as a key feature of Enlightenment individualism, which framed absolute freedom from the constraints of other people, places

and things as the most morally and philosophically desirable outcome (Crawford; 2015). To rely on others, or to simply acknowledge them by abiding their call to our attention, is to submit to a collectivism that impinges upon our autonomy and erodes our dignity. The emphasis on personal choice in this ideological orientation towards the world implies that distraction is something that can and should be overcome by the individual; and that a failure to do so is either a reflection of their lack of willpower or flagrant disregard for their personal development.

Together, these worldviews of technocratic capitalism and individualism stress the possibility - and moral superiority - of optimized, efficient control of one's attention as a way of proving one's worth through productivity. This vision of achieving self-control through fecundity regards outside stimuli, whether coming from other people or glowing on our screens, as sirens calling our attention away from the things that make our life valuable because they create narrowly-defined capitalist "value."

METAPHOR: LEAD US NOT INTO TEMPTATION

All of the above are natural progressions of deeper cultural myths and metaphors about how we attend to things, and what it means when we don't. These metaphors are not mere abstractions, but rather the cyclical interactions between cultural and material reality. As the writer Joshua Cohen notes: "Myth is based on history, is based on myth - they're baked in the desert sun, dried into one, softened with blood only to harden again" (Cohen; 2018). Societies structure themselves from these myths and metaphors, and in turn, these societies enact the myths and metaphors in a constantly reinforcing feedback loop.

Western civilization in particular has rooted understandings of attention and distraction in ethics and morality, which is why the Biblical verse from Matthew 6:13 "Lead us not into temptation" was chosen as the guiding principle behind these worldviews, systems and litany. In Judeo-Christian thinking attention is analogous to virtue, as it is the one and only way through which humans can access the divine. This is a belief espoused both explicitly and implicitly by religious scripture and prominent spiritual authorities.

Christian thought in particular emphasized the salvational quality of attention through prayer and

scripture. To be attentive was to be obedient, while distraction was seen as giving into the temptations of Satan. Indeed, humanity's fall from grace through expulsion from the Garden of Eden created all sorts of desires - or, distractions - that seek to pull us away from God (Nightingale; 2011). Resisting these distractions becomes a moral exercise; an attempt to reconnect with divine presence through unyielding attention.

Augustine of Hippo and Thomas Aquinas both believed attention was the conduit through which one connected with God (Cohen; 2018). Augustine in particular saw omniscient attention as a faculty of the Holy Father, and distraction as the natural human condition. The Catholic philosopher Nicholas Malebranche referred to attention as "a natural prayer of the soul," becoming the first thinker to "systematize attention as transmission" between God and humanity (Cohen; 2018). In this exchange, to be distracted was to not properly give attention to the divine, and therefore miss its grace. As the psychoanalyst Adam Phillips points out, this moralistic view of attention and distraction is so deeply embedded in the Western psyche that:

"[I]t is not unusual now for loss of attention to be equated with loss of morality, if not the loss of culture itself...Nor is it unusual to assume that changes in habits of attention portend

larger changes; and that our morality or civility is somehow bound up in the ways we pay attention." (Phillips; 2019)

This interpellation of attention is how we have come to associate distraction with character deficiency. Phillips traces this moral dichotomy back to the centrality of attention in understanding selfhood, reminding us that "what we call our identity, which is to do with what we notice, is a kind of fixation, an obsession with certain ideas about ourselves" (Phillips; 2019). In other words, what we pay attention to reveals not only who we are, but also our character - or lack thereof. Entire worldviews, systems and patterns of thought and behaviour have grown to reinforce this belief that distraction is a kind of moral failure.

“Life is a train of moods like a string of beads and as we pass through them they prove to be many-colored lenses which paint the world their own hue, and each shows only what lies in it’s focus. To find oneself trapped in any one bead, no matter what it’s hue, can be deadly.”

Maggie Nelson

PRESENT ATTENTION CLA INSIGHTS

While our understandings of attention reinforce our belief in the material theory of distraction as something happening outside of ourselves, what the Causal Layered Analysis reveals is that the problem of distraction is a far more human one - residing not outside on our screens, but in our souls. The idea that distraction has a cultural, philosophical and even spiritual origin is not mainstream, but it also isn’t new. The writer David Foster Wallace, in his unfinished novel *The Pale King*, articulated our need for distraction as an antidote to some “deeper type of pain that is always there, if only in an ambient, low-level kind of way” (Wallace; 2012). We lament a world full of distractions in one breath, and in the next surrender to it as a way of feeding our habits of withdrawal: “I can’t think anyone really believes that today’s so-called ‘information society’ is just about information,” Wallace had written. “Everyone knows it’s about something else, way down” (Wallace; 2012).

Matthew Crawford ties our “Age of Distraction” to the foundations of Enlightenment philosophy, arguing that Western society’s obsession with freedom and autonomy has created a cultural milieu in which the experience of paying attention in and of itself is seen as a constraint on our ability to do what we want, when we want (Crawford; 2015). Distraction then, becomes a way of re-asserting control over ourselves and the world around us. Watching YouTube as you write a report is “declaring your independence from the drudgery of work,” while checking your smartphone at a red light in traffic is “pushing back against the indignity of being made to wait” (Rothman; 2015). While Crawford concedes that digital technologies are indeed pulling at our attention, he contends that their distracting nature comes from the same cultural impulse for personal freedom and control; asserting that the corporate architects of these technologies become the “handmaidens of our own freedom” by adopting the kind of “autonomy talk” of choice and personal satisfaction that appeals to our libertarian inclinations (Crawford; 2015).

Earlier in this project, it was argued that our anxiety over technology's impact on our attention was not historically unique. But one of the unexpected insights to arise from Crawford's assessment of distraction in the Western world is that it reveals the particularities of our contemporary technological discomfort. Our technoskepticism may be part of a long historical tradition of fretting over distraction, but the digital era is uniquely discomfiting because the ubiquity of technology has brought into stark focus the tension between our conceptions of attention – linked as they are to notions of freedom, choice and individuality – and the real-world experience of it. The omnipresence of digital technology in our daily lives confronts us with this contradiction; and our anxiety over distraction actually be an anxiety over being forced to reckon with this conflict. In many ways, this inconsistency between our abstract and empirical experiences of attention is the load-bearing pillar of our current predicament – one that seems to be struggling under the weight of reality.

Crawford's assessment of distraction certainly contains some kernels of truth, but his prescription for what to do about it falls back into the moral dichotomy that conflates a state of unfocused attention with a kind of personal purgatory in which the distracted person is no one, going

nowhere and doing nothing. For Crawford, "Joy is the feeling of one's powers increasing"; by which he means that joy is paying attention to something specific (Crawford; 2015). Distraction, then, is the opposite of joy. A cultural problem, but a problem nonetheless.

But there is another way of accepting the spiritual, cultural and philosophical origins of distraction without succumbing to the urge to condemn it; accepting distraction as not only an inevitable facet of human experience, but one that can attune us to better appreciate our internal lives and the external world.



FUTURE ATTENTION

OK

An alternative vision of attention and distraction would be open and expansive, seeing attention not as utility, but experience. It actively avoids the moralizing judgement of distraction by appreciating the possibilities of attention it creates; suggesting that attention is not an individual faculty, but a collective, mutual construction of experience between multiple perspectives. Taking inspiration from art, photography and technology, a newfound appreciation of distraction allows us to celebrate the possibilities of attention made possible by other people, places and things - including digital technology.

METAPHOR: THE LIVING IMPRESSION

What if attention and distraction were not framed as opposites, but simply different variations of the same experience of the world? Removing the moral distinctions between attention and distraction can give us a deeper appreciation of the different kinds of attention various technologies and mediums make possible; framing them not as threats to our focus, but like different lenses on a camera, offering us multiple ways of seeing the world.

As a practice of articulating experience in the material, art is one area to turn to for inspiration in developing alternative frameworks of attention. The artist David Hockney was particularly interested in developing a “phenomenology of seeing” to

explore the different ways of noticing and attending to the world around us (Odell; 2019). Hockney, famous for his “supersaturated” paintings of life in Los Angeles, was originally skeptical of photography because he found its relationship to time and seeing to be constrained and unrealistic (Odell; 2019). He once remarked that looking at a photograph was akin to seeing the world through the “point of view of a paralyzed psychlops for a split second,” lamenting “that’s not what it’s like to live in the world, or to convey the experience of living in it” (Weschler; 2008). But after a curator left behind unused polaroids in his home in 1982, Hockney began to experiment with photography, and eventually developed a technique akin to a kind of “disjointed fish-eye lens” that he felt captured the “the experience of looking as it transpires across time” (Weschler;

2008) rather than the traditional understanding of photography as a “static framing of certain elements [of experience] in an instant of time” (Odell; 2019). Hockney referred to this kind of photography as a “living impression”:

“[A] sort of picture that came closer to how we actually see, which is to say, not all at once but rather in discrete, separate glimpses, which we then build up into our continuous experience of the world.” (Weschler; 2008)

and Chinese scroll paintings, which took the viewer on “a journey across a multifarious scene that is less an image than a collection of small moments” (Odell; 2019). This kind of art was “excessive, open and without direction” - one might say unfocused or distracting - but to Hockney, it was a more beautiful, not to mention more realistic, representation of what it meant to experience the world.

In *Pearblossom Hwy., 11-18th April, 1986, #2* (Figure 8), Hockney sought to capture the multiple, discrete, distracted perspectives that emerged from seeing over time. From afar, the image looks like regular landscape photography; but upon closer inspection, certain components seem warped: roadside detritus is out of proportion; background trees are just as detailed as those in the foreground; the road painting seems stretched and skewed (Odell; 2019). Jenny Odell calls Hockney’s work like *Pearblossom* “a kind of attentional prosthesis” that allows us to engage with “the familiar and proximate environment” differently by playing with our attention (Odell; 2019). In contrast to how we understand attention today, there is no moralizing in this perspective: to give in to the temptation of distraction is simply to pay attention to something we may not have otherwise noticed.

What this can teach us about attention is that abiding to distraction can actually enrich our lives by making



Figure 8: David Hockney’s “Pearblossom Hwy” multi-perspective photo collage.

Hockney disliked the “one-point” perspective that dominated Western art, which he believed made the viewer an “alienated voyeur who may as well be looking through a keyhole” (Odell; 2019). He was much more interested in works of art that espoused a more positive and wide-angled attention: for example, cubism (“three noses meant you looked at it three times”)

us more attentive to the details of our inner and outer worlds. The cultural mania to eliminate distraction can border on a denial of reality: all minds wander, all eyes roam, and the world will always beckon us to pay attention to it. As the playwright Hanif Kureishi wrote, “A flighty mind might be going somewhere” (Kureishi; 2012).

WORLDVIEW: DEMOCRATIC COLLECTIVISM AND GESTALT

In contrast to the mechanistic and productivity-focused worldviews that underpin our current attentional frameworks, the “Living Impression” metaphor rests upon ideological perspectives that eschew the distinctions between attention and distraction. Rather than understanding attention as a singular resource that can be exchanged, it might be perceived as “a mutual construction more akin to empathy than budgetary expenditure” (Chatfield; 2013). Attention becomes less about utility and more about pure experience. Michael Goldhaber alluded to this in his 1997 Wired article about the emerging concept of the “attention economy”:

“[L]ove, recognition, heeding, obedience, thoughtfulness, caring, praising, watching over, attending to one’s desires, aiding, advising, critical appraisal, assistance in developing new skills, et cetera. An army sergeant ordering troops doesn’t want

the kind of attention Madonna seeks. And neither desires the sort I do as I write this.” (Goldhaber; 1997)

All forms of attention require some level of mutuality between the actors caught up in them. An acknowledgement of this would be the result of moving away from traditional Western notions of the autonomous individual and towards a more collective and democratic view of ourselves. In this framework, attention comes to be seen not as an assertion of one’s willpower, but as a recognition of our interdependence with the world around us; and a commitment to honour that world by attending to it.

This view of our internal and external realities affords respect and attention not only to other people, but to all things that make up our world: animals and plants, buildings and vegetables, smartphones and traffic lights, floor tiles and ketchup bottles. This appreciation of the holistic, integrative nature of things was captured succinctly by the philosopher and game designer Ian Bogost:

“Our world is jam-packed full of splendor and mystery, most of which we never notice as we ply the demands and dissatisfactions of our selfish lives. And even when we find mechanisms for relief—Buddhist mindfulness or libertarian objectivism, sermonistic asceticism or unbridled consumerism—they turn our attention

inward rather than outward. They tell stories about the bodies and minds we wish we occupied rather than offering us tactics to live amidst the world as it really is.” (Bogost; 2016)

that medium’s properties (the figure) but also the contexts in which those properties become prominent (the ground)” (Bogost; 2016). Gestalt teaches us not only that our attention isn’t entirely ours to control, but that the nature of that attention (the figure) is dependent upon the context under which it is elicited (the ground). This acknowledgement over how little control we wield over our attention is a direct refutation of our current obsession with choice and individualism, but it is also a more realistic view of what it means to pay attention in a busy world.

SYSTEM: RANDOMNESS AS A FEATURE, NOT A BUG

Matthew Crawford sees distraction as the result of “autonomy run amok” (Rothman; 2015); a desire to free ourselves from the mundanity of material reality. Even our systems and technologies, he argues, are reflections of this conflation of distraction with freedom. Crawford sees this as a problem in need of an antidote; but what if our systems enabled distraction not as a way of resisting the world, but abiding to it?

The French philosopher Jacques Derrida used the term “freeplay” to describe movement within a system that is made possible by that system; or, put another way, “free movement within a more rigid structure” (Bogost; 2016). Derrida argued that “meaning

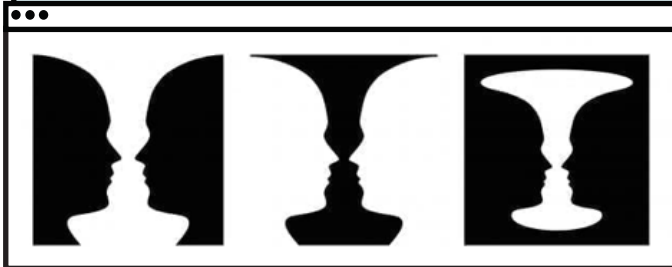


Figure 9: A gestalt optical illusion.

This perspective finds its origins in the German theory of perception known as Gestalt, which translates to “entirety of form.” Gestalt holds that we perceive whole patterns or configurations, as opposed to their constituent parts. People are most familiar with Gestalt through optical illusions which play with figure and ground, making two or more separate things appear at once; for example, an image of a vase that is also two people facing each other (see Figure 9) (Cohen; 2018).

When it came to attention, Gestalt “attempted to deprive the human of a choice in its control” by “proving that a person was unable to selectively focus on one specific reading of an optical illusion (either ‘the figure’ or ‘the ground’)” (Cohen; 2018). Marshall McLuhan extended this theory to media and technology, arguing that “[t]o understand a medium like electric light or television or the Internet, it’s necessary not only to understand

exists only in reference to its contexts”; a system may make a multitude of meanings possible, but only if those meanings remain relevant to the system as a whole. Freeplay is the ability to discover new meanings within a familiar structure (Bogost; 2016).

From a systemic point of view, social structures and institutions could be geared towards a more holistic, less moralizing interpretation of attention. For example, in response to continued urbanization, public infrastructure and architecture could encourage

how such plays on physical space can affect our mental space, by feeling “the largeness of the space and [it’s] story in your mind, and the smallness of your body and your story in the world” (Kisner; 2020). We can generate an internal expansion by surrendering ourselves to the external distractions that physical space offers us.

The technological infrastructure that enables so much digital “distraction” would be unlikely to change. It is important to acknowledge that so many of our criticisms of the “attention



Figure 10: Ann Hamilton’s installation art reimagines how we pay attention to physical space.

distraction by design by mirroring the art of Ann Hamilton, whose hyper-sensory installations allow people to view even the most mundane places with newfound awe: warehouses that slowly fill with empty slits of paper over the span of days and weeks; 118-foot long boats inspired by Laotian walking meditation halls; billowing fabric columns; and pathways made of sound (See Figure 10) (Kisner; 2020). The writer Jordan Kisner observed

economy” are not about technology per se, but the business models of particular companies, which turn public attention and engagement into private profit. Our digital and technological infrastructure currently enables certain types of monetized attention that we have come to associate as negative and depleting. But again, these are economic choices enabled through technological systems. There is nothing suggesting we can’t use

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these same systems to make different choices, or see the choices they currently offer in a new light.

What we can change is our attitude towards the kinds of attention and distraction this infrastructure offers to us. The journalist Jeff Sharlet reminds us that while “[w]e should not mistake the Instagram square for a public one... nor should we miss the dignity afforded by the small solidarities of hashtags: the solidarity of recognition, of seeing one another” (Sharlet; 2020). We need only look at the 2020 COVID-19 pandemic as a case study in how quickly we can come to re-evaluate our suspicions of digital distraction. As the world’s population quarantines at home, we are finding that digital technology, with all the distractions and attention it can make possible, is keeping us connected and creative in the midst of crisis. Even Sherry Turkle, author of a 2011 book arguing that technology was tearing the social fabric of society apart has admitted that the circumstances have forced her to reconsider her position: “I think this reveals that the screen-time issue has been a misplaced anxiety,” she told the *New York Times*. “Now, forced to be alone but wanting to be together, so many are discovering what screen time should be” (Bowles; 2020).

LITANY: PAYING ATTENTION TO INTUITION

In *Fear and Trembling*, the Danish philosopher Soren Kierkegaard coined the term “attunement” to describe the process of waiting for God to answer you before finally taking a leap of faith into the absurd in the absence of a divine response. For Kierkegaard, this frustrating state of “infinite resignation” - or perpetual waiting - was the foundation of faith; a way of accepting our inability to control the world around us and force it to meet our demands (Kisner; 2020). Daily life under a new interpretation of attention might seem a lot like “attunement”: an embracing of the world as it is, and an openness to be pushed and pulled by its myriad distractions, curious to see where it may lead us.

Kyle Chayka observed that the popularity of the minimalist aesthetic as a response to the “Age of Distraction” reflected “both an anxiety of nothingness and a desire to capitulate to it,” arguing that the resurgence of this brand of asceticism was more about “having less as a way of feeling a little more stable in precarious times, rather than a solution to it” (Chayka; 2020). In our current cultural milieu, distraction is associated with this nothingness; a purgatory that implies being no one, doing nothing and going nowhere. Instead, Chayka argues for a kind of minimalism that is “about

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seeking unmediated experiences, giving up control instead of imposing it, paying attention to what's around you without barricading yourself, and accepting ambiguity" (Chayka; 2020).

Rather than seeking to turn away from the world through mindfulness apps and sensory deprivation spas, we might gleefully immerse ourselves in it by developing an orientation toward what the neuropsychologist Paul Persall termed "openture": "the strange, excited comfort of being presented with, grappling with, the tremendous mysteries life offers" (Burkeman; 2012). Openture could be reflected in everyday life through a celebration of distraction's possibilities and potential.

This openness can appear at first as a shirking of responsibility. After all, how would we be able to do anything if we were always distracted? But it is really what the artist Jenny Odell referred to as a "refusal-in-place" (Odell; 2019). Odell argues that our entanglement with technology makes any permanent retreat from it impossible; in other words, we cannot necessarily choose whether to participate, but we can decide how we wish to participate in the world as it is (Odell; 2019). A refusal-in-place is a contestation of the terms of engagement; a recognition that although one exists within particular structures and paradigms, they may still exercise agency through negating or problematizing the terms of engagement.

This is a useful framework through which to imagine the world of work in "future attention." In contrast to an office life of productivity trackers and workplace surveillance, a new workplace might emphasize the value of outcomes over outputs. One source of inspiration for this kind of labour arrangement is a particularly distracting videogame. The Nintendo classic *Animal Crossing* sees players living on a bucolic island with a small host of animal residents led by the tycoon tanuki Tom Nook, who provides players with loans to build their homes (Bogost; 2020). Technically, the game never finishes: there are no targets or goals to meet to continue playing. The islands of *Animal Crossing* are much like our own finite environments: we must use their resources carefully and responsibly. This is the conflict that produces the game's momentum: continuing to make progress with what is at hand. This means that players can choose from a variety of different activities that includes fishing, farming turnips, DIY crafting, mining, harvesting fruits, catching local wildlife and more – one can even choose to do nothing at all.

Ian Bogost argues that the game's equal valuing of different kinds of labour presents a radical revisioning of work, noting how in *Animal Crossing*, "[e]very effort is valid, every accomplishment exchangeable for capital"; even choosing to do nothing

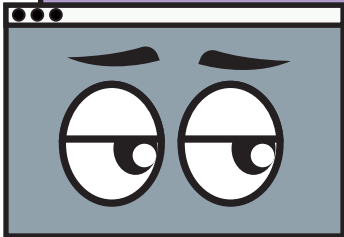
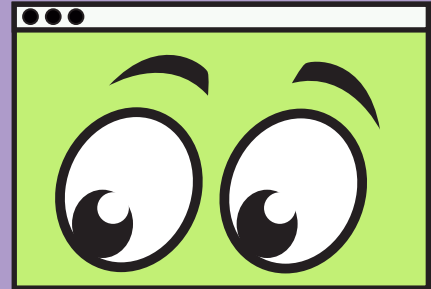
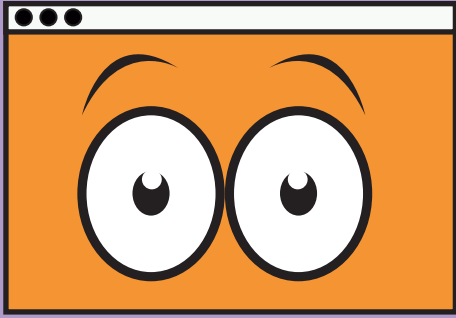
at all is a viable option (Bogost; 2020). In a world reeling from the economic consequences of the coronavirus pandemic, the pastoral workplace dreams of Animal Crossing seem particularly apt:

“[T]he idea that any activity might be seen as viable work is a comfort, and perhaps even an aspiration. Imagine if everyone had a job that they enjoyed, that they were good at, and that could sustain them. What if they could thrive with no job at all, a step well beyond universal basic income? Even a month ago, such ideas would have felt preposterous beyond the cartoonish shores of a video game. But now they feel like dreams worth dreaming.”
(Bogost; 2020)

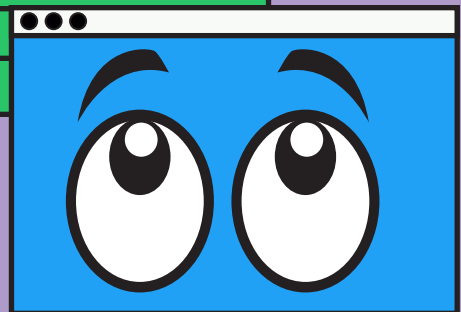
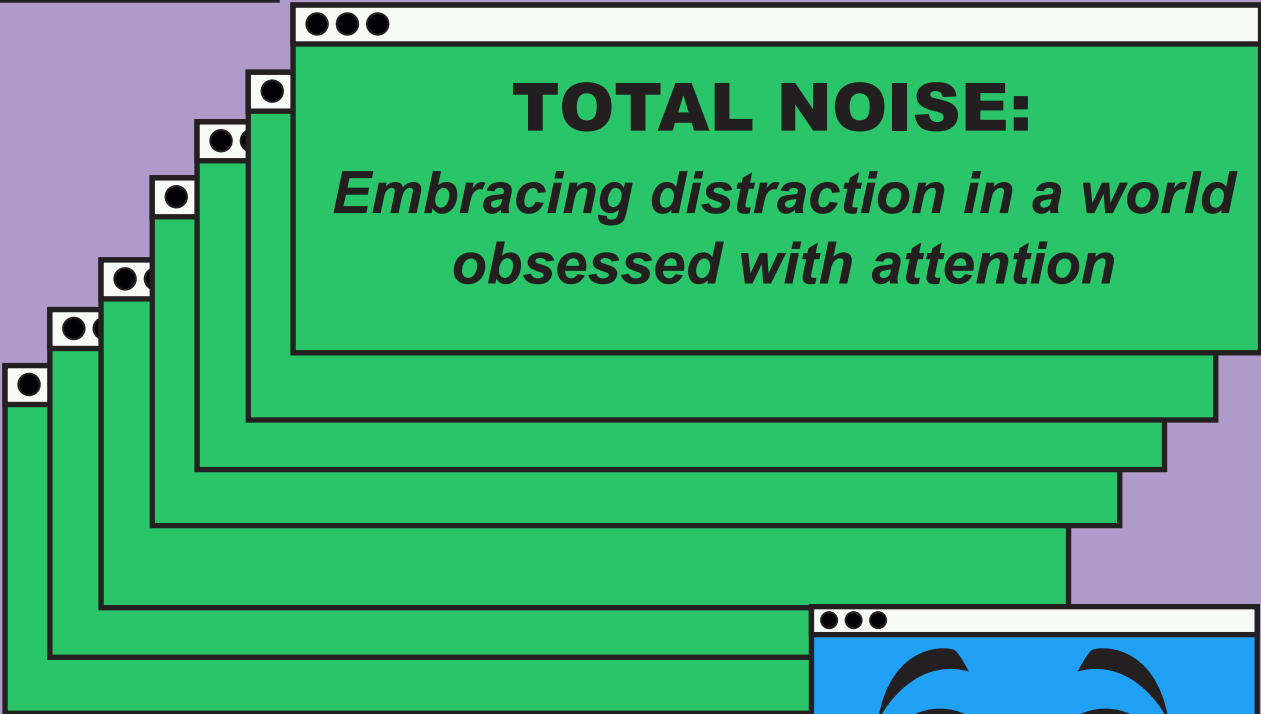
In valuing all kinds of effort that maintain progress and forward motion, *Animal Crossing* points to the ways in which redefining attention and distraction might help us reimagine our working lives. This is not to say that work under future attention would mirror Animal Crossing’s anything-goes ethos, but that it would expand the space for action, agency, experimentation and exploration in the workplace by valuing momentum over metrics; outcomes over outputs.

Another reflection of openness in daily life might be to take something like Kierkegaard’s leap into the absurd every day: carry a “distraction notebook” in which to catalogue the

ephemera of unfocused attention; observations that could be later used for creative projects, self-reflection, conversation starters or nothing at all; use technology to encounter, appreciate and prompt randomness in our daily lives. Hanif Kureishi argues for a re-evaluation of distraction’s creative potential, stressing that sometimes “attention needs to be paid to intuition” (Kureishi; 2012). This idea dovetails nicely with Eve Kosofsky Sedgwick’s antidote to the practice of “paranoid reading” outlined in the present-state litany. “Reparative reading” stands in contrast to paranoid reading in that it does not place its faith in exposure, but rather in imagination. Social media would be used less to gather information and more for what it often purports to be for: connection and collaboration. Reparative reading is the practice of this kind of collaboration, seeking to encounter information not for the purposes of revelation, but inspiration – much of which can come from being open to the possibilities of distraction. Like reparative reading, distraction’s creative potential is solution-oriented; expanding the space for constructive thought and insight that allows us to see things differently. Indeed, sometimes we don’t have a choice: returning to the COVID-19 pandemic; some parents, stuck at home with their children, are finding themselves struck by the creativity being enabled through tablets and smartphones (Bowles; 2020).



TOTAL NOISE:
*Embracing distraction in a world
obsessed with attention*



“We crash into wonder – fling ourselves upon simplicity – so it can render us heavy and senseless, deliver us finally to the ground.”

Leslie Jamison

In her social history of the internet, Joanne McNeil charts our shifting perceptions of the internet over time, reminding us that how we talk about the internet shapes our experience of it. When it first emerged into mainstream use, the internet was somewhere; it was a place we went into and explored. But over time, our sense of the internet as a space began to contract, and in its place emerged a new understanding of the internet as a person:

“People used to talk about the internet as a place. The information superhighway. A frontier. The internet was something to get on...Now people talk about the internet as something to talk to; it is a someone. Even casually people talk about the internet - insentient, dumb - as living, real.”
(McNeil; 2020)

When the internet was a place, users could move about inside of it and make our own decisions about where to go. But when it is seen as a someone, we are stripped of that agency; we become, in the words of historian

David Marno, “passive and vulnerable subject[s] who [suffer] an experience [of distraction] without doing much to contribute to it” (Marno; 2018).

When we speak of attention in the digital world, we paint ourselves at the mercy of technology designed to distract us. But this is a charge that has been laid against every new mode of communication, from the written word to the smartphone, and everything in between. All technologies have positively and negatively impacted our ways of thinking, expression, connection and communication; digital technologies are no different - we’re just still catching up to them. They are more sophisticated; deployed at faster speeds on larger scales; but ultimately, at their core, the challenges the digital world presents to our attention are familiar to us because they’ve appeared each time a new technology of communication, connection and expression is developed. This is not to say that there is nothing different or unique about our contemporary circumstances; each era of communications technology presented us with similar problem in different contexts, and the digital era is no different. The challenge of attention in the digital world is one of reconciling our expectations with reality because we have been confronted by a rupture between them – one that was always there, but has been brought into sharp focus in a world of omnipresent screens.

The “Age of Distraction” narrative reflects something much deeper and more human about our concerns, one that strikes at the heart of Western cultural and philosophical thought about autonomy, freedom, choice and control. William James wrote that “My experience is what I agree to attend to.” Distraction, therefore, is seen as impinging on our ability - perhaps even our right - to experience the world on our own terms. We don’t agree to be distracted, it simply happens to us.

The reality is that our attention anxieties are self-reinforcing and mutually constructed. We have fallen victim to our own cultural legacy; one that is reductive, myopic and moralizing; rooted in Judeo-Christian concepts of distraction as sin and attention as virtue. These concepts informed philosophical orientations towards the world, and became reified by systems and institutions that all reinforce the belief that distraction is a failure of character.

But despite the Biblical origins of our rigid conception of attention, it is worth noting that early Christianity had a more open and tolerant orientation towards distraction: not only was it seen as just attention by another name; it was believed to be a fundamental part of the human condition. Beyond the West, others have paid attention differently: Buddhist conceptions are often static

or spiritually contemplative, framing attention as “neither a compelled reaction (there is no compulsion), nor a willed response (there is no will) - just a receptivity” (Cohen; 2018). Even within this tradition there is variation; insight as sudden and fleeting versus insight as focused and lasting. But the overall conception remains the same: attention as a sort of blankness and openness; a readiness to receive.

Such holistic frameworks of attention seem to stand in stark contrast to our atomized, clinical laser beam of focus. But Western cultural tradition is actually quite rich in this kind of wide-angled attention: David Hockney’s living impressions; Ann Hamilton’s repositioning of space and those who inhabit it; Ian Bogost’s “worldfulness” approach to appreciating things; or even the unbothered states of distraction experienced by the characters of James Joyce’s *Ulysses*, many of whom seem to revel in their lack of focus (Rothman; 2015).

By shifting our conceptions of attention, we can change our relationship with the technologies that leverage it. Technologies no longer become valuable in their ability - or lack thereof - to narrow or focus our attention, silencing the “Total Noise” of the outside world; but in the different kinds of attention they make possible. They are “attentional prostheses,” letting us experience the world from different angles and perspectives;

making the familiar seem thrillingly new; and reminding us that distraction can be just as revelatory and satisfying as concentration. As David Hockney wanted to show with his “joiner” photo collages: there is so much out there to see, if only we cared to look.

The journalist Jeff Sharlet is practicing this way of seeing by leveraging his Instagram account to tell stories through the pictures he posts of people, places and things: night shift workers, thrift store oddities, skeletal treelines, homeless addicts. All of the images are shot from his smartphone camera, so they appear unprofessional, hurried, shot from strange angles, out of focus - but that's the point. He refers to Instagram's “online assembly” of everyday photographs as “the most magnificent documentary art” he has ever seen. “I use both those terms, ‘assembly’ and ‘magnificent,’ with their ancestry in mind,” he writes. “[T]he democracy implicit in the former, the royalty implied by the latter” (Sharlet; 2020).

Sharlet's Instagram journalism points a way toward understanding attention in the digital age as something shared and mutually constructed; circumstantial and context-dependent. It is empathy enabled through technology; a “tentative process” of stepping out into the world and seeing what we notice: “We're constantly practicing, extending our gaze, learning to see” (Sharlet; 2020).

It is fitting that Sharlet uses the phrase “extending our gaze,” which finds its root in the Latin verb *extendere*, meaning “to stretch out.” As you will recall, attention comes from the same etymological ancestry: *attendere*, meaning “to stretch toward.” Perhaps it's worth discarding the rigid division of attention and distraction altogether; and start over with a new synthesis of attention and extension. Of being *attentative*: stretching out of ourselves and towards the world. An expansion.



NEXT STEPS: RETHINKING ATTENTION

It is hoped that this project will be shared widely to the public, in particular with the cultural, technology and public policy sectors, as a way to stimulate discussion on what it means to pay attention in a busy world. Considering the inspiration drawn from art to produce this new framework for attention, there would be immense value in presenting this project to the cultural and arts sector, perhaps in the context of participatory workshops on how these institutions could produce exhibitions and programming that ask us to reconsider our conception of paying attention; and how we can get the most value for our investment – not in the terms of money or productivity or economics, but in the terms of experiencing the world where it is, not where we want it to be, and communing with it there.

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