

From Gutenberg to Zuckerberg, into Digital Tyranny: The Urgency of Media Literacy in the Age of Tech Giants

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Resumo

No cenário digital em rápida evolução, a intersecção de história, tecnologia, jornalismo, comunicação e literacia mediática nunca foi tão crítica. Este artigo investiga o profundo impacto dos avanços tecnológicos na nossa sociedade, traçando uma jornada da invenção revolucionária da imprensa por Johannes Gutenberg ao domínio digital de gigantes da tecnologia como o Facebook de Mark Zuckerberg. À medida que navegamos pelas complexidades da tirania digital, a urgência da alfabetização mediática torna-se evidente para evitar o uso abusivo da tecnologia. Conhecer o contexto histórico e os desafios atuais impostos pelos monopólios tecnológicos, permite compreender melhor o papel do jornalismo na promoção da democracia e a necessidade de pensamento crítico numa era de sobrecarga de informação. Esta abordagem pretende lançar a discussão sobre questões urgentes do nosso tempo, bem como defender uma sociedade mais informada e participativa.

Palavras-chave: Democracia. Literacia dos Media. Gutenberg. Tirania Tecnológica. Jornalismo.

Abstract

This article addresses simultaneously history, technology, journalism, communication and media literacy. In today's rapidly evolving digital landscape, the intersection of history, technology, journalism, communication, and media literacy has never been more critical to avoid abusive uses of technology. This article delves into the profound impact of technological advancements on our society, tracing a journey from the revolutionary invention of the printing press by Johannes Gutenberg to the digital dominance of tech giants like Mark Zuckerberg's Facebook. As we navigate through the complexities of digital tyranny, the urgency of media literacy becomes apparent. By understanding the historical context and the current challenges posed by technological monopolies, we can better appreciate the role of journalism in promoting democracy and the need for critical thinking in an age of information overload. This exploration aims to shed light on the pressing issues of our time and advocate for a more informed and engaged society.

Keywords: Democracy. Media Literacy. Gutenberg. Tech Tyranny. Journalism.

Resumen

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Este artículo aborda simultáneamente la historia, la tecnología, el periodismo, la comunicación y la alfabetización mediática. En el panorama digital actual, en rápida evolución, la intersección entre historia, tecnología, periodismo, comunicación y alfabetización mediática nunca ha sido tan crucial para evitar el uso abusivo de la tecnología. Este artículo profundiza el impacto de los avances tecnológicos en nuestra sociedad, trazando un recorrido desde la revolucionaria invención de la imprenta por Johannes Gutenberg hasta el dominio digital de gigantes tecnológicos como Facebook de Mark Zuckerberg. A medida que navegamos por las complejidades de la tiranía digital, la urgencia de la alfabetización mediática se hace evidente. Al comprender el contexto histórico y los desafíos actuales que plantean los monopolios tecnológicos, podemos apreciar mejor el papel del periodismo en la promoción de la democracia y la necesidad del pensamiento crítico en una era de sobrecarga de información. Se busca arrojar luz sobre los problemas apremiantes de nuestro tiempo y abogar por una sociedad más informada y comprometida.

Palavras-chave: Democracia. Alfabetización mediática. Gutenberg. Tirania Tecnológica. Periodismo.

Résumé

Cet article aborde simultanément l'histoire, la technologie, le journalisme, la communication et l'éducation aux médias. Dans le paysage numérique actuel en rapide évolution, l'intersection de ces deux domaines n'a jamais été aussi cruciale pour éviter l'utilisation abusive de la technologie. Cet article explore l'impact profond des avancées technologiques sur notre société, retraçant le parcours de l'invention révolutionnaire de l'imprimerie par Johannes Gutenberg à la domination numérique de géants comme Facebook, dirigé par Mark Zuckerberg. À mesure que nous naviguons dans les complexités de la tyrannie numérique, l'urgence de l'éducation aux médias devient évidente. Comprendre le contexte historique et les défis actuels posés par les monopoles technologiques nous permet de mieux comprendre le rôle du journalisme dans la promotion de la démocratie et la nécessité d'une pensée critique à l'ère de la surinformation. Cette exploration vise à éclairer les enjeux urgents de notre époque et à plaider pour une société plus informée et plus engagée.

Mots-clés: Démocratie. Éducation aux médias. Gutenberg. Tyrannie technologique. Journalism.

Introduction

While travelling to Brussels for a meeting, I decided to use one of its best assets – bookshops. Going through my usual way of choosing among them – no fancy technic, just a love for searching good words on interesting subjects –, I came across this sentence: «Those who control technologies will increasingly control the rest of us» (Susskind, 2018, p. 3).

It made me pause – and, of course, buy Jamie Susskind's book – because, due to my research on media literacy and the first printings by Johannes Gutenberg, I had already a felling of restlessness about the topic.

From then on, I've tried to raise awareness on the political consequences of digital power. But back then, I felt kind of lonely on this quest. Now, in 2025, with some trying to embody absolute power by controlling all at once big tech, economy – and politics – I will try my best to argue why this is the most important issue of today's democratic societies. And by it, make the case for media literacy urgency. Not panacea, but urgency.

Simply put: We live in a tech world, but we may no longer live in a democratic continent. Not for long, at least. How so if there are (free) elections and parliaments? Because politics are not (only) about that. Because politics have always been about power and (real) power is now in other hands. Of the most valued companies on the stock exchange from 2019 to 2021, seven operate on the Internet and are almost always at the top. The highest value reached by Apple is worth nine times the GDP of a country like Portugal. In fact, there are only six countries (USA, China, United Kingdom, India, Japan and Germany) with a GDP higher than the value of that one company. Although this is not a complete honest comparison because companies are measured by market value and countries by everything they produce in a year, it's still worse noting.

More importantly, because it goes to concentration of wealth and power, is the fact that six American billionaires – Elon Musk (X and Tesla), Jeff Bezos (Amazon), Mark Zuckerberg (Facebook), Bill Gates (Microsoft), Sergey Brin and Larry Page (Google) – have amassed a personal wealth of around 150 billion dollars. Some alert that these fortunes allow them to «replace states», which is unprecedented in the history of democracy (Kerdellant, 2025, p. 9).

It may be argued that this is only about the money, but there's much more to it. The concentration of wealth – and technological monopoly – is taking over political power, Brexit, being only one example (Brändle et al. 2021), defence, education and health. Actually, more than health as we usually conceive it: immortality. Just as examples: Musk is trying to chip chimpanzees with AI and Bezos wishes to migrate humanity into space (Kerdellant, 2025).

It's interesting to note how the aphorism «power corrupts, and absolute power corrupts absolutely» is now common sense in regard to politics, but very few are worried about how absolute tech power is becoming an existential threat to democracy – corrupting an entire society.

It is not new that we live in two worlds – the real world and the media world (Potter, 2018). But thanks to technology, the border is now increasingly unconsciously crossed. A smartphone today has greater processing power than the computer that guided Neil Armstrong to the moon and the number of people connected to the internet has gone from 400 million in 2000 to 5, 5 billion in 2025. Every day we send 269 billion emails. Every second there are 60,000 Google searches. In 2020, we were expected to generate as much information every two hours as humans have generated in two thousand years of existence (Susskind, 2018). Every day the Android operating system alone sends more than eleven billion notifications to its one billion users (Williams, 2021).

Should we be complaining about all this information, easily available, usable and sharable. Not exactly. But neither should we be blind and unaware about the dangers of its unregulated use to democracy and journalism itself.

In a world now more and more ruled by technology, privacy as we knew it no longer exists. Moreover, governments may be elected but big tech companies (that no one elects) have more power than parliaments. Recent events like Elon Musk dive into the White House show unprecedented concentration of economic power with politics and technology.

Approaching the tech tyranny problem from an historic perspective address simultaneously the crisis of journalism and the crisis of democracy. Because they are linked (Quandt, 2023; Lemann, 2015; Kovach & Rosenstiel, 2007), but even more because neither journalism nor democracies can afford to lose their ability to wish for a better world.

Why is journalism fundamental to democracy? It promotes mutual understanding, giving voice to people and mobilising them to act (Wahl-Jorgensen & Hanitzsch, 2009), being considered the responsibility of citizens in democratic societies to keep themselves informed (Mendes et al., 2009).

If journalism is a public good, it goes beyond the usual aim of keeping people informed. Despite all its flaws, journalism still has a side of idealism. Its healthy madness of wanting to change the world can be more tangible if we get some answers to questions that haunt today's societies, namely, how to use technology to help prepare their readers for critical thinking.

Though it may seem David against Goliath, Media Literacy has a role to play in this new world order.

We need to go back more than five centuries, to Johannes Gutenberg's invention of moveable characters (Davis, 2019), to find a period as disruptive in communication and the press as that experienced since the beginning of the twenty-first century. As Vallejo (2020, p. 124) summarises: «Right now we are immersed in a transition as radical as Greek literacy. The Internet is changing the use of memory and the very mechanics of knowledge».

So, let me start by giving you some historical context to help us understand how humanity got here.

HISTORICAL CONTEXT: FROM GUTENBERG TO ZUCKERBERG

Before digital makes us all forget what brought us here, let us recall the invention that revolutionized cognitive evolution: Gutenberg's press.

Scarce 500 km separate the two technological and cultural revolutions that spread words like never before: that piece of engineering and art called print, in Mainz, Germany, by Johannes Gutenberg, and the World Wide Web (WWW), in Geneve, CERN (European Organization for Nuclear Research), by Tim Berners-Lee.

You may ask why go through all the trouble of going back to Gutenberg to talk about the perils of technology. That's because people in general feel overwhelmed by the complexity of technology and its implications and we need to take a step back before we start talking about worlds ruled by machines.

Pushed by the fastness of technology, we tend to ignore our organic relationship with the past. A journey from the Net to the Gutenberg invention can help unbreak that inorganic relationship with mankind's evolution in terms of critical thinking and into the tech world we now live in.

To find a connecting link between the five centuries mediating between the revolution that brought us reading for all (Gutenberg's movable letters) and the one that brought us connectivity for all (WWW and the Internet), we should have more context about the digital world we live in – and context, that includes historical, cultural and economic factors influencing media production and reception, is one of the aims of media literacy (Hobbs, 2015).

Media messages are shaped by cultural, social, political, and economic contexts. Without understanding these factors, we may misinterpret the intent or meaning behind a message. Without context, audiences might misinterpret or fail to grasp deeper meanings.

When trying to understand how our brain reads (Nery, 2024), I came across Gutenberg's movable letters and how the written word altered the human brain to adapt to reading, finding that this capacity is an acquisition, not a natural born skill (Al Dahhan et al., 2016). Today the issue is how digital is transforming us, especially since the generalization of the internet.

It was books (not tablets) that made reading a mobile and individual activity. Johannes Gutenberg (1400-1468) needed three years and the skins of 140 calves to print a Bible (Füssel, 2019; Davis, 2019). Today a book is published every half minute (Vallejo, 2020).

Just as the arrival of the first printed Bible in the United States, in 1847, was surrounded by great commotion right at the NY harbour (Davis, 2019), where sailors would take off their hats at its passage, so does the arrival of new technological gadgets is reason for veneration in the 21st century.

Both Gutenberg and Lee spread words and knowledge in ways never imagined. One through print, the other through digital media. One spreading print worldwide after developing mirrors for pilgrimage, the other building his first computer out of a shoe box and a broken TV (Martin, 2015). Though five centuries apart, they are both men of science who changed our relationship with reading and information.

Considered the greatest event in history, print opened the way to multiple revolutions.

Just as we today would not have the internet without prior invention in computing and communications, likewise Gutenberg depended on earlier technology and art, on new mobility opening new markets, and on social progress and unrest that gave rise to displacement and opportunity. (Jarvis, 2023, p. 21)

Print made publics, drove toward industrialization and capitalism, giving birth to the concept of content. «Print led us to the notion of creativity as asset, to the law of copyright and the doctrine of intellectual property, building a fence around the commons that was conversation» (Jarvis, 2023, p. 8).

Freedom of speech, illusion of permanence and greater authenticity are just some of the consequences of that medieval technology — just as we see the web today (Jarvis, 2023). Internet would not have been possible without the cultural jump started by Gutenberg. With Gutenberg's press letters, printing went from zero books to 20 million in 50 years (Man, 2009). His method served to print all over the world for the next 500 years.

More than a technological revolution, print brought deep social, economic and religious changes that lasted 500 years. Until the Internet and the WWW, the only equivalent in media disruption.

While print of the 15th Century brought silent and private reading, the social media of the 21st Century brought noise. Some even argue books, with their finite size and justified text format, came to organize the world and digital, with its infinite and juxtaposed content, to disorganize it (Jarvis, 2023). Others worry about this new inability to forget that technology now imposes us, arguing that forgetting is essential for critical thinking and sanity (Jarvis, 2023; Thouvenin et al., 2018). If not forgetting, at least select, the actual meaning of critical in its origins: *krísis*, from the Greek, that is, choosing, separating, deciding.

A European researcher and entrepreneur gave us print. And another one gave us the WWW. However, five centuries after the revolution brought by Gutenberg, time for celebration may be over. Printing played a crucial role in the dissemination of knowledge, fuelling the spread of ideas during the Renaissance and beyond. Berners-Lee's invention revolutionized the way people access and share information. And though we are no longer guided by the hand of God as were Gutenberg's fellowmen, we should still be guided by values. Who is looking out for those values? Where are the ones with a critical approach to the missuses of technology in the 21st century?

Tim Berners Lee, consultant at CERN, made internet available to everyone with the creation of the world wide web (WWW) and defends the web as a public good and a basic right, as well as digital equality (Berners-Lee, 2000). He is, therefore, critical of the Tech model and Big Tech dictators. This is a reminder that there can be innovation and technological worlds with ethics. In fact, we may have reached one of those turning points where fundamental values are redefined:

Feudal societies were defined by the ownership of land and the consequential relationship between aristocrat and peasant. In the same way, industrial societies were defined by the ownership of capital and the consequential relationship between capitalist and proletarian. Perhaps digital societies will be defined by the ownership of data and the consequential relationship between Mark Zuckerberg and the rest of us. If so, we are only at the start of a long process and the sooner we understand the new rules of the game, the better. (Fry, 2019).

Gutenberg's invention allowed decentralized access to knowledge (so as the internet). And if the history of print is a history of power, we should not be surprised that the same goes to its only historical competitor – the Internet.

Digital sovereignty now lies in the hands of companies as big as states, owned by few (Kerdellant, 2025; Williams, 2021; Han, 2021), standing on a new kind of business model based on two pillars: Data and Attention. Two things directly connected to power in a globalized world. If you have interesting data, you can get people's attention; if you have people's attention, you get more data, more money and more power. If you control data, attention and money, you rule.

Rule of law, meaning powers controlled by law and not by whims of governors, was invented to avoid absolute power – of politicians. What about absolute powers from private companies who own our attention?

ECONOMY OF ATTENTION

Our context is one of huge contradictions regarding the consumption of and access to information. On the one hand, there is more news than ever before (Fenton, 2009). But on the other hand, there is news coverage cuts (Lepore, 2019) and a clear difficulty for the press to monetise their internet audiences (Cagé, 2016). Despite a growing digital audience, we are witnessing a reduction of means in newsrooms, imposing a «sitting journalism» (Neveu, 2014, p. 535), averse to in-depth information; reduction of readers (Andi et al., 2020); global crisis for the business model, with downward curves of advertising and employment (Pew Research Center, 2019).

The Internet was idealised as democratising peoples, discouraging monopolies and decentralising information, but a revolutionary form of distribution is not necessarily a revolutionary form of content production (Edge, 2014). «The internet has not promoted global understanding in the way that had been anticipated because it has ended up reflecting real-world inequalities, linguistic divisions, conflicts of values and interests. The internet has neither spread nor rejuvenated democracy» (Curran et al., 2012, p. 180).

The result of the dissemination of information has not been as positive as many have come to predict, with the desired diversification being replaced by the homogenisation of discourse in the public sphere. Even when information products are varied, they often tell the same stories, from the same perspective and using the same information material (Fenton, 2009).

Instead of feeding us the diversity that a globalized society started to promise, the business model based on «free» and the run for our gold attention gave rise to concentration (Freedman, 2016). Too

powerful to fail, big tech companies eliminate competition to maintain power. For instance, when the number of Facebook users began to decline, Zuckerberg bought up the competitors like Instagram and WhatsApp (Kerdellant, 2025).

Few companies have the power to configure thoughts and behaviour of millions of human beings. The global advertising market, without China, is more than 50% owned by Google, Meta and Amazon. «Google and Facebook alone account for 85 percent (and growing) of the year-over-year growth in internet advertising is not a form of social control that can be easily categorized. It is more like a new government, a new creed, a new language» (Williams, 2021, p. 57).

Journalism itself – the way news is covered, reported, written and edited – has changed, having to contend with the growth of disinformation and misinformation. News have become increasingly free, but also more chaotic (Lepore, 2019). Digital introduced a new media logic (Deuze & Witschge, 2017) and changed the profession, now «much more precarious, fragmented and networked» (p. 10).

To understand what is happening we need to acknowledge the complete disruption in media consumption (Deuze & Witschge, 2017) we are facing. Contrary to the past, information is no longer scarce, but (too) abundant; 'for free' is the new business model; economy of attention is the gold mine for platforms.

In this economy, the product is us (humans, consumers, readers) and platforms took over the business of information without any compensation to media outlets or journalists (Williams, 2021; Kerdellant, 2025). «Google's genius, like Facebook's, lies in making its services free to the public. All the solutions that Internet users use without paying are sources of information for Google» (Kerdellant, 2025, p. 88).

And us, consumers, are now expected to be high performers, no less than Olympic gamers. Except, in the case of social media and big tech, doping is allowed. That is, hormones of pleasure, like dopamine, are constantly activated. As well as basic instincts like anger (Kerdellant, 2025).

We know, since the 1960s, that bad news spreads more easily and more rapidly than good news. The degree of agitation associated with the emotion it arouses also counts, that is, its potential to provoke a physiological reaction of alertness (Nery, 2024).

The capture of our attention is of economic value, but also of political value, with, for instance, the Chinese government disseminating an annual average of 448 million messages and ads on social networks, not for direct political propaganda, but to divert people's attention from the news the government wants to suppress (Williams, 2021).

The average user consults his or her cell phone 150 times a day and touches it more than 2,600 times a day. But going from one platform to another in a sort of infinite loop as its consequences, namely in our attention. If you are concentrated in one task and there's an interruption, it will take you an average of twenty-three minutes to refocus (Williams, 2021).

All this cognitive overload kills deep attention, let alone contemplative immersion, in a «noisy tsunami of information» (Han, 2021, p. 110). In it, opposition is destroyed. And with no opposites we cannot grow. Instead, we wither away. «Due to the lack of a counterpart, we constantly fall back into our ego, which makes us world less, i.e. depressed» (Han, 2021, p. 110).

Social and individual well being are strictly connected and journalism used to be a builder of community (Kovach & Rosenstiel, 2007). Now, too fast means emptiness instead of fulfilment and social belonging.

Neuroscientists like António Damásio have already established that thinking requires a calm, attentive mind. As does empathy and compassion. While the human brain reacts very quickly to demonstrations of physical pain, it takes time for the brain to understand and to feel the moral dimensions of a situation. «The more distracted we become, the less able we are to experience the subtlest, most distinctively human forms of empathy, compassion, and other emotions». That is, technological speediness may diminish «our capacity for contemplation, altering the depth of our emotions as well as our thoughts» (Carr, 2010, p. 131). In other words, epistemic distraction dehumanizes.

So, where to go from here? To nothing good, I'm afraid. We're talking depression, suicide and cognitive disruption. We're talking emotional content to keep the (money) machine going. Anger, hate, polarization (Kerdellant, 2025; Williams, 2021; Han, 2021), with expressions like «to hallucinate» or «it will make you cry» making the biggest profit: «Appeal to the baser impulses of human beings and exploit their cognitive weaknesses. This is how the 21st century was inaugurated: with an alliance between the most sophisticated forms of technology and persuasion at the service of our most puerile endeavours to

lay its foundations in the field of persuasion». This is why «the empires of the present are empires of the mind» (Williams, 2021, p. 47).

Hating, polarizing and provoking strong negative emotions feeds the algorithmic. Amplification means viral and viral means profit, easily appealing to communities of shared hatred:

Social networks exploit users' psychological weaknesses and make them dependent, giving them small injections of dopamine, the neurotransmitter responsible for addictions. (Ketdellant, 2025, p. 69)

Everyone wants our attention, all the time. However, no human has all the time; no brain has all the attention, leading to cognitive exhaustion. Distraction as a system is not at the service of the people. Instead of freedom, it creates servitude, in an unequal struggle for attention (Williams, 2021; Han, 2021). «I am convinced, now more than ever, that we will be free to the extent that we are able and willing to fight for the ownership of our attention» (Williams, p. 163).

One of the consequences of the war on clickbaits and attention is that the power players understood how inducing is more effective than informing. Truth became secondary, as long as the content is effective, producing the behaviour that is expected and needed for a certain result (Williams, 2021).

Capturing our attention gives platforms unprecedented power. And this is where worries about future politics comes in.

DIGITAL DEMOCRACIES, TRUST, POPULISM AND THE ALGORITHM

As Susskind (2018, p. 6) puts it: «Technology affects us not just as consumers but as citizens. In the twenty-first century, the digital is political». Therefore, if we are looking for a better world we have to have a look into science and its political power, argues Susskind: «Today, the most important revolutions are taking place not in philosophy departments, or even in parliaments and city squares, but in laboratories, research facilities, tech firms, and data centres».

In explaining why he feels technology use will mostly weaken core aspects of democracy and democratic representation, Jonathan Morgan (Pew Research Center, 2020), senior design researcher with the Wikimedia Foundation, described the problem this way:

I'm primarily concerned with three things. 1) The use of social media by interested groups to spread disinformation in a strategic, coordinated fashion with the intent of undermining people's trust in institutions and/or convincing them to believe things that aren't true. 2) The role of proprietary, closed platforms run by profit-driven companies in disseminating information to citizens, collecting information from (and about) citizens, and engaging political stakeholder groups. These platforms were not designed to be 'digital commons,' are not equally accessible to everyone and are not run for the sake of promoting social welfare or broad-based civic participation. These companies' profit motives, business models, data-gathering practices, process/procedural opacity and power (and therefore, resilience against regulation undertaken for prosocial purposes) make them poorly suited to promoting democracy. 3) The growing role of surveillance by digital platform owners (actors that collect and transact digital trace data) as well as by state actors, and the increasing power of machine learning-powered surveillance technologies for capturing and analysing data, threaten the public's ability to engage safely and equitably in civic discussions.

Enabling their influence to a degree not seen before, tech companies and technological change in media-relevant areas such as the internet, «databases and social media is playing a major role in exacerbating problems, for example by decreasing trust in elites, reducing access to unbiased information and facilitating dissemination of disinformation» (Fry, 2019, p. 8). Confidence has fallen in every major institution both in Europe and USA (Botsman, 2017; Yang, 2013), and that goes to journalism itself as well (Paisana et al., 2020).

As the philosopher Han (2021) points out, the use of hands symbolically means work, while the use of fingers, that are a must in our digitalized day to day societies, means pointing – judging with your finger.

Analysing democracy in the digital age, that of disinformation and post-truth, demands a look at the issue of trust and common ground. Populism undermines trust; lack of trust undermines institutions – and, therefore, democracy. It's the power of disunity of ideas, fragmentation. If every person shuts down in his or her small group, no one belongs to a larger group. No one is on common soil. No one belongs. Everyone is apart. The other becomes a stranger, a danger. It's not technology that is the enemy, but it's enlarged capacity to make people hate each other. Feeling angry and morally superior helps divide,

creating a world view with tribal impulses (Williams, 2021; Han, 2021). «The digital, or numerical, order is without history and memory. It therefore fragments life» (Han, 2021, p. 17).

SUBMISSION, SURVEILLANCE (AND MENTAL HEALTH)

Technology is creating surveillance societies, enslaved by artificial intelligence-based systems, far beyond anything Orwell imagined.

In the panopticon system, the watched are forced to watch their watcher in order to deter criminal, reprehensible behaviour (Foucault, 2009). Apparently, the digital platforms do exactly the opposite: watch without punishing, surveillance with the consent of the person being watched. Maximum surveillance with minimum awareness of it.

By it, we're not against our executioner. On the contrary, we open the door and invite him in. Not just the door to our homes, but the door to our brain.

Freedom of choice and consumption is being mistaken by freedom of action. An illusion that allows volunteer imprisonment. «We expose ourselves to a panoptic gaze. Surveillance is increasingly infiltrating everyday life in the form of convenience» (Han, 2021, p. 17).

The smartphone is a thing, doesn't seem to spy on us. There is no alert, as would be in a political dictatorship with political police. It's a whole new strategy of captivity. Tech doesn't become our enemy because we fear it, but because it creates pleasure.

The perfect domain is one in which everyone just plays. In Roman society people are immobilised with free food and spectacular games (*panem et circenses*, bread and circuses). Basic income and computer games would be the modern version of *panem et circenses*. (Han, 2021, p. 24)

Pinocchio and the Wicked Witch from Snow White, with her shiny red apple, come to mind. Childish? Precisely. That's what we should become: children who live for play.

It's not only the device that is «smart», but also the power that uses it.

Smart power doesn't work with commandments and prohibitions. It doesn't make us obedient, but dependent and addicted. Instead of breaking our will, it fulfils our needs. It wants to please us. He is permissive and not repressive. He doesn't impose silence on us. Rather, we are constantly encouraged

and invited to share and communicate our opinions, preferences, needs and desires, to narrate our lives. It makes its intention of domination invisible by sneaking up on you as quite friendly, just smart. The subjugated subject isn't even aware of their subjugation. They feel free. (Han, 2021, p. 41).

Platforms like Facebook or Google are the new sovereigns. Imprisonment by exposé is volunteer. «We tirelessly plough their land and produce precious data, which they then devour. We feel free even though we are completely exploited, monitored and controlled. In a system that exploits freedom, there is no resistance. Domination is complete the moment it coincides with freedom» (Han, 2021, p. 40).

Why resist if it's so permissive – and friendly? We trust it. No revolution is needed.

The idea that social networking would bring us closer together is becoming a trap. As Byung-Chul Han emphasises limitless connectivity does not produce connection, «on the contrary, it has an isolating effect, deepening loneliness» (2021, p. 99). For the philosopher, digitalisation and the self-centredness of infospheres is, in fact, one of the reasons for the spread of depression.

Studies have established correlations between the use of social networks and the increase in social anxiety, narcissism, depression and discouragement (Williams, 2021). Being a «narcissistic, autistic object», the smartphone «destroys empathy». Hyper-communication is not necessarily satisfactory, deepening loneliness (Han, 2021, p. 44).

So, how can we avoid the spread of this new tyrannic power made possible by technology? Two words come to mind: regulation and media literacy.

MEDIA LITERACY. FOR THE PEOPLE, BY THE PEOPLE

The technological landscape has changed the consumption of news, however, the «excess» of information (Gleick, 2012) enabled by technological facilities is also identified as a «burden» for readers, creating news avoidance. Social networks create a sense of overwhelming, caused in part by the cognitive impossibility of encompassing so much information, creating perceptions of burden, excess and inability to keep up (Lee et al., 2017).

In Portugal, as in other countries, social networks have become one of the main sources of information (Gustavo et al., 2023). And while social media is growing as a primary source of information, sales of paper media are falling (Andi et al., 2020).

There are also learning problems and a change in the perception of individual abilities, as the competition between the ease of what is shared on the networks and the demands of studying and immersive reading can lead to people giving up on pursuing more complex academic tasks, with the use of electronic media negatively associated with students' academic grades (Jacobsen & Forste, 2010). For every hour of exposure to electronic media, the average grade of university students dropped between 0.05 and 0.07 points (Coyne et al., 2013).

The distraction effect (Hassell & Sukulich, 2016) may be one of the explanations for this negative relationship. However, it is equally worrying that it is associated with young people giving up when they are faced with more complex tasks, since social networks allow immediate relief from this pressure, providing pleasure and distraction without effort.

Knowing that, in a digital economy, fake news can become more easily profitable than the truth (Martens et al., 2018) and that they can be compared to an epidemic because everyone is a potential propagator (Mesquita et al., 2025), it is easily understood how Media Literacy has turned into a matter of democratic emergency.

Our media context is one of disinformation phenomena, with citizens admitting to not always feel ready to recognise it, leading to: increased polarisation and heightened political or religious persecution, growing lack of trust in democratic institutions, influence on decision-making or the possible effect on election and referendum outcomes (Sádaba & Salaverria, 2023).

Repetition – an old propaganda strategy – is now one of the main instruments of disinformation, quantifying the prevalence of repeated false claims in political discourse revealed a substantial 24.8% of false statements are repeated, with each being repeated an average of four times (Larraz et al., 2024).

We all know the saying that «facts can get in the way of a good story» and how easily this can feed fake news. Being fake news and deepfakes just the tip of the iceberg, it is crucial to better prepare citizens for what they have to face, strengthening their capacity to assess credible media messages, in order to protect equal rights, democracy and conscious citizenship. For that we need Media Literacy (Sádaba & Tomé, 2024; LeCompte et al., 2017). Aiming at teaching how to think and not what to think, Media Literacy is, at the same time, a means to help to understand what journalism is and to understand the importance of civic participation.

Hence, combating the consequences of disinformation appears as a social challenge in which actors from all fields – technological, legislative, and educational – have a role to play, underlining the need for media literacy to provide citizens with personal resources and capabilities to confront their own prejudices and disinformation strategies.

This means looking at media literacy as an integral logic (Frau-Meigs, 2022), promoting learning, developing creative skills, communication, critical thinking, and the ability to participate in the public sphere. Preparing citizens for interaction (Buckingham, 2003) and for critical thinking about the media (Hobbs, 2010; Potter, 2013) can help citizens protect themselves, while empowering them (Hobbs, 2015; Bulger & Davison, 2018).

Media literacy prepares citizens to be well-informed, critical thinkers who know how to determine the credibility of news and other information. It also promotes an understanding of the role that credible information and a free press play in their lives and in a robust democracy (News Literacy in America, 2024).

While it is crucial to understand how such complex problems as disinformation and tech tyranny will not be solved simply by media literacy, we can also advocate that educating for critical thinking is an important path to sensitize for the need of regulation, avoiding out of control big tech.

Media can give us the false feeling that we are knowledgeable, but information is raw material that needs to be worked on to build structures of knowledge. There are new life skills needed to participate in contemporary societies and that includes media literacy, both for journalists and for public in general. Those who do not develop media literacy skills will be the new excluded.

Conclusion

To maintain my coherence about the importance of context, it is wise to bring back McLuhan (1964) to remember that in the long run a medium's content matters less than the medium itself in influencing how we think and act. In time, they alter patterns of perception without resistance, being able to change us as individuals and as a society.

However, the question today is not a specific medium, but the dependence of big tech companies, that use media outlets for their profit but are not media outlets, which means they are not regulated by any code of ethics. The question is how this technological concentration of power is eroding, if not destroying, democracies.

Silent but dangerous, tech dictators are making their way. Speed, creating cognitive disruption and reality distortion, decline of journalism, giving space to misinformation and populism, surveillance capitalism, and unprecedented concentration of tech power and money in a very small group of people, are the keys to understand – and find solutions – for this new environment of democratic disruption (Anderson et al., 2020).

The power of facts that lie at the heart of journalism. We can argue that the future of journalism depends more on in depth and reportage stories than hard news, increasingly done by machines. But also in media literacy because journalism crisis is also a crisis of mediation. Media literacy is the ability to access, analyse, evaluate, and communicate messages in a wide variety of forms. We need to nourish sense of community and critical thinking. In-depth journalism and media literacy are the open doors to do it.

This article is not in anyway against technology. Rather, it aims at raising awareness on its abusive use, arguing that the concentration of technological power is eroding democracies, by creating cognitive disruption, fostering misinformation and populism. It underscores the importance of media literacy as a means to protect both journalism and democracies, advocating for more interpretation and less information in the vacuum. The article concludes with a call for regulation based on values to ensure technology serves humanity's best interests.

Maybe the good news is that, in historical terms, digital technology is still in its infancy. So, there should still be time to act. Upon what?

Being a journalist, I would start by some questions. How much information can the human brain embrace? How should we deal with news avoidance? If AI is imitating the human brain, how can we protect ourselves from ourselves? Can we teach citizens how to protect themselves from *data stalkers*? Can we ask scientists to create an ethical code on the use of data? Can anyone control the powerful companies who own Big Data? Is this a science problem, a political problem? Who represents the people on this new world of Tech Power? Can we talk about fair societies and avoid a humanity at two speeds when some have AI and others cannot even read? Computers were created as an extension of the human brain, but who will control who? How can we live with machines without getting sick instead of happier?

I leave this to future research. For now, I can only give some (maybe naïve in front of such new powers) proposals, based on the main conclusions of this paper: 1) Journalists and newsrooms have been further and further away from the public interest and they need to conquer readers back to quality journalism; 2) Media Literacy is one of the most sustainable and powerful ways to protect both journalism and democracies; 3) Make the case for more interpretation and less information in the vacuum; 4) The ownership of data has become the oil of the 21st Century. Narrate the world, creating meaning and context, instead of datafying it; 5) Regulate based on values, so that technology can be on our side.

Because, if not, why should it even exist?

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