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Centre for International  
Governance Innovation

Special Report

# Freedom of Thought Reviving and Protecting a Forgotten Human Right

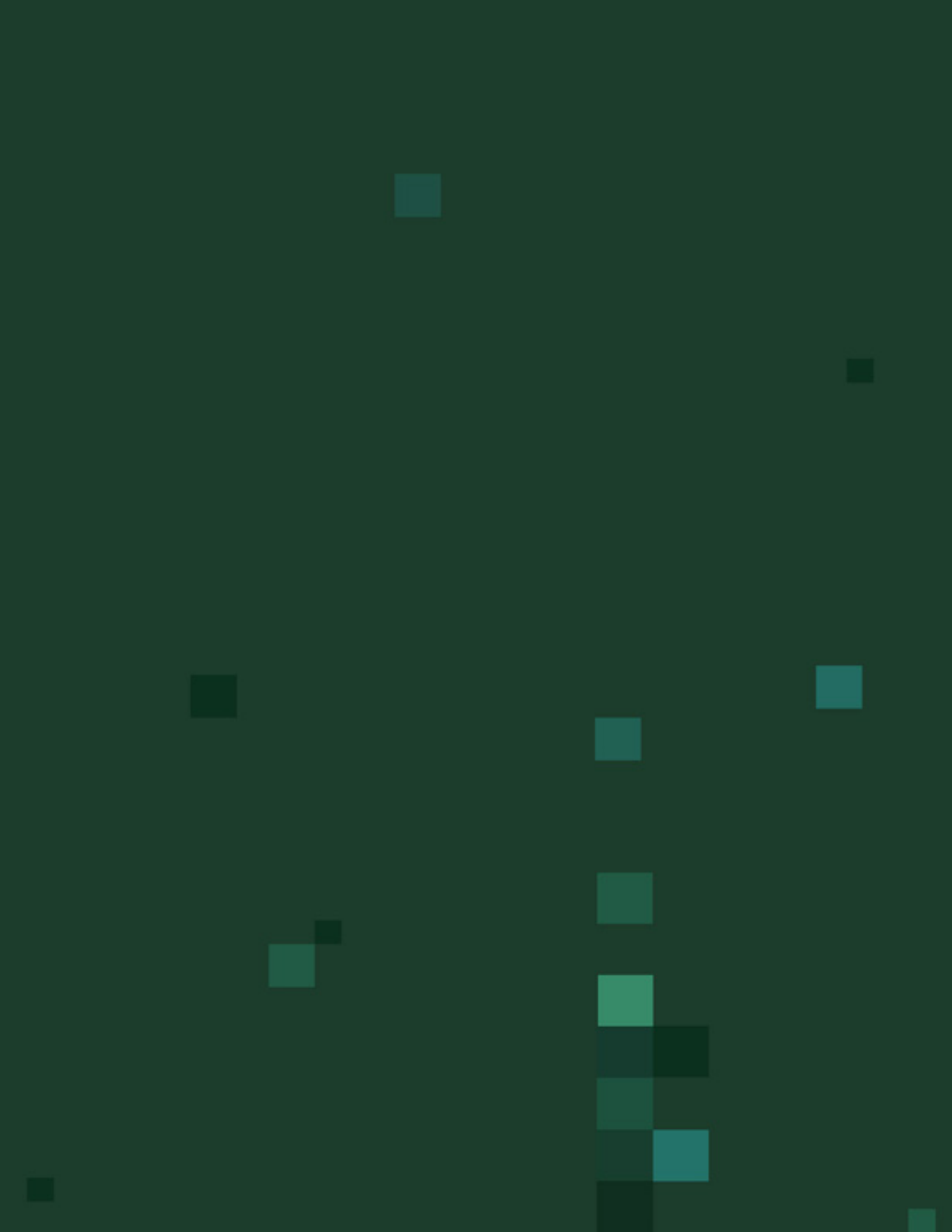
Susie Alegre and Aaron Shull

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This special report is part of CIGI's project  
on freedom of thought: Legitimate Influence  
or Unlawful Manipulation?

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Special Report

# Freedom of Thought

## Reviving and Protecting a Forgotten Human Right

Susie Alegre and Aaron Shull



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The Centre for International Governance Innovation (CIGI) is an independent, non-partisan think tank whose peer-reviewed research and trusted analysis influence policy makers to innovate. Our global network of multidisciplinary researchers and strategic partnerships provide policy solutions for the digital era with one goal: to improve people's lives everywhere. Headquartered in Waterloo, Canada, CIGI has received support from the Government of Canada, the Government of Ontario and founder Jim Balsillie.

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## About the Authors

**Susie Alegre** is a CIGI senior fellow and an international human rights lawyer. She has specific expertise in human rights and technology, in particular, the emerging application of the right to freedom of thought in the digital context, a topic explored in depth in her book *Freedom to Think: The Long Struggle to Liberate Our Minds* and touched on in her latest book *Human Rights, Robot Wrongs: Being Human in the Age of AI*. She has advised international organizations, civil society and the private sector on the application of human rights law to emerging technology and artificial intelligence, and the human rights implications of the digital environment in a range of spheres, including disinformation, elections, child safety online, security and the armed forces.

**Aaron Shull** is the managing director and general counsel at CIGI. Recognized as a leading expert on complex issues at the intersection of public policy, emerging technology, cybersecurity, privacy and data protection, Aaron has extensive experience building global networks of experts to enhance engagement with researchers and practitioners drawn from government, academia, industry and civil society. In 2021, he led a significant research project, Reimagining a Canadian National Security Strategy, which engaged a multidisciplinary network of more than 250 experts to inspire updated and innovative national security and intelligence practices and offered policy recommendations to assist the Government of Canada in addressing the challenges of a new security environment.

## About the Program

In our rapidly evolving digital landscape, technology is more than just a tool — it is a powerful force influencing our deepest thoughts and choices. From big data's manipulation of elections to the prospect of brain implants reading our minds, technology's impacts are far-reaching. The now widely publicized instances of how targeted advertising and content incite risky behaviours and distort self-perceptions among teenagers are particularly alarming. This all underscores the urgent need to address the threat that technology can pose to our autonomy, to our relationships and to societal cohesion.

The Legitimate Influence or Unlawful Manipulation? program, led by Susie Alegre and Aaron Shull, brings together experts in internet governance and human rights. In addition to this special report, a series of policy briefs provide insight into the issues facing modern-day freedom of thought and propose strategies to protect our inner thoughts and opinions from technological intrusion.



# Introduction

In this digital era, there is sometimes a tension between how various human rights are enumerated under international law and the ways in which those rights play out in diverse constitutional systems of domestic law. Within much of the public discourse this stress is evident in attempts to understand the bounds of privacy and freedom of expression. This false dichotomy has arisen, in part, from both the ubiquity of technology and the mediation of almost all public conversations by large semi-monopolistic corporate technology platforms. But the human rights implications of existing and emerging technologies are much broader and more nuanced than that surface-level discourse would suggest. To understand the human rights risks going forward, we need to focus on those rights that have remained overshadowed in discussions on risk.

One such right, dubbed “the forgotten right” by the legal scholar Jan Christoph Bublitz (2014) is the right to freedom of thought in the *forum internum* or inner life. At the dawn of ubiquitous artificial intelligence (AI), we cannot afford to be distracted by philosophical questions about intelligent machines without ensuring the right of humans to freedom of thought. This right is what international lawyers refer to as a *jus cogens* or compelling law norm; an absolute right, it is the highest right from which no derogation is ever permissible. As with the prohibitions on torture or slavery, the right to freedom of thought has been granted this status by the international community, because to unlawfully interfere with someone’s freedom in this way is so morally repugnant that it can never be justified (Alegre 2022).<sup>1</sup> The right has three key planks<sup>2</sup>:

- the right to keep our thoughts private;
- the right to keep our thoughts free from manipulation; and
- the right not to be penalized for our thoughts alone.

The right is absolute, but that does not mean that any interference with or influence over our thinking would amount to a violation of our right to freedom of thought. In fact, true freedom of thought and opinion are premised on both freedom of expression and freedom of information to allow for the evolution of ideas and to reinforce agency. Delineating the exact scope of this right in practice is complicated, as the course of human history is checkered by the use of propaganda, influence campaigns, advertising, misinformation and disinformation, and scientific techniques to “get inside” our heads and control our thoughts. These three planks suggest important questions that can help in pinpointing what might, and what might not, amount to a violation of the right to freedom of thought:

- Where is the line between our inner thoughts and our expression of those thoughts?
- What thoughts or information about ourselves are we sharing voluntarily, versus involuntarily through others’ inferences?
- What does “consent” mean in relation to the use or function of technological applications when they interface with the human mind?
- How are inferences about our inner lives used against us?
- And, critically, where is the boundary between lawful influence and unlawful manipulation?

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<sup>1</sup> Susie Alegre (2022, 26) has described the relationship thus: “Absolute rights are deemed so essential to our dignity and our humanity that there can be no balancing act in deciding whether to protect them, and there are very few rights that are given this level of protection. There can never be a justification for torturing someone or treating them in a way that is inhuman and degrading. No one can enslave another person for any reason. Torture and slavery are prohibited absolutely, as they are anathema to human dignity and an affront to humanity. So too is anything that interferes with our right to inner freedom.”


<sup>2</sup> See Vermeulen (2006, 752), cited in Alegre (2022).

Finding answers inevitably involves case-by-case assessments and a careful analysis of the complex dynamics between law, technology and the human mind.

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## We cannot afford to be distracted by philosophical questions about intelligent machines without ensuring the right of humans to freedom of thought.

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Examples of existing technologies that impact our freedom of thought are widespread. They affect us as individuals and the societies in which we live in many different ways, and range from the ubiquitous recommender algorithms that profile us and tell us what to watch or read online, to the development of brain-computer interfaces (BCIs) designed to “read” the user’s thoughts straight from the brain without the need for a communications interface such as a keyboard or a microphone (Musk and Neuralink 2019).

Freedom of thought depends very much on wider social context and, in particular, on the availability and freedom of information and individuals’ ability to access information without being profiled. As technology increasingly mediates our access to information, it inevitably affects our ability to choose and think for ourselves, undermining our agency. Freedom of thought may be impacted via targeted forces, through deliberate influence campaigns, or by more general and pervasive means, through capture of the information environment itself. As powerful generative AI technologies become more prevalent and their outputs flood the online environment, the risks and challenges will only become more pressing.

The absence of analysis by courts, in particular, of the right to freedom of thought means that there is a need for the development of a legal test or tests that can help guide our understanding of the legitimate boundaries of technology’s engagement with our minds. The Human Rights Council is the main intergovernmental body within the United Nations responsible for human rights and is mandated to “strength[en] the promotion and protection of human rights around the globe.”<sup>3</sup> And the Human Rights Council has already mandated its Advisory Committee to look into the human rights implications of neurotechnology, which has particular relevance to the right to freedom of thought.<sup>4</sup> But it is the Human Rights *Committee* (HRC) that is tasked with defining the rights set down in the International Covenant on Civil and Political Rights so that they may be understood and applied in law around the world, which it does through a series of General Comments. Given the global scope of the challenge and the clear need to protect this forgotten right, the HRC is a key focal point to provide urgent guidance for global efforts. A General Comment from the HRC would give an authoritative interpretation of what the right to freedom of thought means in the digital world, now and for the future. This should provide much-needed guidance on how to determine if an action is lawful influence or unlawful manipulation, which would assist policy makers, regulators and courts grappling with these new challenges.

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3 See [www.ohchr.org/en/hr-bodies/hrc/about-council](http://www.ohchr.org/en/hr-bodies/hrc/about-council).

4 See [www.ohchr.org/en/hr-bodies/hrc/advisory-committee/session31/index](http://www.ohchr.org/en/hr-bodies/hrc/advisory-committee/session31/index).



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## Examples of existing technologies that impact our freedom of thought are widespread.

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### A Forgotten Right

Freedom of thought is an essential plank of the international human rights framework. This inviolable freedom has been described as “the foundation of democratic society”<sup>5</sup> and “the basis and origin of all other rights.”<sup>6</sup> And it is intrinsically connected to the corresponding right to freedom of expression and opinion, which provides the social backdrop crucial to critical and intellectual thought and includes the right to freedom of information. But — as noted in this report’s opening — the right to freedom of thought has also been described as “the forgotten right” (Bublitz 2014), languishing unused in international human rights law for decades. It seems that the right was ignored on the assumption that no government could actually ever “get inside” its citizens’ heads, so we need not worry about it. If that were ever true, recent developments in emerging technologies now give cause to reflect on the urgent importance of the right and the need to protect it (Alegre 2017; 2022).

Enshrined in article 18 of the International Covenant on Civil and Political Rights, freedom of thought sits alongside the right to freedom of conscience and religion and complements the right to freedom of opinion, which sits alongside the rights to freedom of expression and freedom of information in article 19. While these rights have an external aspect when we express or manifest what we think or believe, they also have an absolute core. These rights protect our *forum internum*.

Human rights may reflect and build on philosophical *ideas*, but they must be acted on to be real and effective and to foster an environment in which we can fully enjoy our freedoms. In practice, this means that the right to freedom of thought includes three key elements, as distinguished by Ben Vermeulen (2006):

- the freedom to keep our thoughts private so that we may not be coerced into revealing them;
- freedom from indoctrination or influence on our conscious or subconscious mind through manipulation; and
- a prohibition on penalizing a person for their thoughts or opinions.

What the absolute protection of the right to freedom of thought means in practice will depend to a great extent on how the scope of the right is defined. While there is limited jurisprudence to date, there are indicators that the scope should be broad. In a rare example of jurisprudence touching on freedom of thought, the European Commission of Human Rights found that the right applied to the “comprehensiveness of the concept of thought.”<sup>7</sup> The HRC explains the scope and absolute nature of the right as “far-reaching and profound; it encompasses freedom of thoughts on all matters, personal conviction and the commitment to religion or belief, whether manifested individually or in community with others. The Committee draws the attention of States parties to the fact that the freedom of thought and the freedom of conscience are protected equally with the

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5 Nolan and K v Russia, No 2512/04 (12 February 2009), para 61.

6 In the words of René Cassin, as reported in Scheinin (1992, 266). A legal scholar and humanitarian, Cassin was recognized with the Nobel Peace Prize in 1968 for his contributions in drafting the Universal Declaration of Human Rights.

7 Salonen v Finland (1997) 25 EHRR 371.

freedom of religion and belief. The fundamental character of these freedoms is also reflected in the fact that this provision cannot be derogated from, even in time of public emergency” (Office of the High Commissioner of Human Rights 1993, para. 1).

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Human rights may reflect and build on philosophical *ideas*, but they must be acted on to be real and effective and to foster an environment in which we can fully enjoy our freedoms.

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Martin Scheinin (1992) suggests that taken together, the rights to freedom of thought, conscience and religion in article 18 of the the Universal Declaration of Human Rights cover all possible attitudes toward the world and society in protecting the “absolute character of the freedom of an inner state of mind.” And Evelyn Aswad (2020, 328) has described the International Covenant on Civil and Political Rights’ position that the freedom to hold opinions “without interference” in article 19 as “the broadness of the right to control the inner sanctum of one’s mind.”

Given the fundamental character of this right, along with the creep of technology into every corner of our lives that tends toward the erosion of this most core freedom, it is clear that the freedom of thought can no longer be forgotten. It is a right calling for a renaissance.

## The Renaissance of a Right

Over the past 10 years, recognition has been growing that the right to freedom of thought is key to our future relationship with technology. In 2012, Eben Moglen spoke at Europe’s largest digital society festival, re:publica Berlin, about the interrelations between freedom of thought, free media and free technology (re:publica.com 2012). Two years later, Publitz (2014, 1) published “a plea and a proposal for the renaissance of a forgotten fundamental right” highlighting the crucial importance of the right to freedom of thought in the context of emerging neurotechnology. Susie Alegre (2017) first wrote about the ways political behavioural microtargeting engaged our right to freedom of thought in ways that threaten the foundations of democracy.

Since then, official recognition of the relevance of the right has been reflected in the UN Committee on the Rights of the Child “General Comment on the Rights of the Child in the Digital Environment” (UN Committee on the Rights of the Child 2021) and in the first thematic report of a UN Special Rapporteur dedicated to analysis of the right to freedom of thought in the modern context (Shaheed 2021). UN Special Rapporteurs on freedom of opinion and expression, including David Kaye and the incumbent, Irene Khan, have focused increasingly on the right to opinion in the digital field.<sup>8</sup> In the courts, the Spanish Constitutional Court in 2019 recognized that the right to freedom of thought, enshrined in the Spanish Constitution as “ideological freedom,” was relevant to a case about the use of data for profiling and targeting of the electorate by political parties.<sup>9</sup>

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<sup>8</sup> See, for example, Kaye (2020); Khan (2021, 2022).

<sup>9</sup> See *Sentencia 76/2019, de 22 de mayo*, [2019] Boletín Oficial del Estado [Official State Gazette] no 151 (Spain), online: <<https://hj.tribunalconstitucional.es/es/Resolucion/Show/25942>>.

As the direction of technological innovation shifts increasingly toward the goal of getting inside the human mind, to judge it, understand it and change it, the vital importance of the right to freedom of thought for our future societies and its implications for the future of technology in a wide range of spheres have never been clearer. Just as the right to privacy has developed in the digital age to include a highly evolved right to protection of personal data, the details of protection for the right to freedom of thought need urgent attention.

## Our Technological Future

While the legal lines of the application of international human rights laws to technology and AI are still evolving, there are already emerging use cases that look certain to undermine freedom of thought. While there are many potential applications that could interfere with this right, four contemporary use cases — ranging from the least invasive to the most invasive — show the potential to eviscerate the right to freedom of thought:

- data-driven persuasive technologies;
- eye-tracking and pupillometry and scene understanding (via world-facing cameras) (Bar-Zeev 2021);
- functional magnetic resonance imaging (fMRI) combined with the predictive power of AI language models (Parshall 2023); and
- implantable brain-computer interfaces, such as those developed by Neuralink (Samuel 2024).

## Data-Driven Persuasive Technologies

At time of writing, there are 5.07 billion social media users globally, equating to 62.6 percent of the total global population.<sup>10</sup> Social media, at its best, serves as an exceptional tool for connecting with family and friends, fostering conversations without geographical constraints. However, as many experts have documented, it has become an increasingly toxic element in many people’s lives — a potentially harmful instrument capable of eroding societal resilience, democratic institutions and individual agency.

Out of public view, sophisticated algorithms intertwine with mass surveillance, data harvesting and behavioural psychology to deliver tailored content to specific users. Companies embracing “surveillance capitalism” highly prize our attention, employing data collection to customize advertisements for users (Zuboff 2019). The foundation of “attention economics” supporting surveillance capitalism encourages platforms to employ increasingly compelling methods to extend user engagement online, including the prioritization of emotionally charged content, as it is more likely to elicit user interaction, irrespective of potential consequences.

In 2021, the “Facebook Files,” an investigation by *The Wall Street Journal*,<sup>11</sup> laid bare internal company documents that vividly illustrate Facebook’s preference for profits over dealing with the platform’s flaws, some of which have resulted in serious harms, such as hate speech and teen depression. Whistle-blower Frances Haugen, a former Facebook data scientist, spotlighted these concerns in her testimony before the US Senate in October that year, asserting that Facebook and Instagram are addictive

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<sup>10</sup> See <https://datareportal.com/social-media-users>.

<sup>11</sup> See [www.wsj.com/articles/the-facebook-files-11631713039](https://www.wsj.com/articles/the-facebook-files-11631713039).

products and drawing parallels to cigarettes marketed by Big Tobacco. According to Haugen, Facebook (now Meta) relentlessly pursues the next click and “like,” exploiting dopamine hits that keep people hooked. She contended that despite leadership’s awareness of ways to enhance the safety of Facebook and Instagram, they neglected essential changes due to the prioritization of immense profits over people’s well-being (Zakrzewski 2021). This negligence has resulted in algorithms affecting teens’ mental health, fostering family rifts and fuelling ethnic violence — among other harms.<sup>12</sup>

Samantha Bradshaw and Tracy Vaillancourt (2024) elaborate on TikTok’s impact on freedom of thought and adolescent mental well-being. The algorithm tailors content based on user engagement, including video viewing time. Extended exposure to problematic content, such as pro-anorexia material, may shape the user’s experience and influence perspectives through continued algorithmic recommendations. Bradshaw and Vaillancourt argue that when evaluating the susceptibility of adolescents to algorithmic priming, it is important to acknowledge their distinct vulnerabilities (ibid.). Unlike adults, teenage brains are not fully developed, making them more prone to manipulation.<sup>13</sup>

The problems created by persuasive technologies will only be exacerbated in an online world dominated by AI, where even the creation of the content itself can more easily be personalized to exploit users’ vulnerabilities and where it becomes increasingly difficult to spot fact from fiction or to access information without curation. The voices and opinions of children and adolescents will be vital in developing systems that support their right to freedom of thought and their ability to develop freely.

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## Eye-Tracking Technologies

Eye-tracking technology improves user control and interaction by allowing effortless navigation through device interfaces with eye movements. It recognizes a person’s presence and tracks their gaze in real time, converting eye movements into data that includes pupil position, gaze direction and where someone is looking. This technology consists of cameras, light sources and computing power, with algorithms using machine learning to process the camera images (Egner et al. 2018).

From an accessibility standpoint, the integration of eye-tracking technology is a significant leap forward. It offers an alternative method for individuals with physical

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12 See [www.cbsnews.com/live-updates/facebook-whistleblower-frances-haugen-senate-testimony-platform-trust/](https://www.cbsnews.com/live-updates/facebook-whistleblower-frances-haugen-senate-testimony-platform-trust/).

13 In October 2022 in Britain, where coroners hold a judglike position with broad authority to investigate and officially determine the cause of death, senior coroner Andrew Walker (2022, para. 4) concluded that Instagram and other social media platforms played a role in the death of a 14-year-old girl in 2017. Walker determined that “Molly Rose Russell died from an act of self-harm whilst suffering from depression and the negative effects of on-line content.” Rather than officially categorizing her death as a suicide, the coroner emphasized in his report that the internet had a detrimental impact on her mental health, contributing significantly to her demise beyond a minimal extent. This ruling represents a potentially groundbreaking legal attribution, marking one of the first instances globally where internet companies have been legally blamed for a suicide.

disabilities, empowering them to use devices more effectively. Research has also shown its usefulness in detecting conditions such as Parkinson's disease, schizophrenia, autism, attention deficit hyperactivity disorder and dyslexia (Lee et al. 2023).

In contrast, while retail displays influence purchasing decisions, modern marketers can leverage technology to gather data on user attention, gaining valuable insights into preferences and consumer behaviours to mould them online and on shop floors (Low 2020). Through continuous real-time monitoring of user engagement, adjustments can be precisely implemented at the point when interest starts to diminish.

While innovations such as Apple's Vision Pro<sup>14</sup> hold great promise and reshape our expectation of a future where hands-free, eye-controlled interfaces become standard, the lack of clear boundaries raises concerns about protecting our right to keep our thoughts private as advancements proliferate across various industries without necessary safeguards in place.

## fMRI and AI

A state-of-the-art brain imaging technique, fMRI tracks changes in blood flow in response to neural activity, forming the basis for visualizing brain functions (Chow et al. 2017). When coupled with AI, these scans offer the potential to unveil insights into the inner workings of the human brain and, in many ways, mark the advent of a new era in brain analysis.

Neuroscientists from the University of Texas recently published a groundbreaking study that employed AI to decode non-invasive brain scan data, reconstructing language and understanding narratives heard, perceived or imagined. While these researchers noted the technology's early-stage development and its lack of precision as yet in generating exact transcripts, it marks a significant advance with the AI language system, akin to the enormous leap in chatbots marked by the launch of ChatGPT, identifying words' triggering of brain activity in fMRI scans (Tang et al. 2023). Moreover, as the technology continues to advance within this realm, the researchers emphasized the necessity of proactive policies to protect the privacy of internal mental processes, citing the potential for intentional misinterpretation for malicious purposes stemming from inaccurate decoder predictions or a lack of subject cooperation (ibid., 864).

The use of technology to read our minds threatens not only the right to keep our thoughts private, but also the right not to be penalized for our thoughts alone. Inferences made about our inner lives and the way we think may be used against us in ways that compromise our ability to get credit, get a job or stay out of prison. Often these inferences reflect biased data that classifies certain groups of people as inherently risky. Ensuring diversity in both study participants and researchers will be vital to mitigate against the risks of inequitable and discriminatory outcomes in neuroscientific research (Webb, Etter and Kwasa 2022). Freedom of thought requires recognition for diversity of thought.

## Neuralink and BCIs

A BCI is a system that connects an individual's brain activity to a computer. It directly interprets functional intent, allowing individuals to move, modify or interact with their environment solely based on their brain activity. Essentially, it enables device control using only the mind. The system comprises three essential components: a brain activity measuring device, usually a headset with embedded sensors to detect and record signals from the

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<sup>14</sup> See [www.apple.com/apple-vision-pro/](http://www.apple.com/apple-vision-pro/).

brain; specialized algorithms processing the recorded brain activity to understand the user's intent; and a command signal sent to the application to execute the desired command.<sup>15</sup>

These devices have brought about accomplishments that were once confined to the realm of science fiction; for example, brain implants were used to help a paralyzed man to walk again (Ghosh 2023); then-President Barack Obama shook a mind-controlled robot hand wired to sense touch (CBS News 2016); and a patient with ALS (amyotrophic lateral sclerosis) was able to type by simply thinking about keystrokes (Chaudhary et al. 2022) .

Tech billionaire Elon Musk's company Neuralink aspires to construct a highly robust BCI — specifically, a device proficient in managing large amounts of data that can be implanted through a relatively straightforward surgical procedure using a robotic device. Its immediate objective is to develop a tool capable of assisting individuals with specific health conditions, including seizures, paralysis, brain damage and depression (Musk and Neuralink 2019). In May 2023 the company announced it had secured US Food and Drug Administration (FDA) approval to initiate an in-human clinical study (Gilbert and Siddiqui 2023). In January 2024, Musk announced that the first human had surgically received a Neuralink brain implant, a product the company calls Telepathy (Chappell 2024).

Neuralink takes a more invasive, high-bandwidth approach than some of its competitors, anticipating that its configuration, featuring more electrodes and internal placement, will enhance the speed of data transfer from the brain to the computer. While Neuralink and similar initiatives will undergo thorough FDA scrutiny to ensure safety and reliability, the problems associated with brain implants that may not be supported for the lifetime of a patient are already appearing (Hamzelou 2023). If such technology is more widely available, including as a consumer product, the human rights and ethical implications are enormous. Equality and security concerns also arise due to the technology's potential to provide cognitive advantages to individuals with an implant (Gilbert and Siddiqui 2023).

Collectively, these new technologies might jeopardize the freedom to keep our thoughts private and almost certainly supercharge the prospect of manipulation or of negative consequences resulting from inferences about our thought patterns. Manipulation of individual minds is dangerous, not only for the person who is manipulated, but for others who may be affected by the actions they take as a result of manipulation. Thus this is not only an individual problem: it is a societal threat. A manipulator's understanding of how and what an individual thinks makes manipulation of that individual easier. This is why, as a matter of urgency, we need to define a clear line between lawful influence and unlawful manipulation in the ways we interact with technology.

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**Losing one's right to freedom of thought,  
at its essence, means the loss of one's  
human agency and choice.**

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<sup>15</sup> See <https://cumming.ucalgary.ca/research/pediatric-bci/bci-program/what-bci>.

## A Freedom in Jeopardy

There is an urgent and pressing need to determine how to protect freedom of thought in the digital world. Behind this urgency are two principal drivers. First — as noted in the interim report on freedom of thought by Ahmed Shaheed (2021, para. 6), who served as UN Special Rapporteur on freedom of religion or belief from 2016 to 2022 — are the “major developments in digital technology, neuroscience and cognitive psychology that could potentially enable access to the very content of our thoughts and affect how we think, feel and behave.”

While these technologies are widely considered to be emerging, or nascent, many are already accessible to anyone with a smartphone, and others will soon be widespread. The interim report on freedom of thought stated, “As technological advances increase the possibility of accurately decoding or inferring one’s inner mind accurately, clear parameters and protections for *forum internum* rights need urgent consideration” (ibid., para. 27).

A second driver is that it is not clear where leadership will come from to push for the international governance innovation that will be required to adequately protect this fundamental right. Waiting for national and regional courts to set the parameters piecemeal is too slow a process for response to such a pressing problem. At the international governance level, there are also multiple developments touching on different aspects of the problem but very little clear coordination. At the same time, there are three opposing dynamics that will make resolving the issue more difficult.

The first dynamic is that there are large tech incumbents with vested interests in the contemporary business model that is driving most of the problem. As a general operating principle, many of the largest technology companies in the world build their revenue off advertising. They assemble large data sets with individual specificity, and then target advertising based on the analysis of that data. The more targeted, the more individualized, the greater the chance of persuasion, the more valuable this data becomes. There are already indications that the new wave of generative AI is supercharging the problem. A great deal of money is vested in manipulation.

The second dynamic is geopolitical. In 2022, the US Department of Defense’s annual report to Congress on the military and security developments involving the People’s Republic of China outlined that “as the PLA [People’s Liberation Army] seeks to expand the reach of its influence operations around the world and seize information dominance on the battlefield, it is researching and developing the next evolution of psychological warfare called cognitive domain operation (CDO)...that leverages subliminal messaging, deep fakes, overt propaganda, and public sentiment analysis. The PLA views CDO as a more aggressive form of psychological warfare that it could employ across a range of domains to influence an adversary’s cognitive functions” (US Department of Defense 2022, 140).

In other words, minds are legitimate targets in the battlespace.

The final dynamic is that this is a deeply complex policy area lying at the intersection of international law, technology and neuroscience. This complexity means that most of the people affected by it will not understand the issue or its nuances. The very nature of the problem means that if an individual’s right to freedom from manipulation is interfered with, that person will likely be unaware of the problem. Losing one’s right to freedom of thought, at its essence, means the loss of one’s human agency and choice. If electorates are distracted or manipulated by technology, they are unlikely to put pressure on their political leaders to demand change.



## The Future of Freedom of Thought: Drawing the Line

While political leadership at the UN level should come from the Human Rights Council, it must meet the moment in a manner that outpaces the technological threat to human rights. It should support the use of existing human rights law to draw lines in the sand around acceptable use cases and technological developments.

Clarity in the interpretation of existing law is needed from a source that is independent of political pressures. For this, the HRC should issue a new General Comment that clearly articulates examples of when the use of a technology will contravene the right to freedom of thought and relevant factors to assess when the lines are crossed. The UN Human Rights Council Advisory Committee (2024, para. 106) also called for an updated General Comment in its draft report on the impact, opportunities and challenges of neurotechnology with regard to the promotion and protection of all human rights. Such clarity would allow law makers around the world to understand and protect the right to freedom of thought through their existing and developing legal frameworks.

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Consent given under pressure, or for a high price, however, is not really consent at all.

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Vested interests in the surveillance capitalism business model might find that a clear and unmistakable set of rules based in human rights law would constrain emerging practices. But if those practices violate human rights, they need to be constrained by hard law. It is also true that the *UN Guiding Principles on Business and Human Rights* require that “Business enterprises should respect human rights. This means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved” (Office of the High Commissioner for Human Rights 2011, 14). Clarity in what the law is offers an opportunity, not to stifle innovation, but to ensure that innovation is taken in a direction that supports humanity.

Uniting the international governance efforts under the UN Human Rights Council with a clear definition of the law through a General Comment of the HRC would allow a focused effort to address this deeply complex policy area. An authoritative statement on the scope of the right to freedom of thought and its relationship to technology at the international level would assist domestic and regional courts, regulators and policy makers grappling with this issue. This clear statement on the scope of existing rights is also needed to ascertain what gaps there might be that could be addressed with new legal frameworks.

It is the absolute protection of our inner freedom in the modern world and the implications of emerging technologies for that freedom that need unequivocal leadership to establish the scope of these rights in a digital era. Doing so requires a legal test to determine whether an activity is lawful influence or unlawful manipulation. In his 2021 interim report, Shaheed helpfully indicated that “case-by-case assessment, with consideration of context and subject” will be required to determine whether certain practices impermissibly manipulate



one's thoughts (Shaheed 2021, para. 31). When undertaking these factually driven assessments, Shaheed set out a series of “non-exhaustive” criteria to be used:

- (a) **Consent.** Did the rights holder, whether explicitly or tacitly and where they have capacity to do so, consent to the practice? Was that consent free and informed?
- (b) **Concealment or obfuscation.** Would a “reasonable person” be aware of the intended influence? For example, if the content is an advert or government campaign, is it clearly attributable, labelled or otherwise evident as such? During content curation or moderation, is the user clearly notified when and why certain content was removed or displayed?
- (c) **Asymmetrical power.** Is there an imbalance of power between the influencer and the rights holder? Does the influencer exercise this power to promote a certain narrative to the exclusion of others? Is this done in a limited, transparent and consistent manner, which the recipient can readily change or appeal?
- (d) **Harm.** Some commentators point to “harm” in intent or effect to distinguish permissible “influence” from impermissible “manipulation”. However, others contend that it is not always necessary to prove “harm” to establish the latter. Rather, it is an aggravating factor. If the influence undermines one's rational decision-making, it may impair freedom of thought even if the desired result is a commonly held good. (Shaheed 2021, para. 36)

The suggested criteria provide a starting point to the discussion while, in themselves, raise further questions that need exploration.

The first criteria of “consent” is perhaps the most challenging. There is an absolute prohibition on anything that interferes with our right to inner freedom, but in some circumstances informed, freely given consent may mean that there is no interference. Consent given under pressure, or for a high price, however, is not really consent at all: “We cannot sell our absolute rights. Just as it will never be lawful to sell ourselves into slavery or to consent to torture, we cannot effectively consent to the deprivation of our right to freedom of thought, now or for the future” (Alegre 2022, 310). There are serious questions about the ability to truly consent to practices that we cannot understand, and the context, as well as who we are, may affect the ability to give consent freely. To consent, we need real choice. While free and informed consent may be vital in identifying the threshold for an interference, as opposed to a legitimate engagement, with the right to freedom of thought, once an activity clearly crosses the threshold in all, or most, circumstances, consent will no longer be a factor.

Concealment or obfuscation is a factor in almost all efforts to manipulate an individual's thoughts. These tactics will be concealed in some fashion because overt efforts to manipulate individuals are less likely to be successful, although the context can have an impact on the manipulative effect of even clearly labelled content. We are not so easily taken in when the intent of manipulation is patently obvious. Rather, concealment or obfuscation is evidence of intent rather than a deciding factor for the right itself.

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The lines around effective protection of the right to freedom of thought are crucial for the future of democracy and human rights around the world.

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Given that the most widespread current examples of unlawful manipulation occur online through large platforms, there will almost certainly be an asymmetrical power arrangement between the individual or group being manipulated and those undertaking the subject action, although not in the traditional sense. The asymmetrical nature of the relationship will be informational. One side can leverage big data, modern data science, individualized ad tech, behavioural targeting, emotional ad tech and AI in an attempt to influence or manipulate. Users have very little chance of choosing and curating their own information feeds. Additionally, many of these platforms allow parties that are interested in deceit to use fake names, false accounts or other non-genuine means to create a false narrative. Anonymity online can provide a helpful cloak to protect freedom of expression for vulnerable groups, which supports diversity of information to promote freedom of thought. But, anonymity can also facilitate distortion of narratives, giving one party access to massive amounts of data while the other party has no context with which to understand the information it is receiving. Emerging technologies in the fields of neuroscience and new forms of engagement with AI through anthropomorphized personal assistants and deepfakes will only exacerbate the problems encountered so far in the age of social media.

With respect to harm, it is likely that being manipulated constitutes a *prima facie* harm, given that it is a violation of an absolute right. Therefore, whenever unlawful manipulation is present, then, by definition, harm will be present as well. But it is also worth noting that a practice may amount to an interference with a right even if it does not actually work — the threat of mind-reading may be as potent as its application.

The importance of the right to freedom of thought and the potential harms of its violation are reflected both in the consequences for individuals affected and in the societal consequences of violations. The right evolved in response to the atrocities committed by Nazi Germany and in recognition of the unfathomable risks of the brainwashing of populations to human rights more broadly. The lines around effective protection of the right to freedom of thought are crucial for the future of democracy and human rights around the world.

As a consequence of these challenges, and the non-exhaustive nature of the proposed criteria, broader criteria are likely warranted when assessing technologically enabled unlawful manipulation. A new legal test should be set out under a General Comment by the HRC that takes account of a range of additional factors:

- the scope and scale of application of a practice;
- whether the general public or individuals concerned are aware of a tactic for influence;
- whether the general public or individuals concerned can understand the impact of a particular practice;
- whether the practice is designed to bypass rational faculties;
- the intensity and period of time of exposure;
- the targeting of particular cognitive biases or vulnerabilities (especially when based on “insider knowledge” drawn from data);
- any power imbalance; and
- the practical ability to say no.

There is still much work to be done. Technologies that show the promise of being able to “get inside our heads” are developing at a rapid pace, while the governance of these technologies fails to keep pace. A new test is urgently needed, and the HRC is the right place to develop it.

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