BRUSSELS DEMOCRACY FORUM

RECOMMANDATIONS ON NEW MEDIA

FIRST PUBLIC VERSION

EDITION

Khalil Aouasti, Sébastien Dewailly, Audrey Henry, Daniel Hilligsmann, David Leisterh.

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CONTEXT

The Brussels Democracy Forum has been founded in November 2020 on the initiative of members of ministerial cabinets who have had to collaborate intensively and constructively in the inter-federal corona crisis management. The aim is to gather political professionals, scientists and other experts from Belgium and Europe to discuss topics of major societal interest. Membership is voluntary. No political parties or institutions are represented.

On 28th November 2020, the Brussels Democracy Forum opened a reflection on the impact of new communication technologies - as social media - on democracy and society. A keynote discussion was held in presence of Prof. Dr. Lutz Hagen (Technische Universität Dresden) and Susanne Reitmair-Juárez (Demokratiezentrum Vienna).

SCOPE

Hereafter, some considerations and recommendations linked to the impact of new communication technologies on democracy and society are written down. These aren't all-embracing. Furthermore, they strongly inspire by existing research such as published by the Centre of Humane Technology.

Our recommendations are meant to stimulate a constructive debate including policy makers, scientists and industry.

We point that fundamentally, innovation in communication technology goes along with great new opportunities for individuals and society. The activation of such opportunities should be promoted while harms should be prevented.

CONSIDERATIONS

1. ADDICTION

The true impact of technology on our lives can be subtle and profound at once. Based on commercial interests, platform algorithms mostly tend to maximize user display time with aim of generating revenue. Optimized over time, platforms tend to evolve to highly addictive environments comparable to casinos. “Right angles” (moments of conscious choice) are mostly erased to provide the user a “perfect flow” keeping him continuously scrolling through timelines. In this way, activities that appear harmless in isolation (e.g. scrolling) can be extremely harmful in the aggregate (e.g. social media addiction).

Policy should tackle the underlying causes of harmful behaviours, rather than merely addressing symptoms. Relevant root causes in the context of tech policy include underlying business models; vast asymmetries of power, knowledge, capacity, and resources; and an absence of agreed upon norms in the digital realm.[1]

2. MENTAL HEALTH

As technology increasingly pervades our waking lives, research is showing a wide range of effects on our happiness, our self-image, and our mental health.

30% of 18-44-year olds feel anxious if they haven’t checked Facebook in the last 2 hours. A recent survey of over 2,000 American adults indicates a high incidence of potential warning signs of Facebook addiction, particularly among 18-44-year olds, among whom 30% feel anxious if they haven't checked it for 2 hours. In fact, many are so hooked that 31% report checking it while driving and 16% while making love. 1 month away from Facebook leads to a significant improvement in emotional well-being. In an experimental study of over 1,600 American adults (who normally used Facebook for up to an hour each day), deactivating Facebook accounts led to a significant increase in emotional well-being (including a reduction in loneliness and an increase in happiness), as well as a significant reduction in political polarization.[2]

3. SOCIAL ISOLATION

While social networks claim to connect us, all too often they distract us from connecting with those directly in front of us, leaving many feeling both connected and socially isolated.

The mere presence of a mobile phone can disrupt the connection between two people, leading to reduced feelings of empathy, trust, and a sense of closeness. In a series of studies, researchers found

[1] Center for Humane Technology, https://www.humanetech.com/policy-principles
[2] Allcott, H., Braghier, L., Eichmeyer, S., & Gentzkow, M., 2020. American Economic Review

that when pairs of strangers were asked to have meaningful conversations, their ability to connect emotionally was significantly reduced if a mobile phone was visible.[3]

4. COGNITIVE IMPACTS

Technology's constant interruptions and precisely targeted distractions are taking a toll on our ability to think, to focus, to solve problems, and to be present with each other. The mere presence of a smartphone, even when it is turned off and face down, drains people's attention.

An experimental study of several hundred adults showed that both working memory and the ability to solve new problems were drastically reduced when their phones were turned off but present on their desks, as opposed to being in another room. Ironically, participants who said they were highly dependent on their phones showed the greatest increase in memory and fluid intelligence scores when their phones were moved to the other room. Researchers noted that smartphones act as "high-priority stimuli," unconsciously draining significant attentional resources even when we consciously ignore them.[4]

5. CONSEQUENCES FOR CHILDREN

Exposure to unrestrained levels of digital technology can have serious long-term consequences for children's development, creating permanent changes in brain structure that impact how children will think, feel, and act throughout their lives.

Children who have been cyberbullied are 3x more likely to contemplate suicide compared to their peers. The experience of being bullied online is significantly more harrowing than "traditional bullying", potentially due to the victim's awareness that this is taking place in front of a much larger public audience.[5]

Preschoolers who use screen-based media for more than 1 hour each day have been shown to have significantly less development in core brain regions involved in language and literacy. Brain scans indicate that the more time spent on screens, the lower the child's language skills, and the less structural integrity in key brain areas responsible for language. This is one of the first studies to assess the structural neurobiological impacts of screen-based media use in preschoolers; it raises serious questions as to how screen use may affect the basic development of young children's brains.[6]

[3] Przybylski, A. K., & Weinstein, N., 2013. Journal of Social and Personal Relationships
[4] Ward, A. F., Duke, K., Gneezy, A., & Bos, M. W., 2017. Journal of the Association for Consumer Research, 2(2)
[5] van Geel, M., Vedder, P., & Tanilon, J., 2014. JAMA Pediatrics
[6] Hutton, J. S., Dudley, J., & Horowitz-Kraus, T., 2019. JAMA Pediatrics

6. FAKE NEWS AND AMPLIFICATION

Social media platforms are incentivized to amplify the most engaging content, tilting public attention towards polarizing and often misleading content.

Fake news spreads six times faster than true news. According to researchers, this is because fake news grabs our attention more than authentic information: fake news items usually have a higher emotional content and contain unexpected information which inevitably means that they will be shared and reposted more often.[7]

Reading a fake news item even once increases the chances of a reader judging that it is true when they next encounter it, even when the news item has been labelled as suspect by fact-checkers or is counter to the reader's own political standpoint. The damage done by fake news items in the past continues to reverberate today. Psychological mechanisms such as these, twinned with the speed at which fake news travels, highlight our vulnerability demonstrating how we can easily be manipulated by anyone planting fakes news or using bots to spread their own viewpoints.[8]

7. DEMOCRACY

By selling micro targeting to the highest bidder, social media platforms enable manipulative practices that undermine democracies around the world.

Fake news stories posted before the 2016 US elections were still in the top 10 news stories circulating across Twitter almost 2 years later, indicating the staying power of such stories and their long-term impact on ongoing political dialogue.[9]

More fake political headlines were shared on Facebook than real ones during the last 3 months of the 2016 US elections.[10]

Exposure to a fake political news story can rewire your memories: in a study, where over 3,000 voters were shown fake stories, many voters later not only "remembered" the fake stories as if they were real events but also "remembered" additional, rich details of how and when the events took place.[11]

Analyzing over 2 million recommendations and 72 million comments on YouTube in 2019, researchers demonstrated that viewers consistently moved from watching moderate to extremist videos; simulation experiments run on YouTube revealed that its recommendation system steers

[7] Vosoughi, S., Roy, D., & Aral, S., 2018. Science
[8] Pennycook, G., Cannon, T., & Rand, D. G., 2018. Journal of Experimental Psychology
[9] Hindman, & Barash, 2018. Knight Foundation
[10] Silverman, C., 2016. Buzzfeed
[11] Murphy, G., Loftus, E., Grady, R., Levine, L. J., & Greene, C. M., 2019. Psychological Science

viewers towards politically extreme content. The study notes "a comprehensive picture of user radicalization on YouTube".[12]

8. SOCIETY

Tech-related policies are often strongly focused on the individual and individual harms. Although we are each impacted by technology as individuals, impact and harms are often disproportionately experienced by certain groups and populations—usually the most vulnerable. In thinking about the impact of a particular technology or tech-related policy, we must consider its potential for collective and societal harms in addition to individual ones.

Moreover, while we have limited power and capacity to negotiate rights or to absorb any harmful effects as individuals, we are stronger together. By thinking about our collective, shared experiences with technology, we can formulate stronger policy solutions.[13]

9. RACISM, SEXISM, ABLEISM AND HOMOPHOBIA

Technology integrates and often amplifies racism, sexism, ableism and homophobia, creating an attention economy that works against marginalized communities.

70% of the most shared Facebook posts about Black Lives Matter in June 2020 were critical of the movement, despite the fact that the majority of Americans support BLM, according to research by data analysis company CrowdTangle.

Such fake representations of public opinion can play a significant role in distorting the basis for democratic dialogue and diminishing the momentum for social change. Even as societies take action to challenge racism and other forms of systemic oppression, social media platforms are being hijacked to discourage or even deny change.[14]

Russia's propaganda program (IRA) primarily targeted African-Americans in the US between 2015-2017: fake African-American campaigns on Facebook and Instagram, such as "Black Matters US" and "Blacktivist", reached 15 million users and successfully prompted over 1.5 million users to click through to fake websites which purported to support African-American interests but promoted initiatives such as "Not voting is a way to exercise our rights".[15]

[12] Ribeiro, M. H., Ottoni, R., West, R., Almeida, V. A. F., & Meira, W., 2020. Association for Computing Machinery
[13] Center for Humane Technology, https://www.humanetech.com/policy-principles
[14] Roose, K., 2020. New York Times
[15] Howard, P. N., Ganesh, B., Liotsiou, D., Kelly, J., & Francois, C, 2018. The Computational Propoganda Project

10. QUALITY PRESS

With technological innovation came disruption in public media consumption. While classical quality press seems to have declined over the last years, social media platforms fostered their way to becoming major resources of information and discourse. Quality press organs trying to gain new ground on social media platforms are confronted to polarizing algorithmic environments they have to subordinate themselves to. Furthermore, crucial advertising revenues are mostly shifting to the platform operators.

11. INDIVIDUAL VS. COMMERCIAL INTERESTS

For a variety of reasons, including significant corporate lobbying efforts and (often) superior industry knowledge and expertise, many technology-related laws, regulations, and policies are written from the perspective of companies and tend to privilege commercial interests.[16]

We should readjust this model and put the rights and interests of actual human beings on the same level than corporate interests and agendas. Policies also should be thought from a people-centred point of view, accounting for human strengths and vulnerabilities, and with particular regard for the safety and wellbeing of children, families, and socially or economically disadvantaged or marginalized communities.

12. PRESUME HARM

Technology is never neutral. Depending on its use and context, every technology is capable of inflicting a variety of harms. At present, most laws and policies presume that technology is neutral and safe unless proven otherwise. Instead, policy interventions should presume harm and compel caution.

First and foremost, this means identifying and naming foreseeable risks and harms and anticipating unforeseeable ones. This also means placing the burden of proof on the owner, operator, or proponent of a technology to prove the absence, or effective mitigation, of specific kinds of risks and harms.

Further, it may require imposing specific disclosure requirements about the risks and harms of a technology or practice, both to consumers through warning labels or certification schemes, as well as to regulators through certified corporate statements and mandatory reporting requirements.[17]

[16] Center for Humane Technology, https://www.humanetech.com/policy-principles
[17] Ibid.

13. KEEPING CONTROL

In many cases, algorithms are improved on the base of massive AB testing. That means that "what works best remains" principle is applied over long periods without necessarily understanding why certain mechanisms are working in certain ways on certain users. Operators could thus run the risk of losing control on how their mechanisms profoundly work and what short- and long-term impacts they have on users.[18]

14. ACCOUNT FOR POWER ASYMMETRIES AND IMBALANCES

The wielding of technology is ultimately about power. A policy or proposal that seeks to regulate a technology, its proponents, or its effects must account for power asymmetries and imbalances, including the impact of systemic racism and oppression.

It should clearly articulate the legal, financial, and ethical responsibilities and liability of tech companies for their products and services. Reining in or rebalancing power may require tools from different legal domains, including consumer protection, non-discrimination laws, product and other liability frameworks, fiduciary law, and competition or "anti-monopoly" style measures.

Effective policies should consider a combination of measures to address the underlying power dynamics in context. Where an imbalance of power remains (or a balance is unachievable), the policy should require those with more power to serve those with less. This includes placing the burden of proof and compliance on those with more power.[19]

15. PRECAUTIONARY APPROACH

The age of moving fast and breaking things is over. It's time to acknowledge the fragility of our systems and the potential for powerful actors to exploit this fragility. Effective laws and policies to regulate technology itself will require companies to assess risks in advance and build in adequate safeguards against potential harms before deploying a technology product, service, or solution. Relatedly, policy proposals that address the status, taxation, or regulation of tech companies should include economic and other measures that incentivize a precautionary approach.

Relevant steps may include undertaking an array of cost-benefit analyses and impact assessments (potentially including a social impact and/or human rights impact assessment), as well as harm reduction measures, among others. If addressing the market or competition, the policy may also impose certain fiduciary-related duties or other obligations on technology companies.[20]

[18] Ibid.
[19] Ibid.
[20] Ibid.

16. EMBRACE COMPLEXITY

Humane policy proposals will acknowledge and demonstrate an awareness of the fact that everything is connected. Effective policy proposals do not propose "silver bullet" solutions or magical thinking; rather, they situate solutions within their interconnected and complex environment.

Effective policy will consider a spectrum of flexible, calibrated options, while avoiding reductionist or binary thinking and false dichotomies. While more challenging, this approach is more likely to result in sustainable solutions.[21]

17. PRIORITIZE SUSTAINABLE SOLUTIONS

Technology evolves at a lightning pace, while law and policymaking are slow and deliberative by design. As a result, "harm creation" outpaces "harm response." We must recognize the self-terminating properties of existing systems and avoid "band aid" solutions. Where possible, we should prioritize sustainable solutions that will not require frequent changes or the regular introduction of new measures.

We should favor adaptive solutions that create positive feedback loops, ensuring relevance and ongoing suitability for a purpose. Sustainable solutions are not easy to evade, and account for the arc of technology.[22]

[21] Ibid.
[22] Ibid.

RECOMMANDATIONS

a. REGULATION

1. Centre policy on the rights and interests of people at least equally to those of corporations.
2. Consider psychological harms of long-time exposure to highly addictive media environments - especially for vulnerable groups.
3. Prioritize social and collective approaches over “atomizing” solutions.
4. Seek to identify and correct power asymmetries and imbalances between users and operators.
5. Go beyond symptoms to address the root causes of the problem or challenge at hand.
6. Presume that all technologies, and their applications, are capable of inflicting a variety of harms and seek to identify those harms.
7. Require a precautionary approach to technology development and deployment.
8. Reflect the complexity of a problem or challenge by advancing comprehensive and contextualized solutions.
9. Privilege sustainable, regenerative solutions over self-terminating, quick fixes.
10. Stimulate global approaches.

b. SUSTAINABLE INNOVATION

11. Guarantee control of and promote transparency on algorithmic mechanisms deployed.
12. Provide access to data for science.
13. Stimulate a discussion on societal expectations from technology innovation.

c. QUALITY CONTENT

14. Improve multi-language content moderation on social media platforms both at the global and on local levels (institutionalized and individual fact checking, labelling dubious sources, co-post reliable sources or content, delete more content).
15. Reconsider extreme filter bubbling mechanisms.
16. Strengthen public and private quality media and media research.
17. Assure fair funding of quality press involving the participation of platform operators.

d. EDUCATION

18. Foster media literacy regarding content, platforms, apps and devices.
19. Prevent and respond to online bullying
20. Discuss the potentials and harms of new media with pupils and students
21. Promote a critical use of current apps.
22. Delay the introduction and use of smartphones/social media in young people's lives.
23. Encourage schools to use Video Link, which create a safer learning environment, keeping unwanted videos from playing/appearing. 23
24. Carve out dedicated time device-free time, whether it's a day or an hour.

Additional resources:

- Tools and reminders for students[24]
- Tools and reminders for parents[25]

[23] https://video.link/
[24] https://www.slideshare.net/MaxStossel/digital-wellness-meaningful-daily-actions-for-students-covid
[25] https://www.slideshare.net/MaxStossel/digital-wellbeing-meaningful-daily-actions-for-parents-covid-238421500