PJCIS Public Hearings, Inquiry into Extremist Movements and Radicalism in Australia
Questions on Notice for Lydia Khalil, 30 April 2021
Response submitted by Lydia Khalil, Research Fellow Lowy Institute
20 May 2021

Question on Notice 1 (Hansard Proof, p. 32-33):

Mr LEESER: I think you've really helped explain the importance of having transparency so we can understand what we are regulating. I wonder : what if there were some sort of recommendation that forced social media companies effectively to flush through people's experience online so that they were deliberately having to engage with opinions that disagreed with their own, rather than reinforcing them all the time- if there were some sort of corrective questioning element. If they can send you down a rabbit hold with opinions that agree with your own, surely they can present you a menu of more diverse opinions and diverse experiences online, and maybe we need to look at whether we can regulate that.

Ms Khalil: I think it's not only a question of regulation but a question of understanding the logic of these platforms. They are performing based on an attention economy, so they're recommending things to us that will grab our attention and will hold our attention, regardless of the content. So the recommendation algorithms actually don't take into much account the truth of the content, the value of the content or any other thing besides the fact that it will grab our attention. So these for-profit commercial social media companies are operating on an attention economy. How do you regulate that? I think that's something we need to think about more. Can we offer other alternatives, perhaps, to for-profit social media programs and digital public infrastructure? That's certainly a broader question that could be considered. But in terms of how much further to regulate, I would like to take the opportunity to take the question on notice and perhaps provide some more detailed feedback. Transparency will be key around that because there is so much that we don't know.

Mr LEESER: I appreciate that. I would appreciate you coming back to us with that on notice. I think these companies have had 15 years to demonstrate that they can be good corporate citizens and get self-regulation in place, and I'm not sure they have adequately discharged their obligation there...

Mr DREYFUS: I've understood that position very clearly. That's why you refer to the GDPR, the general data protection regulation, which provides some degree of compulsion that the EU has imposed on big tech to disclose something of how the algorithms work. Can I echo Mr Leeser's acceptance of your offer to write something further for the committee on this subject. We've seen already in Australia, in recent times, work done by the ACCC in relation to the way the platforms interact with traditional news media. Some steps have emerged from that work the ACCC did. This is in a separate stream but is related to similar matters. Speaking for myself, but also picking up Mr Leeser's interest, I think it's likely that the committee will want to take this further. I welcome anything further you wish to write for the committee; that would be helpful. Can I throw open this question of algorithm transparency, and see if other participants in this very useful round table would like to make a comment.

<u>**Response from Lydia Khalil**</u>

I thank the Committee for the opportunity to further expand on the issue of algorithmic transparency and offer recommendations for how content recommendation algorithms or recommender systems can be regulated.

Calls for greater algorithmic transparency are growing. There is a pressing need to regulate more transparency around algorithmic tools. As the Electronic Frontier Foundation (EFF) has written –

With the help of opaque algorithmic tools, platforms distribute and curate content, collect vast amounts of data on their users and flood them with targeted advertisements. While platforms acquire (and monetize) a deep understanding of their users, both on an individual and collective level, users are in the dark about how their data is collected, exploited for commercial purposes and leveraged to shape their online environments.

Algorithmic recommender systems have eroded a user's ability to choose what content they are exposed to because they curate and distribute content in a manner that is opaque to the user.

Legislatures and regulatory bodies are taking note. The European Commission has recently announced that it will make algorithmic accountability a key pillar of the forthcoming legislative digital package: the Digital Services Act and the Digital Markets Act.

The European Commission has labelled very large digital platforms as "gatekeepers" and, through these Acts, is proposing to oblige these gatekeeper platforms to provide transparency of their recommender systems and give users more choices around how they access content and information online. I would recommend that the committee review the proposed Acts put forward by the European Commission, which can be found here, to examine whether they would be applicable in the Australian context. Though it should be noted that if these Acts are passed – it will have global implications as it will force these multinational platforms' compliance in order to operate in the large European market.

In moving to regulate gatekeeper platforms and algorithmic transparency for the sake of curbing illegal content, disinformation or to ensure the 'corrective questioning element' that Mr Lesser referenced in his remarks, regulators and legislators should also take care that legislation and regulation does not inadvertently make platforms 'police' content or force content on a user, as this would be against democratic principles. Rather regulation should be about ensuring that the average user has more awareness, autonomy and choice.

The recommender algorithmic recommends content to the user based on what that algorithm has deemed engaging to the user – it does not evaluate the substance of any said content. Recommendation algorithms can determine what is engaging to the user because the platforms have access to a number of relevant data points about the user – identifying information, networks, clicks, views and other engagement metrics with past content, etc.

But focusing only on engagement is problematic because doing so can shape, and often limit, the ways in which users interact with content online. It can also amplify misinformation and polarization and "undermine the transparent, deliberative exchange of information on which democratic societies are built."

Recommender systems have often driven content that challenges social cohesion, amplified conspiracies and disinformation and has led people to similar and more extreme content. An independent audit of user radicalization on YouTube – which "probe[d] YouTube's recommendation algorithm, looking at more than 2M video and channel recommendations between May/July 2019" found that "Alt-right videos are reachable only through channel recommendations… paint[ing] a comprehensive picture of user radicalization on YouTube."

Large online platforms like Google (which also owns YouTube) for example are aware that their recommendation systems have led user to similar or more extreme material and have attempted to put together programs to address this issue. Through their Redirect Method for example, users who are searching for known extremist material are redirected to other information or alternative narratives. However, programs like these do not address the underlying logic behind recommender systems.

Therefore, internet platforms should be incentivised to explore ways to incorporate and model diversity and novelty measures in their recommender systems as a potential means to get around so called echo chambers and filter bubbles that arise when a recommender system prioritises engagement .

Enacting regulation that can offer users more control over what data about them a recommendation algorithm is important. Users should also be able to easily opt out of algorithmically-curated recommended content completely on a particular platform. A user should also be able to opt out of providing feedback (via your clicks, likes, engagement) to the recommender systems.

At the moment, the algorithms behind recommender systems are treated as commercial secrets. This makes it difficult for researchers to provide any evidence-based assessment. Additionally, citing privacy concerns, platforms have been reluctant to share information that could reveal users' personal data.

However, platforms should be subject to audit by independent researchers and/or relevant regulators to audit their algorithmic tools and those audits should be publicly available. This is a key element of algorithmic transparency. Audits will allow us to better understand how these recommender algorithms work because at the moment they are a black box, knowable only to particular employees of these large platforms.

Algorithmic transparency and independent auditing is critical because, according to a much cited article in *AI and Transparency* "Any recommendation is a nudging, and any nudging embeds values. The opacity about which and whose values are at stake in recommender systems hinders the possibility of designing better systems that can also promote socially preferable outcomes and improve the balance between individual and non-individual utilities."

Though the focus of the inquiry is on extremism, recommendation systems present a host of ethical challenges that are just beginning to be researched and addressed. I would urge Government to address the ethical challenges holistically.