Filter Bubble

AXEL BRUNS
DIGITAL MEDIA RESEARCH CENTRE
QUEENSLAND UNIVERSITY OF TECHNOLOGY
BRISBANE, AUSTRALIA
A.BRUNS@QUT.EDU.AU

Abstract

The 'filter bubble', and its close relative the 'echo chamber', must be amongst the most pervasive and pernicious metaphors in communication studies in recent decades. They imply that, through their own agency or the workings of search engine and social media algorithms, individuals or groups of users have become ensnared in communicative spaces where they are able to encounter only information that aligns with their pre-existing attitudes. The concern is that, if such patterns are common throughout society, different groups will come to develop widely divergent worldviews, and become unable or unwilling to find a democratic consensus on matters of societal importance. However, there is very little robust empirical evidence to support these claims; while there is considerable evidence of deepening polarisation between groups, this is not usually due to a lack of awareness of or communication with opposing sides; indeed, more often the problem is a rise in confrontational and uncivil speech directed at opponents. This chapter outlines these flaws with the 'filter bubble' and 'echo chamber' metaphors, and argues that it is well past time that these metaphors were retired from scholarly and everyday use.

Introduction: Taking Metaphors Literally

The metaphor of the 'filter bubble' (Pariser 2011; 2015) must be one of the most insidious imaginaries about the patterns and processes of public communication to have taken hold in both public discourse and media and communication scholarship in the past few decades – closely followed by that of the 'echo chamber' (Sunstein 2001a; 2001b; 2009; 2017), which is often positioned as describing an equivalent situation, or even used explicitly as a synonym for 'filter bubble'. From everyday chat amongst friends to Barack Obama's farewell speech as U.S. President (2017), the 'filter bubble' concept pops up almost everywhere – and as this chapter will show, it has substantially misdirected scholarship and policy responses and actively kept us from focussing on the real issues of mis- and disinformation, abuse, and hate speech (and their deeper causes) that we should be addressing.

In keeping with the mission of this collection – to provide critical reflections on influential metaphors such as this – we might begin our discussion here by considering first what the 'filter bubble' metaphor is meant to depict. Eli Pariser, the tech entrepreneur who coined the term in 2011, builds his idea on a single anecdote:

in the spring of 2010, while the remains of the Deepwater Horizon oil rig were spewing crude oil into the Gulf of Mexico, I asked two friends to search for the term "BP." They're pretty similar – educated white left-leaning women who live in the Northeast. But the results they saw were quite different. One of my friends saw investment information about BP. The other saw news. For one, the first page of results contained links about the oil spill; for the other, there was nothing about it except for a promotional ad from BP. (Pariser 2011: 2)

Pariser sees this as an indication that the search engine recommendation algorithms which produced these diverging results catered to the personal interest profiles they had established for the two women: that they

assumed the women had differing levels of interest in the unfolding environmental disaster, and therefore provided relevant information on the oil spill to the one, but not to the other of Pariser's friends. Extrapolating from here, if such patterns occur with every search, every recommendation, this has the potential to place each user in their own, unique informational environment – realising not the vision of the *Daily Me* newsfeed that the more techno-optimist Nicholas Negroponte envisioned in 1995, as a more personalised and therefore more immediately useful alternative to a general-purpose newspaper or news Website, but the dystopia of a society where individuals and groups no longer have a shared basis of information on which to base their day-to-day decision-making, their political engagement, and their electoral choices.

In a post-9/11, post-truth, QAnon-infested world, such fears have rung true enough to make the 'filter bubble' a globally known metaphor. Yet Pariser's choice of imagery remains a curious one: the 'filter' part is easily explained – yes, search engine recommender systems, as well as the algorithms that have increasingly come to shape our social media feeds to highlight certain types of content and downrank others, ostensibly filter a much greater volume of content to present especially those items that are likely to be most relevant to the query posed by the user, or to their assumed personal and professional interests. But what exactly does the image of a 'bubble' represent? In their most common form as soap bubbles, bubbles are both translucent and ephemeral: if we imagine ourselves trapped in such a bubble, it would not preclude (but may slightly distort) our view of the outside world; and if we were light enough, we might float away with it for a moment, but soon enough the bubble would burst and we would come back down to Earth with a thud. If all the metaphor of the 'filter bubble' aims to signify is such a brief and temporary excursion from the hard realities of the wider world, should we even worry about it? How would it produce the far more deleterious consequences – up to and including a permanent fragmentation of society into different partisan tribes that no longer have a shared perception of reality – that Pariser and other proponents of the 'filter bubble' (and 'echo chamber') metaphor envisage?

To do so, in fact – to produce "a unique universe of information for each of us" (Pariser 2011: 9) –, our separation from the outside world would need to be much more complete and permanent: more a cocoon (or a coffin) than a bubble, perhaps. This is, possibly, where the other major metaphor for this presumed informational enclosure and separation of individuals and groups from the mainstream, the 'echo chamber', provides more suitable imagery: a 'chamber', after all, is considerably more sturdy and permanent than a 'bubble', and people could be locked or even imprisoned in it by powerful outside forces. This alternative metaphor for what are ultimately fairly similar concepts – Cass Sunstein, the legal scholar who introduced the idea of 'echo chambers' in 2001, also describes them as "a system of 'gated communities'" that prevents citizens from having "common experiences and … unsought, unanticipated, and even unwanted exposures to diverse topics, people, and ideas" (2001a: 2) – also benefits from the fact that it builds on the image of a technology that (compared to the everyday idea of bubbles) very few people would ever have experienced directly; as a result, what exactly an 'echo chamber' may be is far more open to personal imagination.

Actual, physical echo chambers are purpose-built rooms that add reverberation and richness to the sound of the voices or instruments performing in them; although, "despite his frequent use of the term ..., Sunstein never defines echo chambers" (Weinberger 2017: n.p.), it is perhaps this enhancement and amplification of smaller and less prominent voices – for instance, those of groups from the extreme fringes of domestic politics – that is the central quality that Sunstein's metaphor is meant to describe. In his metaphorical 'echo chambers' on digital and social media platforms, then, obscure mis- and disinformation and viral conspiracy theories on the real perpetrators of the 9/11 attacks, the true birthplace of Barack Obama, or the actual origins of the COVID-19 virus, for instance, can reverberate and amplify to such an extent that none of the inhabitants of these spaces could possibly have missed them, or even feel able to challenge them any more.

But to what end? Sunstein's mixed metaphor of 'gated communities', cited above, seems to imply that (like Pariser's 'filter bubbles') these spaces are sealed off from the outside world, with entry or escape difficult or even impossible. Yet physical echo chambers are designed explicitly to produce sound that can be transported to the outside world, directly or in the form of recordings, and the viral conspiracy theories named here as examples would not have *been* viral if they had merely continued to bounce around the walls of their respective

truther 'echo chambers' ad infinitum. If noise is able to escape from these 'chambers', then, this reduces their ability to fragment society into separate informational environments: those of us on the outside will (and do) certainly experience our share of 'unsought, unanticipated, and even unwanted exposures' to this noise – to the point that the global spread of mis- and disinformation relating to COVID-19 was even declared an "infodemic" by the Director-General of the World Health Organisation, mirroring the viral pandemic itself (United Nations, 2020). Clearly this could not have happened if the 'echo chambers' of COVID-19 conspiracists were truly sealed off from the rest of the world. Similarly, as we will see shortly, information from the outside world certainly manages to enter (and is even actively and deliberately introduced into) these supposed 'echo chambers', and then often emerges from them again in a severely distorted form. Far from gated, locked, or otherwise separated from the rest of society, as Sunstein's descriptions make them appear, the spaces he describes are therefore not so much 'echo chambers', but closer to another common piece of studio equipment that takes input sounds and modifies them for output, potentially beyond recognition: distortion units.

Beyond the Metaphors

If the imagery underlying the 'filter bubble' and 'echo chamber' metaphors is confusing at best, and unsuitable at worst, they do not fare much better once their claims of informational and societal fragmentation between individuals and groups as a result of search engine and social media algorithms and affordances are tested by empirical study. To begin with, a growing series of research projects has attempted to replicate Pariser's anecdotal observation of differing search results on the same topic — and the different personalised informational environments for search engine users that this might imply — at scale and in a variety of countries, and has failed to produce any substantive evidence of such differences. Using small teams of human searchers, artificially created user personas (Haim et al. 2018), or data donations from large groups of citizen participants (Krafft et al. 2018; Krafft et al. 2019; Nechushtai & Lewis 2019; Nechushtai et al. 2023; Bruns 2022), time and again the result has been that, if anything, the range of information sources commonly recommended by search engines is too homogenous, and overprivileges the major news and information brands.

Working with human users in the United States, for instance, Nechushtai & Lewis found that *Google News* kept referring them over and over again to the same five mainstream news outlets, "despite the platform's algorithmic capability of constructing a much more diverse and/or tailored news experience" (2018: 15). In theory, this could still be regarded as a 'filter bubble', perhaps – but if so it would constitute a 'filter bubble' at the national scale, and would therefore be fundamentally incapable of bringing about the fragmentation into diverging tribes with their different worldviews *within* U.S. society that the 'filter bubble' thesis, and Pariser's foundational anecdote, envisage. Much to the contrary, the more pressing problem that these empirical studies of search result variability point to is that of an impoverished information diet, stemming from a lack of diversity in the most prominently recommended news and information sources. We might even speculate that it is this very overemphasis on generic, mainstream, and 'safe' sources in search results which drives individuals with a greater appetite for diversity to respond to the call of 'do your own research' and consult more partisan, unreliable, and fringe sources. In short, the evidence for search is that if there is a problem with recommendation systems, it is too much homogeneity rather than too much personalisation – and this may well be a significant issue, but it is the very opposite of the issue that the original 'filter bubble' thesis attempted to describe.

With the rise of social media as a key source of information and news, however, Pariser's emphasis shifted from search engines to social media (2015); here, too, he saw the potential for 'filter bubbles' to emerge – not, in this case, predominantly as a result of content recommendations in response to user searches, but through the operation of the algorithms that have increasingly come to play a part in shaping the reverse-chronological newsfeeds presented to social media users on various platforms. To a greater or lesser extent, such newsfeeds respond to the interests and actions of users as they interact with social media platforms, highlighting for instance more of the posts from close friends and frequent contacts than from accounts and pages that users interact with less often. In pivoting to this greater focus on social media, Pariser's 'filter bubble' thesis is perhaps also coming even closer to Sunstein's 'echo chambers', which as we have seen always already focussed on

(gated) communities of users and their interactions with digital and social media platforms more than on the role of search engines.

Clearly, too, the age of social media since the launch of major platforms like *Facebook* and *Twitter* has indeed seen the gradual emergence of fringe groups with widely diverging worldviews, culminating for now perhaps in the melting-pot for conspiracy theorists that is QAnon. Such groups, and the individuals engaging in them, have made efficient use of social media technologies to find, support, and encourage each other, to amplify and extend their conspiracist worldviews, and to circulate them – with considerable success – to the wider world. In doing so, they have also productively utilised the affordances of these social media platforms – including algorithms that highlight and amplify popular or 'trending' topics – to increase the visibility of their contributions to public debate. These practices are obviously problematic, especially when they manage to spread mis- and disinformation that leads to risky personal behaviours (such as the rejection of life-saving vaccinations) or collective violence (such as coup attempts against democratically elected governments in Washington, D.C., Brasilia, and elsewhere), and platform providers, policy-makers, and other relevant stakeholders have yet to develop more effective countermeasures – but they result from factors other than the emergence of isolated 'filter bubbles' or 'echo chambers', and any interventions that seek to address these supposed causes of societal fragmentation are doomed to fail (and will waste energy and resources that could be better invested elsewhere).

Let us review why this is so. Both metaphors presume that on social media platforms, and through the operation of platform algorithms and affordances, individuals and groups become trapped in their own 'information universes' where they increasingly interact just amongst themselves (further amplifying each other's fringe views, as the 'echo chamber' metaphor implies) and increasingly encounter only information that agrees with their own, and their companions', worldviews (as the 'filter bubble' metaphor presumes). These dynamics represent a process of homogenisation, driven by a combination of *selective exposure* (preferential attachment of users to others who share their views, and preferential engagement with content that represents these views) and *selective avoidance* (of users and content that disagree with these preferred views) at the personal level, and possibly in a feedback loop with algorithms that in turn pick up on these personal choices and suggest even more users and content that agrees with the individual's presumed worldviews.

While these processes might appear logical and straightforward in principle, they are considerably less likely to occur in everyday reality than it may seem. First, for the vast majority of ordinary social media users outside the rarified worlds of political activism (and indeed of academic communities), personal networks are likely to be highly heterogeneous, with ideological orientation and political worldviews playing a very minor role, if any. While *Facebook* pages, *WhatsApp* groups, and other specific community functions embedded within social media platforms can certainly serve as mechanisms for gathering like-minded communities of interest and thus produce greater homogeneity in parts of a user's network, for ordinary users that homogeneity is rarely based on ideology: while Pariser assumes, for instance, that on Facebook we predominantly connect with like-minded "political compadres", thus making it easy for the platform's algorithm to provide "significantly more news that's popular among people who share your political beliefs" (2015: n.p.), in reality "a notable proportion of users simply don't pay much attention to the political characteristics of the people in their networks" (Duggan and Smith 2016: 9).

Instead, the personal networks that social media users establish on these platforms result more often from a broad combination of family, friendship, work, and interest ties, and on balance social media platforms overall are therefore much more likely to serve as engines of context collapse (cf. Marwick & boyd 2011), as these different life-worlds intersect and entwine with each other in unforeseen and uncontrollable ways, than they are likely to lead to the establishment of entirely homogenous, politically orthodox personal networks that could serve as seeds for 'echo chamber' and 'filter bubble' dynamics. As a result, it is considerably more likely that individuals will experience the "annoyance and aggravation" at inadvertent exposure to unwanted political views that Duggan & Smith (2016: 3) observed amongst social media users ahead of the 2016 U.S. presidential election than the reassuring serenity of finding oneself within an ideologically consistent group of 'political compadres'.

This observation is even more pronounced if we consider that many if not most such users will be active on a number of online social media platforms, in addition to their offline social networks. While it is entirely likely that across all of these networks users will seek out people and content that resonates with their personal interests – political or otherwise –, this pursuit of selective exposure does not imply an equal and opposite level of selective avoidance, as several studies have demonstrated (Brundidge 2010; Garrett et al., 2013; Weeks et al., 2016); individuals might favour a particular style of music, sporting code, or political party, for instance, but this does not mean that they will go to the trouble of actively eradicating all mentions of other music, sports, or parties from their social media experience by blocking relevant keywords or unfriending the individuals in their networks who champion them. Indeed, even if they tried to do so it would be difficult for them to create such a genuine 'filter bubble' in practice, for most topics: several of Duggan & Smith's respondents expressed deep frustration with their inability to eradicate all mentions of Donald Trump and/or Hillary Clinton from their social media feeds during the 2016 U.S. election, for instance, and in a thoroughly mediatised society it would have been even more difficult to also avoid any information relating to one or both of the candidates as it appeared in other channels outside social media.

Even for genuine political partisans, in fact, the empirical evidence points to a pronounced absence of selective avoidance: indeed, due to their heightened political interests such individuals and groups are usually *more* likely to actively seek out counter-attitudinal sources (Garrett et al., 2013: 114). It must be acknowledged that they do so not because of a genuine openness to other worldviews and ideologies, or because they are willing to reach a compromise or consensus position with their perceived political opponents; rather, they are most likely to seek out these views because they feel a need to know what their political enemies think, and require this knowledge in order to respond to and – in their view – undermine and debunk the opposition's arguments (cf. Roberts & Wahl-Jorgensen 2020). Even so, however, while this unquestionably positions them as ideological hardliners, it also clearly places them outside of the isolated 'informational universes' or 'gated communities', disconnected from mainstream news and information flows, that the 'filter bubble' and 'echo chamber' metaphors postulate. Like the visitors to a white supremacist site whom Gentzkow & Shapiro (2011: 1823) observed to also frequently access the *New York Times* in order to keep track of their declared political enemies, such political hyperpartisans might in fact engage with a larger and more diverse range of news content than everyday users with mainstream views and a limited interest in politics.

Finding Better Explanations

Evidence for the existence of genuine 'filter bubbles' or 'echo chambers' is thus difficult to come by: search results tend to reproduce and reinforce the hegemony of a small and insufficiently diverse group of broadly mainstream news and information sources regardless of the personal interests and identities of searchers; ordinary social media users are confronted with the bewildering diversity of wanted and unwanted views from their network of contacts that is the result of the context collapse which mainstream platforms promote; and hyperpartisan users are as likely to seek out communities of like-minded 'political compadres' as they are motivated to monitor the perspectives of their sworn enemies. Even the existence of clearly ideologically biased social media platforms, from comparatively visible sites such as *Gab* and *Truth Social* to the various Dark Web communities catering to even more extreme perspectives, does not change this picture: yes, these support comparatively ideologically homogenous communities, yet those communities also very deliberately engage with more mainstream social media platforms where they actively seek to argue with and attack their political opponents (Dehghan & Nagappa 2022; Nagappa & Dehghan 2022); they are not disconnected from encounters with other worldviews.

And nonetheless it is indisputable that many contemporary societies show signs of fragmentation, even to the point of dysfunction and dissolution (as the recent coup attempts in the United States and Brazil have demonstrated most dramatically). To debunk the 'filter bubble' and 'echo chamber' metaphors as flawed and unfit for purpose is not to dismiss the very real concerns about the challenges to democratic function and legitimacy that these and other countries are clearly facing; rather, it is to recognise that the explanations for

these challenges that those metaphors can offer are shallow, insufficient, and resulting from technological determinism. It is certainly easy and convenient to blame the algorithmic recommendation and filtering systems of search engines and social media platforms for the societal fragmentation we can now observe, but it is also wholly wrong to do so; as we have seen, for instance, political hyperpartisans are not hyperpartisan because they never encounter perspectives that would challenge their worldviews in the first place, but because they have come to immediately and instinctively dismiss any counter-attitudinal information as they do so. If there is a 'filter', therefore, that filter is in their heads, not in the algorithms that support their communicative activities (Bruns 2019).

It would thus be more productive, perhaps, to shift our attention from the search for the technological factors that supposedly drive societal fragmentation to a study of the dynamics of the partisanship and polarisation that this fragmentation represents; this must cover conventional patterns of polarisation on specific issues and broader ideologies (Leifeld & Brandenberger 2019; Lelkes 2016), but also the increasingly recognised role of personal and political identity, and the emotional charge that such identity carries, in driving affective polarisation between individuals and groups (lyengar et al. 2012). During information engagement and communicative activity, especially in digital and social media, these patterns are especially likely also to be expressed as interpretive and interactional polarisation (Kligler-Vilenchik et al. 2020; Yarchi et al. 2021), as users selectively engage with and comment on information sources and on each other's contributions. Yet again, however, we must actively resist the temptation to interpret the observable patterns of preferential attachment and engagement with specific communities in a larger network of participants that some such empirical analyses will surely produce as showing the presence of 'filter bubbles' or 'echo chambers': they may point to the emergence of shorter- or longer-lived "issue publics" or "interest publics" (Habermas 2006; Bruns 2023) that serve as a rallying point for like-minded participants and stand in antagonism to other such publics with differing viewpoints, but remain embedded within a wider informational environment from which – as we have seen – it is virtually impossible to disconnect entirely.

Rather, then, we might also examine the strategies that such groups use to articulate their antagonism to their perceived opponents, and assess the level of communicative dysfunction that such strategies represent. This recognises that not all polarisation is problematic, and that the emergence of like-minded groups that hold and articulate different and opposing viewpoints must not be misinterpreted a priori as a descent into 'filter bubbles' or societal fragmentation; meaningful - and even at times emotional or uncivil - debate between differing viewpoints and ideologies is a fundamental feature of democratic processes as long as it remains within certain societal norms. It thus becomes possible to consider at what point and through what processes this polarisation transitions from productive (e.g. aiding the formulation of and contest between distinct policy alternatives or ideological frameworks) to destructive. Pursuing this aim, Esau et al. (2023) propose a set of five symptoms for such "destructive polarisation", each of which can be assessed on a scale of severity: the breakdown of communication between opposing groups; the discrediting and dismissal of information that does not align with one's own views; the erasure of complexities from debates between opposing sides; the exclusion of opposing views through emotional language; and an exacerbated allocation of attention and space to the most extreme voices in a debate. Each of these may be converted into useful empirical frameworks for an assessment of communicative dysfunction that once again foreground human agency rather than the role of algorithms in the breakdown of meaningful public debate on contemporary issues in society, and it is possible that further such symptoms may be added to this list.

To do so is not to absolve the operators of major search and social media platforms of their responsibilities (and culpability) entirely, however; any analysis of such information engagement and communicative action patterns must also remain alert to the extent that these strategies are enabled and even amplified by the affordances and algorithms employed by these platforms, and the extent to which their current recommendation and moderation approaches fail to effectively address the exploitation and abuse of these affordances and algorithms by sufficiently motivated stakeholders. It is abundantly clear that platforms could do significantly more to quell abuse and hate speech, to limit the circulation of mis- and disinformation, and to reduce the presence of human and non-human bad-faith actors who disseminate and amplify such content. The

fact that they cannot be blamed for the creation of 'filter bubbles' or 'echo chambers' does not mean that they cannot be blamed, with considerable justification, for a variety of other issues — and the misguided focus on these flawed metaphors in recent scholarship and policy approaches may indeed be a reason that there has been less attention on these more fundamental problems than there should have been.

As Kreiss & McGregor (2023) remind us, however, even a shift away from these metaphors and towards the significantly more pressing problem of partisanship and polarisation may not be sufficient, though: the existence of polarisation in society is in itself usually only a symptom of substantially more fundamental and entrenched socio-economic issues. As they note, antagonism and outright polarisation is entirely justified at times: mainstream society should be polarised against the hateful fringe groups that promote fascism, misogyny, transphobia, antisemitism, or islamophobia, for instance, and against the domestic and foreign actors who seek to discredit and undermine legitimate democratic processes. It is in this context that the limits of 'polarisation' as an alternative metaphor for genuine societal divisions are revealed, too: derived from physics, it privileges the image of two equal and opposite poles (the north and south poles of a magnet, or indeed of Earth itself), and therefore usefully describes only those rare cases where – as in the U.S. – the long-term political status quo consisted of two major parties locked in a continuous struggle for political supremacy. However, the depleted political system of the United States is far from representative for the wide variety of democracies around the world: here, multi-party and thus multi-polar systems are considerably more common, and the relationships between their different agonistic forces are rarely so evenly balanced. In many European countries, for instance, the deepest faultlines of polarisation run not predominantly between the parties of the left and the parties of the right, but more often between the programmatic parties of the democratic centre (which will form government in various coalitions at different times) and the populist parties of the left and right fringes. A simplistic, bipolar understanding of 'polarisation' is insufficient for describing this more complex interrelationship between agonistic and antagonistic actors; a more appropriate but less intuitive simile from physics, if one is needed, would be that of a complex force field between multiple bodies that variously attract or repel one another.

Conclusion: The Dumbest Metaphor on the Internet?

These reflections on what might replace the 'filter bubble' and 'echo chamber' metaphors should serve as a warning that it cannot be enough to simply insert yet another overly simplistic metaphor in their place. Metaphors can be genuinely useful in approaching a complex set of issues, but only if they are well-chosen, wellexplained, and kept from short-circuiting more in-depth analysis through their apparent intuitive simplicity; as we have seen, the 'filter bubble' and 'echo chamber' metaphors meet none of these criteria. Their originators, Eli Pariser and Cass Sunstein, and the researchers who have followed them, never clearly outline what they mean these metaphors to describe, or how they might be translated into empirical criteria for the detection of such phenomena; much of the empirical research that has followed, in fact, treats the two terms as equivalent – as "filter bubbles (aka 'echo chambers')", as Orellana-Rodriguez & Keane once put it (2018: 78; emphasis in original). The foundational imagery that lies at their centre, while initially attractive, makes less and less sense the more closely we examine it, as we saw at the start of this chapter when we explored the physical objects to which they have sought to compare communicative configurations. And yet the 'echo chamber' and especially 'filter bubble' phrases they coined have become widely used well beyond the scholarly realm, appearing even in the farewell speeches of U.S. presidents: they have effectively foreshortened and oversimplified scholarly, policy, and public debates about the impact of search engines and social media on the quality and dynamics of public and political debate, and taken us down a dead-end path that misrecognised the genuine challenges to contemporary public discourse as primarily driven by technological factors, and consequently also sought technological solutions.

This, perhaps, has been the most insidious consequence of our acceptance and widespread adoption of these metaphors: we have allowed a technologically determinist perspective to take precedence over alternative conceptions that would (correctly) seek culpability not predominantly with the algorithms that facilitate and (to

some extent) shape our communicative activities, but with how we adopt, adapt, and utilise these technologies to our own individual, communal, societal, personal, professional, and political ends. We have done so, arguably, because it was easy: if political culture and societal cohesion is in decline, the logic went, it *must* be because of the new technologies of communication that have arisen over the past few decades – and not, for example, because of the decline in civic education, literacy, and engagement; because of the new generation of populists and demagogues that has arisen to conspire against democratic institutions; because of the challenges from global financial crises, pandemics, runaway climate change, and the social, societal, and geopolitical upheavals they are causing; or because of the unaddressed and growing socio-economic inequalities that are a fundamental feature of late-stage capitalism.

We have allowed ourselves to believe in the 'filter bubble' and 'echo chamber' metaphors, in other words, because they offered a simple explanation for a much more complex problem, and a convenient excuse for not addressing the other and far more important factors that threaten societal cohesion. If, as the journalist Sebastian Meineck has memorably put it, the 'filter bubble' concept is indeed "the dumbest metaphor of the Internet" (2018: n.p.; my translation) — and it surely must be a contender, even amongst admittedly stiff competition — then sadly this makes us all the dumber for believing in it so fervently. It is high time for us to burst this pernicious bubble, and get to work on the problems that really matter.

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