

The Filter Bubble: How to Control Democracy in the Information Society Era

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Abstract

Research Question: The research lead to answer the question: Do filter bubbles distort the electoral process in such a way that it violates the right to free elections?

Purpose: The main research objective is to show that information bubbles violate decisional privacy, which in consequence leads to a violation of the correctness of the election process.

Method: : The research methodology includes a systematic review of scientific papers and studies developed by international organizations and of reports.

Results: The research shows the effects of filter bubbles on election process. Thanks to this, we can see that not all information is distributed evenly on the Internet and some of the information does not reach the recipients. The main research objective is to show that filter bubbles violate decisional privacy, which in consequence leads to a violation of the correctness of the election process. The author presents why states should regulate social media in the field of filter bubbles and what steps should be taken.

Organization: The development of the information society poses new challenges for the legislator. One of them is the problem of regulating social media and related tools - including filter bubbles. The article presents the influence of filter bubbles on the electoral process. The article reviews the current research on this problem- both empirical and doctrinal.

Society: The article deals with a socially relevant topic, which is the manipulation of the electoral process. The examples studied in the work on the cases of recent elections in the USA, Great Britain or Brazil show that the problem affects practically every corner of the world. The result of the study is to show that filter bubbles pose a threat to democracy.

Originality: The problem of filter bubbles and their impact on the electoral process is still an unexplored phenomenon. The work analyzes examples of the impact and indicates the steps that should be taken to start work on regulating this phenomenon. This research is based on the concept of social control over the social media algorithm.

Limitations / further research: The purpose of this article is to identify problems and review solutions. Research on the problem should be further established on the basis of legal and factual analysis

Keywords: information bubble, internet law, democracy, decisional privacy, social media.

1 Introduction

The development of the Internet and new technologies has led to fundamental social changes, resulting in the development of the information society. This society is characterized by the

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Prejeto: 22. januar 2023; revidirano: 2. marec 2023; sprejeto: 7. marec 2023. /

Received: 22nd January 2023; revised: 2nd March 2023; accepted: 7th March 2023.

growing dependence of the economic, political, social, psychological and ecological spheres on information (Kreft, 2012, p. 755). These permanent and significant changes in socio-economic relations should be reflected in the legal order, including due to their impact on fundamental rights. Technological advances are opening up the possibility of highly sophisticated surveillance and espionage in ways that the older rules of the game may not be enough to keep in check (Strömholm, 1967, p. 19). Technology has had the biggest impact on how we transmit and receive information. Also, the role of social media in providing information on current affairs is growing. Furthermore, for the young people social media is the main source of information (Schwaiger et al., 2022, p. 609). Through social media public debate takes place and thus the right to freedom of expression is exercised. However, information on social media is distorted by filter bubbles.

The main research objective is to show that filter bubbles violate decisional privacy, which in consequence leads to a violation of the correctness of the election process. The research lead to answer the question: Do filter bubbles distort the electoral process in such a way that it violates the right to free elections? The article is a starting point of the research. The aim of the work is to outline the issues and indicate further directions of research.

2 Theoretical framework

The changes initiated by the information revolution affect the constitutional balance, understood as an ideal state created by the application of constitutional law norms in a given legal order, in the context of the protection of fundamental rights and the balance of power in the individual/state/enterprise relationship (Celeste, 2018, p. 88). This balance is disturbed primarily by the dominant role of enterprises in the digital environment, which negatively affects the position of both the individual and the state. The positions of the individual are further weakened by the increased surveillance capabilities of citizens. This control is exercised by the state authorities, but also by private corporations, which is a novelty in the protection of individual rights. This interference, although it has occurred so far, has not been so intense and profound. This phenomenon is exacerbated by the pervasive presence of technology among individuals and the dominant role that private corporations play in the digital environment. Existing legal mechanisms to protect civil and political rights are not adequate to abuses generated by platforms (Suzor, 2018, p. 9). In the social aspect, it is also worth paying attention to the discrepancies between the assessment of identical online and offline behaviors, which result in differences in their social acceptance (Milczarek, 2020, s. 56). One of the aspects of changing the balance of power in the individual/state/enterprise relationship is the problem of access to information. Internet companies (such as Google and Facebook) create the space where public debate is created. They have control over the flow of information and access to it. One of the disturbances in the flow of information are filter bubbles.

The term filter bubble was coined by Eli Pariser in 2011 (Pariser 2011). “Filter bubble” (also called “information bubble”) is situation in which someone only hears or sees news and information that supports what they already believe and like, especially a situation created on the internet as a result of algorithms (McIntosh, 2020).

Due to the algorithmic personalization of search results (in social media and search engines) people receives different search results («personalized universe of information» (Pariser, 2015) consistent with their previous activity on the Internet, and that in effect each search engine user exists in a filter bubble. That's create echo chambers: we assume that everyone thinks like us, and we forget that other perspectives exist.

Privacy is of key importance in election processes, because access to the attention of an individual leads to sophisticated ways of promotion, primarily the use of profiling, and thus violates decision-making privacy, especially in the field of making decisions (Wójcik, 2018, p, 127). In the attention economy, winning means getting as many people as possible to devote as much time and attention as possible to the product (election candidate, political party, some idea), because in the attention economy it is really "the user is the product". Privacy is therefore an ontic, necessary dimension of man and thus an inalienable right of his personal nature (Pniewski, 1994, p. 110). Bruns suggests that search engines and social media, together with their recommendation and personalisation algorithms, are centrally culpable for the societal and ideological polarisation experienced in many countries (Bruns, 2019).

That lead us to main research question (RQ1): do filter bubbles distort the electoral process in such a way that it violates the right to free elections? To check how the system of filtering bubbles and information personalization works, we can use the data provided by Facebook Help Centre: Posts that we see higher in Feed are influenced by our connections and activity on Facebook. The number of comments, likes and reactions a post receives and what kind of post it is (e.g. photo, video, status update) can also make it more likely to appear higher up in our Feed. Filter bubbles are therefore not just a state in time, but also a process that evolves into increasingly more personalised information, which ultimately makes it impossible to find challenging information (Dahlgren, 2021, p. 15).

Posts that you might see higher in Feed include:

- A friend or family member commenting on or liking another friend's photo or status update.
- A person reacting to a post from a publisher that a friend has shared.
- Multiple people replying to each other's comments on a video they watched or an article they read in Feed.
- The EdgeRank algorithm used by Facebook is based on three components:
- Affinity Score- expressing the intensity of the relationship between users.
- Edge Weight- specifying the value of a specific action.

- Time Decay - how long the message has been active on the site.

As a result of the operation of an algorithm, the person using the network will receive selected information. Algorithmic filtering may also constrain further exposure to a narrower, more closely aligned range of content. This, in turn, may foster the adoption of more extreme opinions (Kitchens, Johnson, Gray, 2020, p. 1620) and foster populism. Current research shows that the negative effects of filter bubbles are stronger for younger people and those with low interest in news (Fletcher & Nielsen, 2018, p. 2450).

Violating information freedom by filter bubbles undoubtedly have a potentially negative impact on democracy (Viķe-Freiberga et al, 2013). Using filter bubbles and microtargeting, you can influence voter preferences and voter turnout. The analysis of several examples makes it possible to determine the scale of the negative impact of filter bubbles on electoral processes. An experiment in which Facebook persuaded its users to vote in the US election demonstrates the power of new opinion influencers well. The results suggest that the Facebook social message increased turnout directly by about 60,000 voters and indirectly through social contagion by another 280,000 voters, for a total of 340,000 additional votes. That represents about 0.14 % of the voting age population of about 236 million in 2010 (Bond et al., 2012, p. 297). In the UK, filter bubbles have distorted the public debate during the Brexit campaign (Bastos, Mercea, Baronchelli, 2018, *passim*). In presidential campaign in Brazil in 2022 the social media was very polarized, with two big groups of nodes that share similar content and almost no connections between these groups (Recuero et al., 2022, p. 161). In another study, the researchers claimed that differences in Google search results were capable of shifting voting preferences of undecided voters by 20 % (Zuiderveen Borgesius et al., 2016). As you can see, even such a small intervention in the algorithm made it possible to influence the behavior of users. That create a space for fake news and misinformation campaigns, with are the core threats to a transparent and fair electoral process.

3 Method

The research methodology includes a systematic review of scientific papers and studies developed by international organizations and of reports. I used the following databases to gather relevant articles to which we had full access: Scopus, Pr, Web of Science, Google Scholar, JSTOR, Wiley Online. Additional articles from other sources were also identified by examining the reference lists of the studies located through the database search. The search term consisted of three sets of keywords –filter bubbles, democracy and elections.

The analyzed literature was divided into 5 thematic groups: (1) devoted to the way filter bubbles work; (2) the impact of filter bubbles on access to information; (3) the impact of filter bubbles on the right to privacy; (4) cases of negative impact of filter bubbles on the electoral process; (5) behavioral research.

The article only presents selected views seen in the literature that shed light on the themes that legal scholars and commentators address.

An important part of the work was the analysis of the functioning of filter bubbles in practical terms. For this purpose, the Edge Rank algorithm provided by the Meta corporation was analyzed.

The conducted research allowed for the creation of an article based on four key issues:

1. The concept and operation of filter bubbles.
2. Examples of the negative impact of filter bubbles on election processes.
3. The tail wagging the dog - The problem of control over the social media.
4. How to protect democracy in the information society era.

The research lead to answer the question (RQ1): Do filter bubbles distort the electoral process in such a way that it violates the right to free elections?

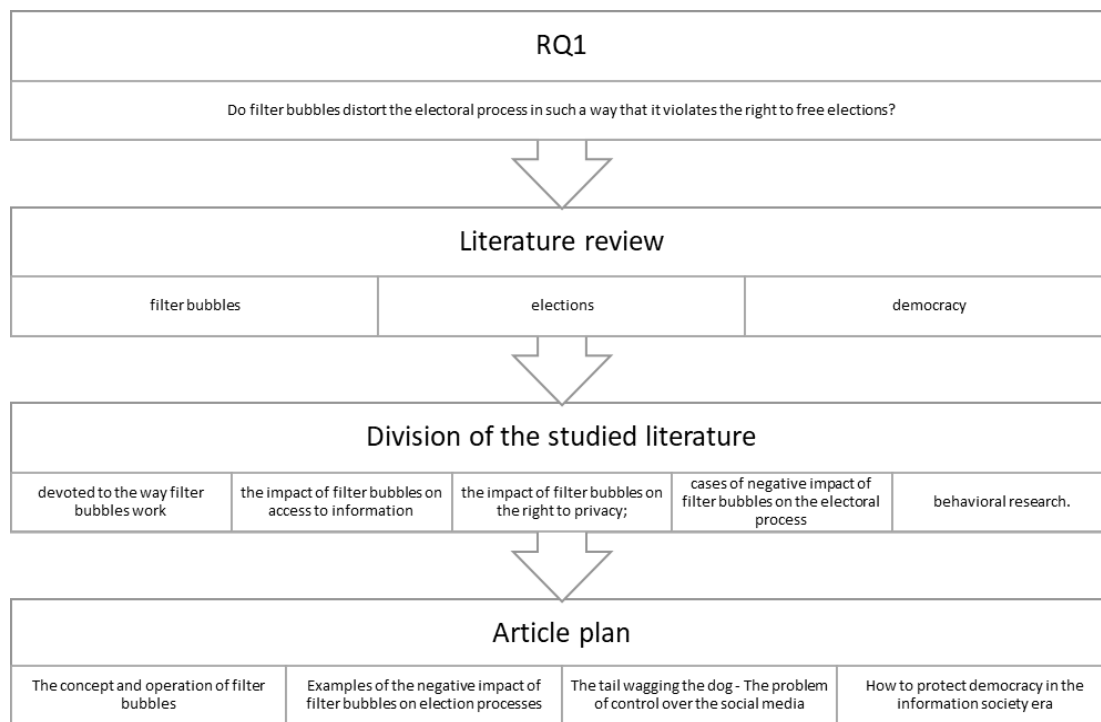


Figure 1. Research model

4 Results

4.1 Decisional privacy and democracy

The sort of classical model of democracy is one where it's we are making sure the people has information to make good decisions. Article 3 of Protocol I to the European Convention of

Human Rights guarantees everyone a right to free election. Freedom, fairness and transparency are recognized as key principles of democratic elections. Free elections are those where candidates can compete without any obstacles erected by the authorities, where the electorate has genuine options and a free access to information concerning those options. Fairness of elections can be prejudiced if there is a interference resulting in inequality of chances for the runners in the electoral race. The principle of electoral transparency is not met if the voters have no freedom to seek, receive and impart information about the process and the candidates, including about the source and spending of financial support received by a candidate or a party (The Report of the Kofi Annan Commission, 2020). Filter bubbles create opportunity to manipulation of society and could have influence their voting behaviour.

Each individual should be able to independently shape his personality and his destiny according to his own will and demand (Kopff, 1971, p. 38). The scope of the right to privacy includes the individual-general relationship, in terms of the individual's control over information about himself, but also in the general-individual context - that is, what information an individual receives in the context of shaping his personality and fate.

Privacy protection is related to access control (Bok, 1983, pp. 10-11). The preservation or disruption of privacy through filter bubbles affects spheres of privacy functioning, including information privacy, i.e. the ability to regulate the disclosure of sensitive or confidential information; physical privacy relating to being able to define private space and setting boundaries, and decision-making privacy relating to being able to choose a particular course of action without interference or interference from others (Fleczer, 2015). Restricting access to information is a source of distortions in decisional privacy, because we make decisions based on a distorted picture of reality (based on incomplete, biased, false, emotional information).

Sunstein points out two other basic risks of filter bubbles. First, in a democratic society people need to come across opinions that differ from their own opinions, to develop themselves fully. Otherwise, people might enter a spiral of attitudinal reinforcement and drift towards more extreme viewpoints. Second, if people locked themselves in their own information cocoons, they might have fewer common experiences. Sunstein says a diverse democratic society needs shared experiences as 'social glue' (Sunstein, 2001, p. 191).

When affective polarization becomes severe, »people increasingly perceive and describe politics and society in terms of 'us' versus 'them'« (Sommer, McCoy, 2018 p. 2). In effect society stops to believe that political opponents are legitimate and deserve equal respect, or are even acceptable as family and friends, they become less likely to adhere to democratic rules in the struggle for power (Lührmann et al., 2019, p. 904).

Currently, the protection of privacy of attention is solely in the hands of network users, who can defend themselves against unwanted interference in a limited way. Facebook provide the

ways to customise Feed by changing the view and adjust Feed preferences; hiding a story that appears in Feed (also from a specific person, Page or group); and by reporting violates Community Standard. However, this protection is negligible and insufficient. The main problem with control of social media is that we don't really know how the algorithms works. Thus we cannot measure the real negative impact of filter bubble.

4.2 Algorithm problem

Until recently, traditional media played the role of the so-called gatekeepers, i.e. the authority deciding what information should be made available to the public and in what form. The role of the gatekeeper was inextricably linked with consistent journalistic ethics, which requires not only objectivity and reliability, but also the presentation of different points of view and information that is often inconvenient, undesirable, and yet necessary. In a situation where the role of the information medium is taken over primarily by social media, with Facebook at the forefront, the role of gatekeepers is taken over by algorithms, i.e. de facto machines. Their biggest limitation is their lack of ethics. Algorithms sort according to rigid rules of importance, but they do not have the soft ability to subjectively distinguish what is really important from what is irrelevant or harmful from the perspective of the broader public good (Malinowski, 2006, p.20). Algorithms are not neutral technologies (Gillespie, 2014, p. 182), they are infrastructures of advertising and persuasion, designed to maximize user attention, and subsequently, advertising revenue (Wu, 2016). Digital information environment is 'mutually shaped' by algorithms that sort, rank, prioritize, and deliver content, and users (Schroeder, 2014, p. 145-157). Food for algorithms is the data generated by online interactions. People's attention is drawn to emotional, drastic and controversial information, including hate speech and fake news. That is why that kind of information is most often found on the social media feed. Howard et al. found that Twitter users in the United States shared as much "junk news"—or content that was conspiratorial, hyper-partisan, and lacked professional journalism standards—as professionally produced news in the two weeks leading up to the 2016 Presidential Election (Bradshaw et al., 2019, p. 188-189). The purpose of social media is not to provide good, reliable information (this is the idea of journalists). Their goal is to attract attention to get income from the sale of advertising. Hence, the debate via social media is aggressive, polarizing, full of misinformation, hate speech and fake news—because it attracts attention. As Fishkin points out, contemporary critiques about the poverty of deliberation in our democracy predate the rise of the Internet. The quality of democratic deliberation have declined in some democracies (Fishkin, 1991).

Also, social-media corporation could in theory make it easier for a political party which their business or ideological interests align with to reach their supporters or blocking information and views that are inconsistent with their ideology or interests (such practices have also been noted) (Committee of experts on Media Pluralism, 2016).

The examples presented above clearly indicate that filter bubbles have a real impact on the implementation of electoral processes. However, we only learn about the scale and extent of

the damage after the elections, this information is selective and perfunctory. They do not give a complete picture of the situation.

4.3 Social media- out of control

Despite the theoretical pluralism of the choice of social media, it is de facto dominated by several websites (Facebook, Twitter, Instagram), which impose their conditions on all users and develop standards that are often a model for other enterprises of this type. In addition to the monopoly position, several additional factors left the activity of social media practically out of control. Among them, one can point out the international nature, which makes it difficult to supervise the enterprise; innovativeness, causing state authorities to have little awareness of how they operate; monetization of personal data that has led to the massive use of social media for business and political activities. The system therefore offered broad benefits. So, the system is in favor of big companies and political forces.

Social media play an important role in the implementation of public debate (and, consequently, are an important element of the electoral process). Social media are a public place (Bruns & Highfield 2016, pp. 56-73), (Shirky, 2011, pp. 28-41), (Cela, 2015, pp. 195-200), which implies the need to apply the Habermas model of the public sphere (Ochman 2015, p. 148). The situation we are currently dealing with, i.e., arbitrary decisions on the shape of public debate by corporations managing social media, is incompatible with the axiology of liberal societies. This creates a real (and realizing) threat of limiting the freedom of speech inconsistent with the accepted standards and top-down management of the public debate. There is a precedent-setting creation of a kind of *lex specialis* to national (or international) law, where private companies are the legislators, and not authorized bodies acting on behalf of the sovereign.

In my opinion we can't fall all responsibility on technology companies to design algorithms that encourage "fake news" and "filter bubbles." States are responsible for the legal regulation of social, political and economic life. Leaving the social media out of control is a violation of the positive obligations of the state. The establishment and strengthening of democratic processes and institutions is the common responsibility of governments. States are responsible for protecting human rights to free elections in the information society. Therefore, they must adjust the law on an ongoing basis so that it meets the current threats and challenges.

5 Discussion

As I mentioned in this paper, as a society we have a little awareness about the way the algorithm works. The algorithm literacy is key to to determine the actual effect of the filter bubble on the distortion of the information we receive. As a Milan and Agosti points out: "algorithmic sovereignty tool should be open source, in order to promote transparency in its functioning and enable others to check its functioning, evolve its functions, modify or customize it." (Milan & Agosti, 2019). Other researchs points out the importance of research

on micro-targeting, specifically on its effects on citizens, including a normative component and debate about online political micro-targeting (Zuiderveen Borgesius et al., 2018). Its impact is especially significant not only because of how quickly fake news spreads, but also because identifying the authors of such campaigns and digital material is very difficult (Doublet, 2019). For governments and other actors that seek to legitimize undemocratic elections and delegitimize democratic elections or undermine specific candidates or parties, the use of on-line disinformation is a low-cost strategy with a potentially high impact (Bader, 2018, p.34).

Voices about increasing control over the operation of filter bubbles appear with increasing intensity. As Elizabeth Denham, the British Information Commissioner investigating the Cambridge Analytica case, points out, "it is important that the public is fully aware of how information is used and shared in contemporary political campaigns and the potential impact on their privacy". Users' privacy is being used against them.

To prevent election manipulation, national data protection officers have issued guidelines for political parties. In March 2014, the Italian data protection authority adopted rules on the processing of personal data by political parties. The legislation underlines the general prohibition of using personal data that is publicly available on the Internet, such as social networking sites or forums, for political communication purposes if the data has been collected for other purposes (Provvedimento in materia, 2014).

European Commission High Level Group on Media Freedom and Pluralism (HLG) points to the importance of harmonization of the existing national legislations, covering cross-border media activities on areas such as libel laws or data protection. HLG calls to adapting regulatory frameworks and codes of self-regulation to the fluid media environment (Viķe-Freiberga et al., 2013). The European Data Protection Supervisor is of the view that the problem of online manipulation is only likely to worsen, that no single regulatory approach will be sufficient on its own, and that regulators therefore need to collaborate urgently to tackle not only localized abuses but also both the structural distortions caused by excessive market concentration (Opinion 3/2018).

Dependence on providing information from one source favors the negative effects of filter bubbles (Dubois, Blank, 2018, p. 732). Hence, the young generation using social media as the main (sometimes the only) source of information is the most vulnerable. Due to the increasing participation of young people in elections, the tendency of filter bubbles to damage the electoral process will increase.

6 Conclusion

The analysis carried out in the study allows to answer the research question (RQ1) that filter bubbles distort the electoral process in such a way that it violates the right to free elections.

Based on the research, it was found that:

- The filter bubble combined with the manipulation of the algorithm allows you to control access to information.
- Filter bubbles can (and are) controlled by algorithms programmed by Internet companies (Google, Facebook).
- The public has no access to information on how the algorithm works.
- Analysis of past elections (such as Great Britain, Brazil, United States), in which the negative impact of filter bubbles on the electoral process was found.

Filter bubbles pose a threat to the right to privacy by analyzing our every digital footprint and by using algorithm feed by collected data to distort their access to information, and thus interfere with decision-making relating to being able to choose a particular point of view. As this and other studies have shown, filter bubbles, in conjunction with microtargeting and fake news, are conducive to manipulation that negatively affects the correctness of the electoral process.

The user bubble is not voluntary. It is a kind of censorship. While, by appropriately adjusting the browser settings, you can -partially-adjust the effects of the filter bubble in terms of the content provided (which, however, is rarely the case due to the poor awareness of the use of algorithms), the very fact of analyzing user behavior remains beyond any control.

The experience gained so far shows that the social media as information environment generates problems and threats different, more intensified, than those occurring in the analog world. This therefore requires other protection tools. Currently, no institutional framework has been created to strike the right balance between the interests of information providers and users. We need to applicate the human rights standards and normative frameworks to the challenges that social media pose to elections. States must fulfill their positive obligations related to the protection of individual rights, including the right to privacy, freedom of information and freedom of elections. Leaving filter bubbles out of control is a violation of these obligations.

Social media as public places are burdened with certain obligations related to conducting a public debate. As a society, we should have insight into how these responsibilities are met. Main responsibility for maintaining media freedom and pluralism lies with the states, yet it also points out that the EU is competent to intervene on media freedom and pluralism in order to guarantee to representative democracy. Developing legal solutions is difficult because lawmakers do not know how social media algorithms are constructed. We can only guess based on scanty data and observations. Key data is not made available, despite promises, even to scientists. It is crucial to subject the algorithm to social control in the spirit of transparency

and to limit micro-targeting (which makes it difficult to verify the information provided by candidates). This will be a first step to answer the question: how to regulate social media during elections.

References

1. Allcott, H. & Gentzkow, M. (2017). Social Media and Fake News in the 2016 Election. *Stanford University, Journal of Economic Perspectives* 31(2), 211-236. doi: 10.1257/jep.31.2.211
2. Bader M. (2018). Disinformation and elections. *Security and human rights*, 29, 24-35. doi:10.1163/18750230-02901006
3. Bastos, M., Mercea, D., & Baronchelli, A. (2018). The geographic embedding of online echo chambers: Evidence from the Brexit campaign. *PLoS One* 13(11). doi:10.1371/journal.pone.0206841
4. Bok S. (1983). *Secrets: on the ethics of concealment and revelation*. New York: Vintage books.
5. Bond, R. M., Fariss, C. J., Jones, J. J., Kramer, A. D., Marlow, C., Settle, J. E., & Fowler, J. H. (2012). A 61-million-person experiment in social influence and political mobilization. *Nature* 489(7415), 295-298. doi:10.1038/nature11421
6. Bradshaw, S, Howard P. N., Kollanyi, B., & Neudert, M. (2020). Sourcing and Automation of Political News and Information over Social Media in the United States, 2016-2018. *Political Communication* 37(2), 173-193, doi: 10.1080/10584609.2019.1663322
7. Bruns, A. (2019). Filter bubble, *Internet Policy Review* 8(4). doi:10.14763/2019.4.1426
8. Bruns, A., Highfield T. (2016). *Is Habermas on Twitter? Social media and the public sphere*. In G. Enli, A. Bruns, A. O. Larsson, E. Skogerbo, C. Christensen. *The Routledge companion to social media and politics* (pp. 56-73). London
9. Cela E. (2015). Social Media as a New Form of Public Sphere. *European Journal of Social Sciences Education and Research* 4(1), 195-200
10. Celeste E. (2018). Digital Constitutionalism: Mapping the Constitutional Response to Digital Technology's Challenges. *HIIG Discussion Paper Serier 2*
11. Committee of experts on Media Pluralism and Transparency of Media Ownership (MSI-MED) (2022, 31. december). Feasibility, Study on the Use of Internet in Elections. Retrieved from: <https://rm.coe.int/16806fd666>
12. Dahlgren, P. M. (2021). A critical review of filter bubbles and a comparison with selective exposure. *Nordicom Review* 42(1), 15–33. doi:10.2478/nor-2021-0002
13. Doublet, Y. M. (2019). *Disinformation and electoral campaigns*. Strasbourg.
14. Dubois, E. & Blank, G. (2018). The echo chamber is overstated: the moderating effect of political interest and diverse media. *Information, Communication & Society* 21(5), 729-745. doi:10.1080/1369118X.2018.1428656
15. Facebook Help Centre (2022, 31. december). Retrieved from: <https://www.facebook.com/help/166738576721085>
16. Fishkin J.S. (1991). *Democracy and Deliberation: New Directions for Democratic Reform*. New Haven: Yale University Press.
17. Fleczer D. (2015). Godność i prywatność osoby w świetle Konstytucji Rzeczypospolitej Polskiej. *Roczniki Administracji i Prawa* XV(1),19-30.

18. Fletcher, R. & Nielsen, R. K. (2018). Are people incidentally exposed to news on social media? A comparative analysis. *New Media & Society* 20(7), 2450–2468. doi:10.1177/1461444817724170
19. Zuiderveen Borgesius, F. J., Möller, J., Kruikemeier, S., Fathaigh, R. Ó., Irion, K., Dobber, T., Bodo, B., & de Vreese C. (2018). Online Political Micro-targeting: Promises and Threats for Democracy. *Utrecht Law Review* 1, 82-96. doi:10.18352/ulr.420
20. Gillespie T. (2014). *The Relevance of Algorithms*, In R. Gillespie, P. J. Boczkowski, K. A. Foot Eds. *Media Technologies: Essays on Communication, Materiality, and Society*, Cambridge: MIT Press, 167-194.
21. Kitchens, B., Johnson, S. L., & Gray, P. (2020). Understanding echo chambers and filter bubbles: the impact of social media on diversification and partisan shifts in news consumption. *MIS Quarterly* 44(4), 1619-1649 , doi: 10.25300/MISQ/2020/16371
22. Kopff, A. (1971). Koncepcja prawa do intymności i do prywatności życia osobistego. *Studia Cywilistyczne XX*.
23. Kreft, J. (2012). Społeczeństwo informacyjne- krytyczne podejście. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Ekonomiczne Problemy Usług, Gospodarka elektroniczna: wyzwania rozwojowe* 2, 754-762.
24. Lührmann, A., Grahn, S., Morgan, R., Pillai, S., & Lindberg, S. I. (2019). State of the world 2018: democracy facing global challenges. *Democratization* 26(6), 895-915, doi:10.1080/13510347.2019.1613980
25. Malinowski, B. (2016). Jak Facebook zamyka nas w bańce informacyjnej. Algorytm filtrujący newsfeed a zjawisko filter bubble. *Zarządzanie Mediami* 4(1), 15-22, doi:10.4467/23540214ZM.15.002.5212
26. McIntosh, C. (2020). *Cambridge Advanced Learner's Dictionary & Thesaurus*. Cambridge: Cambridge University Press.
27. Milan, S., Agosti, C. (2019). Personalisation algorithms and elections: breaking free of the filter bubble. *Internet Policy Review*.
28. Milczarek, E. (2020). *Prywatność wirtualna; Unijne standardy ochrony prawa do prywatności w internecie*. Warszawa.
29. Ochman, A. (2015). Medialna sfera publiczna według Jürgena Habermasa. *Studia Paradyskie* 25, 147-168,
30. Opinion 3/2018 on online manipulation and personal data (Ref. no. 152) (2022, 31. December). Retrieved from https://edps.europa.eu/sites/edp/files/publication/18-03-19_online_manipulation_en.pdf
31. Pariser, E. (2011). *The Filter Bubble: What the Internet Is Hiding from You*. New York.
32. Pariser, E. (2015, 7. may). *Did Facebook's Big Study Kill My Filter Bubble Thesis?* Wired. Retrieved from <https://www.wired.com/2015/05/did-facebooks-big-study-kill-my-filter-bubble-thesis/>
33. Pniewski Z. (1994). Personalizm społeczno-etyczny jako adekwatna teoria prywatności. *Roczniki Nauk Społecznych XII*(1), 109-131
34. Protecting Electoral Integrity In The Digital Age The Report of the Kofi Annan Commission on Elections and Democracy in the Digital Age (2020, January). Retrieved from https://www.kofiannanfoundation.org/app/uploads/2020/05/85ef4e5d-kaf-kacedda-report_2020_english.pdf
35. Provvedimento in materia di trattamento di dati presso i partiti politici e di esonero dall'informativa per fini di propaganda elettorale” published in the Official Gazette of the Italian Data Protection Authority number 71 (2014, 26. March). Retrieved from <https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/3013267>

36. Recuero, R., Soares, F., Vinhas, O., Volcan, T., Hüttner, L., & Silva, V. (2022). Bolsonaro and the Far Right: How Disinformation About COVID-19 Circulates on Facebook in Brazil. *International Journal Of Communication* 16, 148–171,
37. Schroeder R. (2014). Does Google Shape What we Know. *Prometheus* 32(2), 145-160, doi:10.1080/08109028.2014.984469
38. Schwaiger, L., Vogler, D., & Eisenegger, M. (2022). Change in News Access, Change in Expectations? How Young Social Media Users in Switzerland Evaluate the Functions and Quality of News. *The International Journal of Press/Politics* 27(3), 609–628. doi: 10.1177/19401612211072787
39. Shirky C. (2011). The Political Power of Social Media: Technology, the Public Sphere, and Political Change. *Foreign Affairs* 90(1), 28-41.
40. Somer, M. & McCoy, J. (2018). Déjà vu? Polarization and Endangered Democracies in the 21st Century. *American Behavioral Scientist* 62(1), 3-15. doi:10.1177/000276421876037
41. Strömholm S. (1967). *Right of Privacy and Rights of The Personality a Comparative Survey; Working paper prepared for the Nordic Conferen.ee on privacy organized by the International Commission of Jurists*. Stockholm.
42. Sunstein, C. R. (2001). Republic.com. Princeton. Retrieved from <http://jolt.law.harvard.edu/articles/pdf/v14/14HarvJLTech753.pdf>
43. Suzor, N. (2018), Digital Constitutionalism: Using the Rule of Law to Evaluate the Legitimacy of Governance by Platforms, *Social Media + Society* 4(3), doi:10.1177/2056305118787812
44. Viķe-Freiberga, V., Däubler-Gmelin, H., Hammersley, B., & Pessoa Maduro, L. M. P. (2013). A free and pluralistic media to sustain European democracy. Retrieved from <https://www.rcmediafreedom.eu/Publications/Reports/A-free-and-pluralistic-media-to-sustain-European-democracy>
45. Wójcik, J. (2018). Prywatność jako przedmiot wymiany. *Roczniki Kolegium Analiz Ekonomicznych* 49, 125-135.
46. Wu, T. (2016). *The Attention Merchants: The Epic Scramble to Get Inside Our Heads*. New York.
47. Zuiderveen Borgesius, F., Trilling, D, Möller, J., Bodó, B, de Vreese, C., & Helberger, N. (2016). Should we worry about filter bubbles?. *Internet Policy Review* 5(1). doi: 10.14763/2016.1.401.

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Povzetek:

Filtrirni mehurček: kako nadzorovati demokracijo v dobi informacijske družbe

Raziskovalno vprašanje: Raziskava vodi k odgovoru na vprašanje: Ali filtrirni mehurčki izkrivljajo volilni proces tako, da kršijo pravico do svobodnih volitev?

Namen: Glavni cilj raziskave je pokazati, da informacijski mehurčki kršijo odločanje o zasebnosti, kar posledično vodi v kršitev pravilnosti volilnega postopka.

Metoda: Raziskovalna metodologija vključuje sistematičen pregled znanstvenih člankov in študij mednarodnih organizacij ter poročil.

Rezultati: Raziskava prikazuje učinke filtrskih mehurčkov na volilni proces. Zahvaljujoč temu lahko opazimo, da niso vse informacije enakomerno porazdeljene po internetu in nekatere informacije ne dosežejo prejemnikov. Glavni cilj raziskave je pokazati, da filtrirni mehurčki kršijo odločanje o zasebnosti, kar posledično vodi v kršitev pravilnosti volilnega postopka. Avtorica predstavi, zakaj bi morale države regulirati družbene medije na področju filtrskih mehurčkov in kakšne korake je treba sprejeti.

Organizacija: Razvoj informacijske družbe postavlja pred zakonodajalca nove izzive. Eden od njih je problem regulacije družbenih medijev in sorodnih orodij – vključno s filtrirnimi mehurčki. Članek predstavlja vpliv filtrirnih mehurčkov na volilni proces. Članek pregleduje dosedanje raziskave tega izziva – tako empirične kot doktrinarne.

Družba: Članek obravnava družbeno aktualno temo, to je manipulacija volilnega procesa. Primeri, preučeni na primerih nedavnih volitev v ZDA, Veliki Britaniji ali Braziliji, kažejo, da problem zadeva praktično vsak kotiček sveta. Rezultat študije je pokazati, da filtrirni mehurčki predstavljajo grožnjo demokraciji.

Izvirnost: Problem filtrirnih mehurčkov in njihov vpliv na volilni proces je še vedno neraziskan fenomen. V delu so analizirani primeri vpliva in nakazani koraki, ki jih je treba narediti, da se začne delo na področju urejanja tega pojava. Ta raziskava temelji na konceptu družbenega nadzora nad algoritmom družbenih medijev.

Omejitve/nadaljnje raziskave: Namen tega članka je prepoznati težave in pregledati rešitve. Raziskavo problema je treba dodatno utemeljiti na podlagi pravne in dejanske analize.

Ključne besede: filtrirni mehurček, internetno pravo, demokracija, zasebnost pri odločanju, družbeni mediji.

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