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**COMPUTATIONAL PROPAGANDA ON TikTok
AS THE 21st CENTURY PROPAGANDA MODEL**

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ABSTRACT

Noam Chomsky and Edward Herman wrote an institutional analysis called Propaganda Model that explains the role of mass media in spreading symbols and messages to the general populace under class and power interests requiring systemic propaganda that needs consideration of 5 filters: (1) ownership, (2) advertising, (3) dependence, (4) *flak*, and anti-communism. Until the emerging of the internet led us to social media features that allow the users to interact socially and artificially. Social media formats are also increasingly diverse and innovative, such as TikTok which was originally released as a music video content platform, and now it's a place for promotion, information, suggestion, and opinion encouragement content. TikTok content is easily spread across social media because of the ease of download, upload, and access. This study will elaborate on the ease and massiveness of TikTok's access to the Propaganda Model's filters to see the current propaganda system mobilization as computational propaganda. The characteristics of computational propaganda are: (1) automation, (2) scalability, (3) anonymity. As a system that makes the public vulnerable to get in the involvement, it's necessary to form an attitude to deal with it. Therefore, this study offers Noam Chomsky's idea regarding Intellectual Responsibility as the final contemplation.

KEYWORDS: TikTok, computational propaganda, Propaganda Model, intellectual Responsibility.

INTRODUCTION

Propaganda in the 21st century is often associated in the pejorative sense, with modern synonyms such as 'lies', 'manipulation', 'brainwash', and 'information bias' (Cull et al., 2003). Various opinions arise regarding its definition but based on the propaganda definitions in the Propaganda and Mass Persuasion: A Historical Encyclopedia (2003, p. 317) writers and thinkers show an implicit agreement that propaganda is concerned with structured and systematic opinion influencing. One of these systems can be seen within the mass media, which Noam Chomsky and Edward Herman wrote on an institutional analysis called Propaganda Model through Manufacturing Consent (1981). The institutional analysis was written when the media in the United States in their era were television, radio, and printed media. Now, the public can easily

access the internet with all its features, including social media that allows its users to get information as well as interaction. Information and interactions can just happen because of the filter bubble¹, which makes inappropriate information² can be vulnerably spread out.

However, these vulnerabilities are often not perceived as a threat, because many users think that self-control during internet surfing can protect them from the side effects of inappropriate information. As long as the inappropriate information is not implemented by users on each user, users who think that they have sufficient caution feel that they are not significantly affected. But is it true that none of the inappropriate information on the internet never doesn't have an impact on us? Digital technology in the form of the internet with a very wide range of features is very promising and has become a part of everyday life because it offers extraordinary access to data, knowledge, social networks, and opportunities for collective engagement for better development (Woolley & Howard, 2019, p. 3). With just a few clicks, we can get anything from the internet. Although the duration is not much, just 1 hour a day, if it's always done every day, it's enough to build a persuasion space for each user. When there is room for persuasion, user consent is easy to manufacture. According to Walter Lippman (Cathey, 2009, p. 5), manufacturing consent is the function of governments and companies to 'shape' public opinion regarding political issues and commercial trends. People are manipulated to do certain things through the persuasion of the mind for economic, social, and political activities by manufacturing public thought through propaganda (Gonzales, 2013).

A user who feels he just wants to fill his spare time before the train arrives 30 minutes later suddenly wants to buy a suit that he didn't even think about before just because a 10-second video ad appeared on his social media timeline. The user is persuaded by advertisements, but can this instant persuasion be categorized as propaganda? These questions can be answered through reflection on the Propaganda Model. This paper will examine the relevance of the Propaganda Model as a model of the current propaganda system in the new propaganda mobilization media in the form of social media (with an example of the latest social media format, TikTok) and it gets a new term in the form of computational propaganda. This study uses a literature study with a philosophical approach in the form of a deductive hypothesis so that the hypothesis that has been deducted (in the form of the relevance of the Propaganda Model to the current propaganda system model) will be tested for its testability in that hypothesis. Apart from the reflection on the current model of the propaganda system, this study also offers a reflection of attitudes that can be done in dealing with collective involvement in the propaganda system by adopting Noam Chomsky's idea of intellectual responsibility.

Reaffirming the Propaganda Model

Noam Chomsky—a linguist, social critic, and thinker—along with Edward Herman—an

¹Filter bubble (a term coined by Eli Pariser) is a state of intellectual isolation when users are faced with an information ecosystem formed by algorithms based on their history and location, which results in users being separated from information that does not match their point of view (Technopedia, 2017).

²Inappropriate information has several terms such as (1) disinformation: information that is intentionally designed to spread harm, (2) misinformation: false information but isn't realized to be false, and (3) mal information: information that is genuine but spread out to harm certain parties (Turcilo & Obrenovic, 2020).

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economist and social critic—wrote *Manufacturing Consent* (1981), presenting the Propaganda Model explicitly in the first part. Herman is often known for his critique toward media and corporations, followed by the development of this critique through the Propaganda Model which he co-authored with Chomsky. Meanwhile, propaganda has become Chomsky's focus apart from linguistic and scholarship based on his bibliography, and implicitly initiated at first within *American Power and The New Mandarins* (1969)—the first book with political nuances that contained American policy during South Vietnam's attack. The book has 3 editions with additional sections, the 2nd edition in 2002 with introduction addition, and the 3rd edition in 2008 with closing addition by Herman. The division of authorship is not explicitly explained, it was not clear which part was written by Chomsky or Herman. 3 decades later Chomsky was interviewed by Alan MacLeod on March 13th, 2018, he explained that the two of them interact in all chapters, but the main division of the writing was: (1) Herman: the basic outline sections, institutional analysis, corporate structure, and the media relations with the government programs and the fundamental institutional structure, (2) Chomsky: most of the research on the cases which described in the next chapter (MacLeod, 2019). According to many studies and writings related to the Propaganda Model that the author has read during the writing and research process, most of them referring the Propaganda Model as Chomsky's Propaganda Model. However, while this is understandable due to Chomsky's discourse focus long before *Manufacturing Consent* was released involved a lot about propaganda—which also gave him a title of White House's number one enemy as reported by the Guardian³, it's not right if we only put one name while discrediting the other. *Manufacturing Consent* with the Propaganda Model was written by both Chomsky and Herman. But for further reference about propaganda, we will use Chomsky's ideas since Herman did not specifically discuss propaganda.

Initially, Chomsky saw public opinion formation as a form of indoctrination that influences society to make basic truths easily buried through the information control as a propaganda system (Barsamian, 2015, p. 158). Chomsky's indoctrination diction is often criticized as totalitarian (Cathey, 2009, p. 4). In a totalitarian state, it's easy to regulate and rule society. Meanwhile, in the liberal and democratic state, it's difficult to regulate the society because everyone has won the freedom of act and speech—thus, control is implemented on the way society's thoughts since the government can't regulate by force. Chomsky realized that the control to suppress people's instincts to seek the truth is a common thing in a democratic society and can't be separated from two major dimensions that go hand in hand to form public opinion: (1) the political dimension and (2) the commercial dimension (Chomsky, 2000). These dimensions move in an information system. Chomsky labeled propaganda information as a set of messages that constructed through mass media to influence the emotions, attitudes, opinions, and actions of certain audiences for the sake of ideological and political purposes.

In the *Manufacturing Consent*, the Propaganda Model appears to provide an institutional analysis of propaganda distribution through mass media. Mass media with its messages and symbols as the communication system has a function to entertain, inform, and implement values, beliefs, and codes of behavior for each individual that will be integrated into the institutional structure of the wider society (Chomsky & Herman, 1988, p. 61), forms a manufacturing consent

³Based on the news which discussed during Noam Chomsky's interview on March 11th, 1993, accessed via <https://chomsky.info/19930311/>

that produces two types of propaganda: (1) direct propaganda, and (2) indirect propaganda. Direct propaganda aims at explicit political interest, making people think, and get information from the authorities, institutions, and state interests. On the other hand, indirect propaganda aims to distract the public from the political world's information seeking to focus on things that seem to give them something (e.g.: sports, music, shopping channels). These two goals show how propaganda is not only related to political power but also commercialism that enhances consumerism as something natural in a profit-oriented society (Chomsky, 1996). Before information as the propaganda forerunner is disseminated to the public, it goes through 5 filters as the serial curation: (1) ownership, (2) advertising, (3) sources, (4) *flak*, and (5) anti-communism (Chomsky & Herman, 1988).

First, ownership. This filter is related to profit orientation and the size of the mass media industry. The expansion of the free market was accompanied by the industrialization of the press, even at that time, small newspaper printing companies were quite a money promising. Many mass media in America have been integrated with the market and some of them have entered the stock market. A press industry can get bigger with audience size and advertisement funding. The huge profits increase the expropriation threat. The takeover is in the form of the mass media content concentration, because as a market they have customers who use it, so it's used up to customers. These customers are authorized and interested in a particular purpose—such as advertisement or policy dissemination. In this case, the big media are heavily influenced by the government policies as one of their revenue shafts. The press industry is controlled by the rich or managers who are subject to cohesion and have common interests with other large corporations, banks, and governments.

Second, advertising. Advertising is money-making for the press industry and has played a crucial role. The press industry's focus is no longer solely on audiences, but also on the distribution of advertising as revenue since the advertisement industry entered. To attract the attention of potential advertisers, the industry needs to make buying mood programs⁴ for audiences because it's futile for advertisers to waste money on channels with boring programs. Thus, television, radio, and printed media are concerned with audiences' maintenance to keep the ratings and advertising revenue.

Third, source. This filter is related to how the media get their news sources—how they are being dependent on certain parties. The mutual interests and economic needs create a symbiotic relationship between the media and the strong source of information. The media needs a stable and reliable information source—the industry has timelines and targets that must be met—for program making. Not all news channels have their on-set reporters. It's costly. So, for easy access to information, the mass media depend on parties who have the authority and interests, such as those bureaucracies that extend up to the government level which subsidize news to the mass media for special access to news materials and programs. These subsidies can become routine and form mutual dependencies, so it's not surprising anymore if a certain mass media channel tends to support certain bureaucracy, because the existing dependencies can act as media controllers to make a media follow special agenda and a certain series of work.

⁴In 'A Propaganda Model' it's written for instance that advertisers will avoid serious programs or controversially disturbing and choose a channel that has entertainment so that they put the message to be displayed in the form of insertion.

Fourth, *flak*⁵. *Flak* is a way to discipline the media through responses that tend to be negative towards certain media or media programs. It can be in the form of letters, telegrams, telephone calls, petitions, lawsuits, speeches, fines, and other modes of complaints, threats, and punishments (Chomsky & Herman, 1988, p. 13). The appearance of *flak* on a large scale can make a media uncomfortable because it can trigger a boycott, it becomes a big consideration for advertisers to make advertisements on the media. The ability to make *flak* which is quite expensive and quite threatening is not easy, it takes power to make it and it's stated that the government is the main *flak* maker. Although *flak* can threaten the mass media, it seems that the press industries can handle it well by flipping the card—it can even attract sympathy or sponsors who are ready to back up on the other side. *Flak* is a sensation that could be intentional because certain conditions may trigger support from other parties.

Fifth, anti-communism. America is a liberal country and for some reasons communism is considered threatening toward property owners due to their class position and superior status (Chomsky & Herman, 1988, p. 15) Anti-communism which has emerged as a general belief has formed its qualifications for the flow of information dissemination in the mass media. When something labels itself or contains pro-communism or doesn't sufficiently act as anti-communism, the political consequences in the audience will be severe. This anti-communism control shows a dichotomy in the mass media space, where issue-making tends to allocate furtherance on one of the sides.

COMPUTATIONAL PROPAGANDA AS A MODEL FOR 21st CENTURY PROPAGANDA ON TikTok

Filter bubble as an echo chamber⁶ producer opens great opportunities for confirmation bias, bot systems⁷ is combined with human creates artificial interaction, emerges turbid interaction within media social. The bot system that was designed to imitate the real user carries fake actors which are managed along with troll⁸ allies to make public support illusion toward certain ideas and policies creates dominoes effect which will trigger bandwagon (Woolley & Howard, 2017, p. 7).

This faulty information and digital manipulation phenomenon get its terminology as computational propaganda (Woolley & Howard, 2019, p. 4). The term is a new-born, the research was done between 2015-2017 by the Oxford Internet Institute which involved 12 researchers from 9 countries to analyze the use of algorithms, automation, and human curation in social media's inappropriate information distribution. Computational propaganda has two important components: (1) technical, and social. Technically, we can define computational propaganda as a collection of social media, autonomous agents, algorithms, and huge databases that served to manipulate public opinions. Its features are: (1) automation: allows propaganda strikes to be scaled up, (2) scalability:

⁵The meaning of *flak* is not explained in 'A Propaganda Model', but this word is a German term, derived from military jargon. The Nazis used *flak* as an abbreviation for *fliegerabwehrkanone*— and according to Joan Pedro via (Fuchs, 2018, p. 80) suggested to interpret it as 'a countermeasure to discipline the media'

⁶*Echo chamber* is a state of belief support through the dissemination and the repetition between the same tendencies in a closed system (Oxford Learner's Dictionaries, n.d.).

⁷Bot system is a computerized and automated software system, created to imitate real users.

⁸Troll is an online violation experiment that ignores boundaries and social etiquette by sending messages that aim to generate emotional responses with anger-maker tendency.

allows huge and quick reach within content distribution (which sometimes is personalized through algorithm curation in each platform to make users think that the content fit themselves), and (3) anonymity: allows the perpetrator remains unknown. ‘Computational’ doesn’t merely mean that the persuasion act is happening in the computer or online, but it highlights the fact that this strategy relies on computational technology improvement.

Propaganda Model was released when mass media used to be only TV, radio, and printed media. Now we have the internet with its social media feature which can be the new ecosystem for propaganda mobilization. It seems both computational and Chomsky-Herman Model Propaganda basically need media for propaganda mobilization. Does it mean Propaganda Model with its 5 filters is still relevant in this computational propaganda era? One of the key points from computational propaganda research shows that the computational propaganda implemented by various tactics and topic(s): (1) in the authoritarian state, social media has primary function to be social control, while (2) in the democratic state, social media actively being public’s computational propaganda through opinion manipulation and certain experiments (Woolley & Howard, 2017, p. 3). It conforms to Chomsky’s idea about the freedom winner societies’ control difficulty. Propaganda as an intentional communication constantly evolving under certain urgencies eras and circumstances.

Most countries are no longer doing wars to escort supports and looking for worthy victims—whichever Chomsky think as mind-boggling⁹--but in this neoliberalism and progressive financialization era, we are facing different obstacles such as xenophobia, inequality, extreme nationalism, sexism, racism, hatred, and so forth that are spread in various forms in the social media. Social media as a big plate of massive access has made itself becomes a huge industry with revenues obtained from advertisement, telecommunications, stock market, users’ data exchange, and cloud service, as well as the job market. This statement at least has filled the first 3 filters of the Propaganda Model: ownership, advertisement, and source. *Flak*, in social media, has become the communication instrument where people easily and quickly affirm or oppose certain sides. In the fifth filter, anti-communism might be irrelevant since modern problems are increasingly comprehensive. It’s not limited to pro-communism vs anti-communism only; the ideological enmity happens between diverse polarization or even unclear.

Why is it unclear? Because not all social media users come for political interests and purposes. The 5th filter is no longer about ideology, but preference. The tension is not solely caused by the substance, but also how something is delivered being attention catchy! According to Jürgen Habermas written in (Fuchs, 2018, p. 72), there is depoliticization and feudalization in the form of entertainment; it delivers facts that spark interest and entertainment within episodically material and simpler fragments. In this case, we can take an instance from TikTok’s tabloidization¹⁰. The current proper content is no longer about proper information, but ‘how interesting?’ it’s. Social media like TikTok has become a place where people who have tired, bored, and stressed due to work and life seek entertainment as their coping mechanism.

⁹The term mind-boggling can be interpreted as something confusing. Chomsky thought why the authorities should kill or fight those people who are considered as dangerous if they are alive. He made this comment regarding Propaganda and Drones in the Middle East (Chomsky, 2013).

¹⁰Attempts to simplify by using some words with supporting schemes such as: emotionalization, scandalization, polarization, banalization, manipulation, fabrication, etc.

TikTok offers a new social media experience through its video interface. Its novelty can't be substituted with other social media platforms or even YouTube, because TikTok programs the content delivery tailored on each user based on its algorithms. It's like a box of chocolate, you don't know what's inside the chocolate. Users don't know what video will be displayed after the next tap, it's a surprise. Interesting yet risky at the same time. The algorithm curation may be a misfit for some users, and it's a big gap for propaganda content to get in the timeline. Besides, TikTok contents can be easily deployed on cross-social media, it creates more opportunities for controversial and propagandistic content spread out in a great number of scalabilities. Its tabloidization as the same as buying mood programs which are referred in Chomsky-Herman Propaganda Model, both are audience maintenance programs. Through the sophistication of the computational systems, propaganda may get its new ecosystem (social media as its new medium, TikTok as its new format). However, Propaganda Model is not the one that is still relevant, but computational propaganda relevant its scope within Propaganda Model that has always been there since before the new media mobilization. Propaganda has always been in the same form (As manufacturing consent), but the different system accentuates its adaptability from time to time. Moreover, the propaganda system runs for both politicization and depoliticization.

ATTITUDE DETERMINATION: HOW FAR DO WE NEED TO BECOME A COUCH-POTATO?

Social media nowadays is more accessible than mass media in the Chomsky-Herman era, but at the same time, the propaganda system increasingly becomes more obscurantist and gives almost zero realization in terms of its effect since it turns to be the part of everyday lives. Some of the users even think that if they can be rational and careful during social media surfing, inappropriate values and messages won't affect their life. In fact, social media is directly and indirectly, will give an impact, e.g., persuade us to buy something based on several ads, as well as support or destroy certain sides. To understand how social media's content has an impact on us, we need an understanding of our cognitive response. Based on the research from Ohio University in the 1960s, communication can be persuasive despite it fails in several stages of information processing (e.g.: the incomprehensiveness and invalidity argumentation) (Pratkanis & Aronson, 1992). Persuasion can be built through repetition, although the effect is not felt, doesn't mean that the user isn't getting involved with the propaganda system. Instead, we are part of the system itself.

Computational Propaganda that happens in social media can be much worse than what we can imagine. Is it possible for us to reject and separate ourselves from the propaganda system? According to Chomsky, often not. But Chomsky is a typical person who believed in the existence of truth, so the rejection against the propaganda system seems to be cultivate-able. Learning and human knowledge as a social thing require practice and faith adoption based on others' testimony. For example, how do we know basic to complex things such as: whether a tomato is safe to eat? Why can't we swim at the depth of more than 500 meters? What are the effects of mercury usage on the skin? Or Why North Korea is so different from South Korea? It seems that not all questions are tested on our own. We grasp it from others: parents, families, friends, teachers, books, websites! Human culture and ability are getting more complex due to IT innovation, yet it came with a hard pill to swallow, e.g., an open door for false belief widespread (Weatherall & O'Connor,

2019, p. 31). The false and inappropriate information may already exist even before social media is a thing, but the key difference is, in the pre-internet era only some group has access to create and share content, but nowadays we users can easily share those, peers-to-peers, with minimal efforts.

In TikTok, the policy doesn't allow users under the age of 13 years, in reality, we'll find a lot of minors as the users. It's a vulnerability toward persuasion space since minors tend to have lower consideration. By TikTok's surprising curation algorithms, the misfits' contents can be shown anytime on the timeline. Though each user can take over the filter bubble to get better content's recommendations, some missed can occur due to content's unclear classification (TikTok still classifies content based on its hashtags). Now, what we are supposed to do? We may have tried to curate our social media timeline to become a better space by only following certain accounts, liking appropriate videos, and disliking inappropriate videos... but it doesn't shut the door for misfit content to come into view. (Chomsky, 2013) stated that the internet gives an option for information-seeking opportunities since it's quicker compared to the old conventional media in the terms of information release. But in such free access, we must know what we are going to find and what do we want to know so we won't get distracted into the different sphere because the internet as an alternative media is also a business purpose.

According to (Chomsky, 2000), the truth won't be given directly into our head, it takes effort to get it. It doesn't even need a special brain; it takes privileges instead. Unfair? Society is unequal and diverse from the very first place. Chomsky hasn't systematically differentiated structure but reflecting his writings and interviews it's clear that in the hierarchical structure there's the authority in the top order, followed by responsible people for certain conditions. Thus, Chomsky wrote *Writer and Intellectual Responsibility* (Chomsky, 1996). Intellectual responsibility is: (1) telling the truth (which is personally difficult and tiring), (2) excluding aesthetic dimension (e.g.: avoiding indifference on inappropriateness simply because it's appealing), and (3) having truth-seeking as the moral imperative.

Truth-seeking and spreading are important, but the responsibility appears to be transparent. In this kind of situation, intellectuals—those who have the privilege to know the truth—can be prospected differently based on audience interest once they tell the truth. Some will get praise, some won't. Responding to TikTok, we can't expect every user to have a great digital literacy understanding. But for those individuals who are considered to have certain privileges toward truths, how far are we going to be mere couch potato? The Propaganda system takes collective involvement, some people who know how and when to hit the brake should tell those who don't know. It doesn't have to be a huge impact; reminders can be given to our surroundings to reduce the vulnerability possibility from an undesirable propagandistic system.

CONCLUSION

In contrast with conventional propaganda, computational propaganda as a nowadays' term considerate technical and crisis difference. Through different obstacles with different media and formats—in TikTok, for example—we are faced with society's opened room for various ideology conversations. Misfit and inappropriate information from social media such as in TikTok is increasingly vulnerable and is often not recognized its effect since people enjoy the way it's

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delivered through tabloidization. The tabloidization makes the social media users' preferences are no longer for political purposes, but also de-political which triggers entertainment. Though computational propaganda is different from conventional propaganda in the terms of media's mobility that which used to be TV, radio, and printed media, doesn't mean it's a brand-new thing. The propaganda systems were and are always the same, it involves manufacturing consent. And the relevant one is not the Propaganda Model, but the computational propaganda as the 21st-century propaganda model that makes itself relevant to the core model. The public is indeed vulnerable to being involved in the propaganda system, but the significant impacts are often not felt. By understanding not everyone has the access to grasp the truth, the intellectuals who have the privilege should lift their fingers to decrease collective involvement toward unnecessary propagandistic messages.

REFERENCE

- Barsamian, D. (2015). *Noam Chomsky: Propaganda and The Public Mind*. Lexington, Massachusetts.
- Cathey, P. (2009). Understanding Propaganda: Noam Chomsky and the Institutional Analysis of Power.
- Chomsky, N. (1996). *Powers and Prospects: Reflections on Human Nature and the Social Order*. London: Pluto Press.
- Chomsky, N. (2000, December 10). Propaganda and Indoctrination. (ZNet, Interviewer) Retrieved from <https://chomsky.info/20001210/>
- Chomsky, N. (2013, Juni 04). Dr. Noam Chomsky on Imperialism, Drones & Propaganda. (A. Martin, Interviewer) Retrieved from <https://chomsky.info/20130704/>
- Chomsky, N., & Herman, E. (1988). *Manufacturing Consent* (Additional Edition ed.). London: The Bodley Head.
- Cull, N., Culbert, D., & Welch, D. (2003). *Propaganda and Mass Persuasion*. California: ABC CLIO, Inc.
- Fuchs, C. (2018). Propaganda 2.0: Herman and Chomsky's Propaganda Model in the Age of the Internet, Big Data and Social Media. In J. Carañana, D. Broudy, & J. Klaehn, *THE PROPAGANDA MODEL TODAY* (pp. 71-92). London: University of Westminster Press.
- Gonzales, P. (2013). Noam Chomsky Propaganda Model : A Critical Evaluation.
- Macleod, A. (2019). *Propaganda in the Information Age: Still Manufacturing Consent*. New York: Routledge.
- Oxford Learner's Dictionaries. (n.d.). *Oxfordlearnersdictionaries.com*. Retrieved from Definition of echo chamber: <https://www.oxfordlearnersdictionaries.com/us/definition/english/echo-chamber>
- Pratkanis, A., & Aronson, E. (1992). *Age of Propaganda : The Everyday Use and Abuse of Persuasion (Revised)*. Santa Cruz: University of California.
- Technopedia. (2017, Oktober 10). *Filter Bubble*. Retrieved from Technopedia: <https://www.techopedia.com/definition/28556/filter-bubble>

International Review of Humanities Studies
www.irhs.ui.ac.id, e-ISSN: 2477-6866, p-ISSN: 2527-9416
Vol. 7, No.1, January 2022, pp.255-264

- Turcilo, L., & Obrenovic, M. (2020). *A Companion to Democracy #3 : Misinformation, Disinformation, Malinformation (Causes, Trends and Their Influence on Democracy)*. Retrieved from [hk.boell.org: https://hk.boell.org/sites/default/files/importedFiles/2020/11/04/200825_E-Paper3_ENG.pdf](https://hk.boell.org/sites/default/files/importedFiles/2020/11/04/200825_E-Paper3_ENG.pdf)
- Weatherall, J., & O'Connor, C. (2019). The Social Media Propaganda Problem Is Worse Than You Think. *FALL*, 30-32.
- Woolley, S., & Howard, P. (2017). Computational Propaganda Worldwide: Executive Summary.
- Woolley, S., & Howard, P. (2019). *Computational Propaganda: Political Parties, Politicians, and Political Manipulation on Social Media*. New York: Oxford University Press.