Techno Populism and Algorithmic Manipulation of News in South Korea

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The current Moon Jai-in administration in South Korea is facing serious challenges as a result of a scandal involving the manipulation of news online. Staff in Moon's camp are suspected of manipulating public opinion by creating millions of fake news comments online, contributing to Moon being elected president. This South Korean political scandal raises a number of theoretical issues with regard to new platform technologies and media manipulation. First, the incident exposes the technological limits of blocking manipulation of the news, partly because of the nature of social media and partly because of the nature of contemporary technology. Contemporary social media is often monopolistic in nature; with the majority of people are using the same platforms, and hence it is likely that they will be subject to forms of media manipulation. Second, the Korean case of news manipulation demonstrates a unique cultural aspect of Korean society. News comments and readers' replies have become a major channel of alternative news in Korea. This phenomenon is often designated as "reply journalism," since people are interested in reading the news replies of ordinary readers equally to reading news reports themselves. News replies are considered indicators of public opinion and are seen as affecting trias politica in Korean society. Third, the Korean incident of news manipulation implicates a new form of populism in the 21st century and the nature of democratic participation. This article aims to explicate key issues in media manipulation by including wider technological, cultural, and political aspects in the South Korean news media context.

Keywords: Algorithmic manipulation of news, fake news, cultural studies, online journalism, Korean political communication

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Introduction

Currently, the topic of fake news is one of the most frequently cited agenda items in journalism. Collins, the British publisher, announced that the term fake news has been used three times more in 2018 compared to 2017, the most increased word usage of the year. Fake news is an issue that threatens the democratic role of media and represents the irony of public participation in the media. Although different people, from top-ranked policy makers and journalists to ordinary citizens perceive fake news differently, the issue of fake news has emerged on the back of advancing new media platform technologies and social networking services. These platform developments have been the target of a hopeful vision of participatory democracy and enhancement of individual rights (Allcott & Gentzkou, 2017; Ruiz et al., 2011). Despite developments in communication technology and diversifying news sources, public opinion seems to be increasingly monopolized and subject to manipulation, while diversity is decreasing.

Readers' comments on news in portal sites are the main source of fake news in South Korea, in contrast with the contestation of fake news that comes from the widespread use of social media and the advancement of various channels of digital media elsewhere in the world, such as YouTube news and podcasts. The majority of Korean people still consume conventional sources of news provided by nation-wide news agencies including TV and major newspapers; but the access methods have been changing, and most news is consumed through highly popular Internet portal sites. Since users' comments on news in these portal sites tend to strongly influence public opinion, academics have designated the practice as 'reply journalism', to signify the power of readers' replies on news in Korean society.

Because of the potential influence of reply journalism, algorithmic manipulation of readers' replies to the news has been widely practiced and it emerged as a major incident of fake news in Korea. This incident, widely known as the "Druking Scandal," damaged the legitimacy of the current administration because the election camp of the current President, Moon Jae-in, was found to have been involved in manipulating reply journalism. It also had a chilling impact on the rhetorical vision of participatory democracy through digital media. Moreover, this political scandal disclosed the problem of the monopolistic structure of the news media industry; in the Korean case, the internet portal site Naver provides news to the majority of Korean people.

This study looks into the Korean case of manipulating readers' comments on news in the context of wider cultural and socio-political structures. The political scandal of the Druking case highlights a number of theoretical issues including cultural context, transformation of the mediascape, and technological and legal issues involved in manipulating public opinion. The scandal reveals the irony of the participatory democracy made available by new media platform technology and the challenges for journalism derived from fake news in Korean society.

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² Druking is the online ID of Kim Dongwon, the major perpetrator of this scandal. It is known that his ID is named after Druid King in the game, *War of Warcraft* which also shows stories of the king making and battles over the throne.

Fake news concepts and the manipulation of public opinion

Broadly speaking, fake news is seen as a threat not only to journalism, but also to democracy as a whole. Although the term fake news has thrived since the 2016 presidential election campaign in the US, it is clear that no nation is free from the challenges of fake news. Nations are facing their own versions of fake news and struggling to regain legitimacy of journalism.

As the discourse concerning fake news has emerged there have various views on and definitions on the subject. Some theorists take a broad view by defining fake news as including falsity in news (Guess, 2018; Laser, 2017), while others have taken a narrower view by defining it as intentional and deliberate fabrication of falsity in news (McNair, 2017; Bakir & McStay, 2018). By studying the case of the 2016 election in the USA, Allcott and Gentzkow emphasized fake news as "news articles that are intentionally and verifiably false and could mislead readers" (Allcott & Gentzkow, 2017, p. 213). Through a process of classifying recent studies of fake news, Tandoc et al., (2017) defined fake news as forms of satire, parody, fabrication, manipulation, or propaganda. Fake news stories are not based on fact, whether they intentionally switch the meaning of the facts, like in satire and parody, or "have no factual basis but are published in the style of news articles to create legitimacy," (p. 143) as in the case of fabrication or manipulation.

Although it appears as though the issue of fake news has been a persistent problem in the history of journalism, current variants of platform fake news are a phase change phenomenon derived from the technological advancement of platform media, as the algorithmic means of manipulating news are becoming more widely available. It is important to distinguish fake news from misinformation, where in the former it means intentional and massive attempts to disseminate false news using algorithmic manipulation, while the latter is simply the more conventional problem of dealing with truth in journalism. Thus, some academics now argue that contemporary key concerns around fake news are a matter of technology rather than of journalism (Balmas, 2014; Frend, 2011; Karlova, 2013).

Two main motivations underlie the production of fake news; one group being financial and the other, recognizably ideological. They are used for targeted attacks on the generation of advertising revenue or discrediting the opposition in political areas. The proliferation of fake news in the current mediascape is derived from the development and affordances of digital media platforms, which blurs the boundary between journalists and readers, and between what is, and what is not news. Social media, in particular, will blur information sources, and this can easily lead to fake news.

In the case of South Korea, many people still consume conventional forms of news such as nation-wide newspapers and network TV news, although the use of YouTube or other social media news sources is increasing. Alternative news sources such as YouTube and podcasts are particularly used by supporters who have clear political orientations and party affiliations³. People in general,

³ Podcast, *Alrileyo* run by Simin Yoo, the chair of Noh Moohyun (the former President) Foundation currently marks the biggest hit by drawing 250,000 viewers in a month. And YouTube news channel *Hongka Cola* run by Junhpyo

on the other hand, widely use conventional media, although reading patterns compared to previous generations have changed, and the majority of Korean people now read news through Internet portal sites that carry major newspapers and TV news. Statistics indicate that 77% of Korean people read news through portal sites in 2017 and 75.2% in 2018. (Kim, 2018; Kim, 2017).

As a result of this pattern of access to news, the main challenge for fake news arises from the readers' comments on news on the leading portal site. It is also debatable whether the definition of fake news is limited to journalist format. Some studies see content forms that mimick news genres as the condition of fake news (Horne and Adali, 2017; Laser, 2018); while others accept a wider range of formats as an integral part of fake news phenomenon by including online information, rumors and propaganda (Mustafaraj & Metaxas, 2017; Waisbord, 2018). Readers' comments are not characterized as being included in the news genre within the conventional definition. However, in the Korean context reader comments strongly influence public opinion to the extent that they are frequently considered to be an important part of journalism by Korean readers. Readers' comments are often cited by major news agencies and are perceived as representative of public opinion by politicians and social activists.

According to a survey conducted by CMRKPF (Center for Media Research at the Korea Press Foundation), 8.2% of readers have written comments, with the demography of commenters being clearly skewed (Korea Press Foundation, 2016). According to the survey, highly educated males in the high-income group are overly represented in news comments, for example, males write comments on portal sites eight times more than female readers.

By contrast, the majority of people read these comments, despite being written by a minor portion of the total population. The survey shows that only 20% of people do not read comments on news articles. Clearly, this means that 80% of total readers regularly receive the opinions of 8.2% of people on news sites through an Internet portal. Additionally, news readers perceive readers' comments as part of the news. According to the same survey, 70% of people agreed that comments are part of the news, and 65% stated that news agencies and portals have a responsibility to control the comments.

Fake news and readers' comments.

Reader comments influence the formation of public opinion and play a strong role in Korean journalism. According to a previous study, 66% of users think that readers' comments promote public communication, while 65.7% of users perceive readers' comments on news on Internet portal sites to be public opinion (Kim & Oh, 2016). However, only 37.9% of Internet users trust reader comments on news, according to the same survey. Despite the discrepancy between credibility and the perception that comments constitute public opinion with regard to replies on

Hong, the former leader of oppositional party is a competitor to *Alrileyo*, having 200,000 viewers (Won, 2019). The number of viewers of YouTube News is continuously increasing although there are debates on method of counting viewers and political partisanship of viewers (Jong, 2019).

news, previous studies have found that a majority of people rely on reader comments on the news to figure out the trends of public opinion, and their opinions are also influenced by these replies (Lee, 2012; Jung & Park, 2016).

The importance of readers' comments or reply journalism in Korean society highlights a number of key issues. First, reply journalism provides an easy way for people to account for others' opinions. Since many people participate in making comments on news stories by clicking a button on replies that indicates agreement (or 'upvoting'), it is a convenient tool for readers to figure out what other people think of particular news topics. Potentially, then, reader comments on news influence people's attitudes toward news topics through the spiral of silence, mirror reflection, or third person effects (Sherrick & Howe, 2018; Jung & Park, 2016; Houston, 2011). In other words, when readers have different opinions from highly agreed upon replies, they tend to keep silent or to mirror other opinions as similar to their own. Considering that only 8.2% of news readers write comments and over 90% do not, as the results of a previous survey illustrates, this kind of influence through reply journalism is misrepresenting public opinion.

Second, the importance of readers' comments in Korean journalism demonstrates the cultural aspects of Korean society. Traditionally, Korea has emphasized collective values rather than individualism, as can be seen in other countries in traditional/agricultural societies. In addition to traditional and Asian values, Korea has promoted collectivism over the course of modernization and economic development, and inculcated the idea through military regimes during the 1970s and 1980s. Due to experiencing a military dictatorship, Koreans are alert to collective activities and to others' opinions for fear of being different and isolated. The legacy of collectivism still affects politics and organizational culture in Korea, and people tend to gather around commonalities such as geographic and educational networks (*hakyeon*, *jiyeon* in Korean), i.e., grouping with others with the same hometown, with the same school and so forth.

Academics and Korean people in general often believe that collectivism and the culture of connection in Korea were derived from Confucianism and Korean traditional values such as an emphasis on face (chemyon) and social cues (nunchi) (Choi & Kim, 2000; Heo & Park, 2012). However, the influences of religions and traditions on national culture can easily fall into ad hoc reasoning instead of more systematic explanation based on solid theories. In media studies, for example, many scholars often discuss Confucian values and Asian cultural traditions in explaining the success of globalizing Korean media and the Korean wave in Asia (Yoo & Lee, 2001; Shim, 2006). Although religions and traditions affect national culture in general, it is hard to define their influences on cultural environments and people's behavior precisely. Yet it is true that Korean culture has been strongly influenced by multiple religions including Confucianism, Buddhism, and Christianity depending on the period of time in history. Buddhism controlled the entire spectrum of public lives in ancient Korea (BC 57 – AD 1392), while Confucianism had strong power over people during the *Chosun* dynasty (1392 - 1897). In modern history, Christianity has been strong until the present day, with over 30% of people practicing Christianity and Korea having the second largest number of missionaries in the world next to the US (Yoon, 2014). Thus, Korean culture cannot be identified with any one religious influence such as Confucianism.

Additionally, Korean traditions have been transformed into new forms as part of following the Western model of modernization. While Korean society follows Western/ capitalist values, collectivism and networks of personal connection still persist. Grouping and collectivity became more of a form of violence than static and moral traditions. People try to stand for commonality by silencing difference and conforming to the majority. Religions and tradition may affect the consolidation of these collective values in part, but other factors, including a political-economic basis and post-colonial power politics over the course of modernization may also affect the characterization of contemporary Korean culture. Based on this complexity in a collectivist culture, Korean people hesitate to express their opinions in public, particularly on politically contestable issues. This tendency drives people to concur with highly agreed upon opinions in the news and to search for opinions of the majority.

Third, the importance of reply journalism has increased as the credibility of and trust in traditional news agencies has decreased. In the last couple of years, Korea has experienced a major political crisis including the impeachment of the former president Park Geun-Hye and the accident of the *Seowol* ship, which was submerged in the southern part of the Korean coast and resulted in the death of over 300 high school students who were on a field trip, in addition to tens of other general passengers. After experiencing these dramatic events people were politically mobilized more than ever before, and millions participated in a protest against the Park administration known as the "candlelight revolution in Korea." There were huge numbers of rumors and conspiracies disseminated during this time, as well as fake news largely produced by both alternative media and major news agencies. People no longer trusted official news outlets and started comparing multiple sources of news by reading articles and readers' comments. These readers' comments were frequently cited by major news agencies and became related to trends in public opinions. During this period, the credibility of the news decreased, and Korean journalism entered a period of crisis

In this context then, reply journalism has become the main source of alternative news. Because of these psychological, cultural, and political reasons, reader comments about major news influence were not limited to particular people, but also concerned public institutions. Reader comments, then, are often perceived as a source of major trends of public opinion, and seen to affect the formation of public opinion and changing public policies. In this way, reader comments are often considered as the barometer of public opinion and can affect legislation and even court decisions. Significantly, reader comments are often cited by major news agencies as illustrations of public opinion. In the meantime, reply journalism has become a major target of fake news because of its importance in Korean society. The algorithmic manipulation of reply journalism has been attempted by both political and interest groups.

Monopolistic structures in the digital media industry.

The emerging power of reply journalism in South Korea is contingent upon the industrial structure of digital media in the country. Internet portal businesses and SNSs have consolidated their monopolistic power, as Google and Facebook have in the West. With portals and social media functioning through networking, one monopolistic firm ends up defeating others and gathers the most users. In South Korea, the Internet portal site Naver is easily in the lead, comprising around

80% of Korean users and defeating other portals including Google and Yahoo⁴. Based on this industrial structure, Naver has assumed their monopolistic position in Internet usage and occupies the leading position in journalism. Naver does not produce original news content but curates news from major agencies and edits the webpage of its news section. According to a survey conducted by Open Survey in 2018, 75.2% of people read the news using Naver (Kim, 2018). This means that the vast majority of Korean people consume news through this single Internet portal.

Naver started its business in 2000 when the global company, Yahoo, was the number one portal site in Korea and Daum was the second competitor. By engaging in mergers and acquisitions with game companies, Naver expanded its business and anchored new online services for users such as *JisikIn*⁵, *Blog* and *Café*, and developed new marketing strategies. Naver became the primary portal in Korea in 2003, within 2 years of its launch (Ryoo, 2013). Since 2011, when Naver set up the NHN ('Next Human Network') Business Platform and made one billion dollars in revenue, Naver has maintained its monopolistic position in Internet business in Korea.

Additionally, Naver has maintained a leading role in journalism based on this monopolistic structure of the Internet portal business. As noted, the majority of Korean people read news through Naver. Naver adopted a reply system on its news section in 2004. In 2007, Naver invented the function of recommending a reply by setting up "agreed" and "disagreed" buttons in the reply section of the news pages. In 2012, Naver configured the arrangement of replies by setting up two options, ordering by the newest or the highest number of agreed comments, and allowing users to choose to click between the two. Figure 1 illustrates the current configuration of reader comments on Naver news. It shows the total number of replies followed by the two options of ordering and the numbers of agreed and disagreed readers.

⁴ According to statistics by Internet trends, Naver takes up 80% until 2017, and the number is now decreasing in 2019 while google search is increasing up to 28%. www.<u>internettrend.co.kr</u>. It might not be a simple coincidence that the use of Naver search engine has declined since the political scandal. It is argued that brand value of Naver has been decreased due to the political scandal (Oh, 2018).

⁵ Jisikin literally means knowledgeable person in Korean language. Naver created a Q&A section called Jisikin on the portal site that ordinary users pose questions and answers freely, Because of popularity of this section, many professionals (doctors, IT marketers etc.) are currently involved in discussion in Jisikin for PR purposes though majority is ordinary users.

전체 댓글 66 (total replies 66)

댓글 상세 현황 (information of replies)

- 현재 댓글 56 (current number of replies)
- 작성자 삭제 10 (deleted by writers 10)
- 규정 미준수 0 (violation of the rule 0)

2018.10.22. 16:06:41 댓글 정렬 옵션 선택 (choice of ordering replies)

- 순공감순 (according to high number of genuinely agreed)
- 최신순 (according to newest reply)
 - d921**** ... (ID, example of reader comment) ...

답글 8 (response 8) 공감(agreed) 120 비공감 (disagreed) 8

Figure 1. Naver configuration of news replies. ⁶

The strong power of Naver in Korean journalism frequently ignites disputes and criticism, particularly after the incident of the political scandal related to reply manipulation. Naver has been charged as the primary creator of fake news due to its monopolistic position and market power. A representative of the Association of Newspapers noted that the "monopolistic power of Naver impedes the value of journalism and threatens the newspaper industry" (Jong, 2018) while pinpointing problems with the reply system in Naver news.

The political scandal of manipulating news reader comments

Naver has now faced challenges to its monopolistic power in the Internet business when the reply system of Naver news became embroiled in the political scandal of fake news. A leading staff member of Moon's election campaign, Kim Kyong-su, who is now the governor of Kyungnam Province, was arrested due to his illegal manipulation of users' comments (Koh, 2018; Lee, 2019). He was charged as complicit with Kim Dongwon, known as Druking, who invented an upscale macro program called KingCrab. Both were suspected of manipulating public opinion by creating millions of fake news comments online and thereby helping Moon to win the presidential election. Facing challenges by members of the opposition party and public opinion, an independent counsel

⁶ (added English translation by the author)

was organized to inspect the case. Governor Kim and Druking were sentenced to jail in the district courts.

According to the judgement documents of "2018 High Court 823," Governor Kim was sentenced to two years in prison for 'obstruction of a computer business' and another 10 months in jail arising from violations of election law. Both counsel and judges agreed that Governor Kim collaborated with Druking in manipulating public opinion using a Macro program⁷ and that they damaged a computer information process by obstructing the business of Naver and Nate in the course of the manipulation.

The independent counsel investigated the case and Governor Kim was indicted, along with Druking and a group of people who collaborated with Druking in the manipulation of 99 million instances (including 80,000 news articles and 1,410,000 readers' comments on the news) on Naver news sites by fabricating numbers of agreed and disagreed replies during a period of time from December 2016 to March 2018 (one year and four months). It was found that during this period, Governor Kim received 80,000 manipulated news articles from Druking, and Kim also sent a Druking URL links of news requesting that they were manipulated. Additionally, Kim and Druking were charged with 11 million instances of manipulation on the Naver news site, from 21 February to 20 March, 2018, according to the High Court judgement.

Judges at the High Court approved evidence of crimes as submitted by the counsel and announced complicity between Governor Kim and Druking in manipulating public opinion. According to the judgement, Kim directed manipulation of public opinion not only by providing targeted news articles to Druking, but also by cooperating with the advancement of KingCrab, an upgraded version of a macro program for faking news replies.

Algorithmic manipulation of news

Algorithmic news practice brings up both opportunities and challenges to news production in contemporary society. As more and more news media such as Google news and SNS and portal news platforms adopt technological means of editing and curation of news, these gatekeeper's roles and journalistic authority face major challenges (Napoli, 2015; Carlson, 2018; Figenshon, 2018). In light of this, transparency in algorithmic news practice and of big data gathering becomes important, and many recent journalism studies have focused on these issues (Diakopoulos & Koliska, 2017). However, few studies have elucidated algorithmic manipulation of news in the larger context of changes in mediascape and production of journalism (Egelhofer & Lecheler,

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⁷ A macro program is autokey function on computer to repeat commands and keywords on a mass scale without typing manually each time. It is commonly used technique in computer programs such as MS excels and many others, but now Macro programs are specifically designed to manipulate data, mostly for marketing purposes, such as manipulating viewers' feedback on films and sports and for the purpose of illegal reselling tickets (Bevan & Cohen, 2016; Shin, 2019).

2019). The case of the Druking scandal starkly illustrates algorithmic manipulation of journalism and the new technological means of misleading public opinion. The political scandal of the manipulation of reply journalism in South Korea was enabled by technological advancements inherent to digital platform media. Although there have been cases of public propaganda and misinformation throughout journalistic history, the massive scale of manipulation and fake news is only now possible through the widespread use of digital media and targeted algorithmic practices.

Manipulating 'reply journalism' with 'KingCrab'.

For the purpose of manipulating replies on news, Druking and his followers developed a new software tool called 'KingCrab', which is an applied version of a macro program to manipulate reader comments on online news. KingCrab functions in an Internet server by automatically clicking "agreed" icons on replies of news in the Naver portal site. The independent counsel investigated the process of prosecuting those responsible for the KingCrab software program and found that Druking and others had shared URL links of news articles using a secret messenger program called "crab catch room", and which then manipulated replies using an automatic function of KingCrab.

Druking manipulated 1,840,000 cases of replies using *KingCrab I* according to the court judgement record written in the first sentence of Kim Kyong-su's case. From 21 February, 2018, Druking and his group upgraded the technique of KingCrab and further developed *KingCrab II*, which allowed them to expand the scale of manipulation. While KingCrab I required mobile phones to execute commands, this limited the scale of the manipulation. KingCrab II, on the other hand, used the Amazon web server and functions without mobile phones or other means of user verification (Jong, 2018). This allows the users to overcome physical limitations such as using phones and USBs. KingCrab II was also economical, allowing savings on data costs for mobile phones and the cost of USBs. By using KingCrab II, the manipulation of replies was easily achieved and expanded without limitations by simply typing numerous commands such as changing the IP address, browsers, and user information.

Moreover, Kingcrab II was specifically designed to avoid the policy restrictions used against such abuses on Internet portal sites. 'Abuse' refers to intentionally manipulating the number of mouse clicks online. Naver and other portal sites normally implement policies against these abuse techniques, but software such as the Kingcrab II program is frequently developed to skirt around such policies. Naver was not able to track the manipulation undertaken by the Kingcrab II software.

Anti-abuse policy on Internet portal sites.

In the wake of the Druking case, Naver has established policies against the abuse of Internet content and news replies. Naver's executive appeared in court and testified in the Druking case on 31 October, 2018, where he stated that Naver had invested ten million USD to prevent abuse and illegal use of macro programs over 2018. Naver claimed to be able to prevent manipulation of

replies on news, and other attempts of further abuse on the portal. For instance, Naver detects the IP address and NNB, (a browser cookie that Naver puts a value on for each user when they connect to the server) and determines whether one-click agreed or disagreed responses to news replies are from a human or robot, when they occur multiple times over a short period. Moreover, Naver monitors multiple logins by the same IP address, and if they find problems, they will then disable the users' input. Naver hired twenty managers to prevent manipulative activities and is reported to run over one thousand inspection machines against such practices (Jong & Park, 2018).

Naver has changed the news site policies and readers' comment practices on news since the Druking scandal. For example, Naver now limits the number of times one user can click the 'agreed' or 'disagreed' buttons on replies in the news section, allowing less than 50 clicks within a 24-hour period (KDC Newsroom, 2018). Additionally, users can only write comments multiple times after a 60-second lag each time. Also, there is the restriction that users are limited to one click on the 'agreed' or 'disagreed' buttons on replies multiple times, after a 10-second lag each time. Naver also limits the number of comments on each news article by one user to three times, whereas it used to allow each user 20 comments per article.

Naver has adopted various strategies to prevent manipulation of their portal through the implementation of advanced software and additional accreditation/verification processes. However, the technological means of blocking the manipulation of news and of public opinion does not seem to be readily available. The founder and CEO of Naver, Lee Haejin, appeared before a parliament hearing and stated that "there is no way to block manipulation of replies on news entirely, and we will stop editing news and ranking news eventually" (Lee, Lee, & Lee, 2018). He also commented that "macros are not a very advanced technology, but there is no way of blocking them entirely", when interrogated by a legislator of the oppositional party (Kim, 2018).

Naver is in the process of establishing new policies of reply journalism. First, the news site of Naver was changed to present news as 'out links' so that contributing news agencies have the right to edit and rank news articles (Kang, 2018). Previously, Naver had used the method of 'in link,' which gave the Internet portal the right to control the editing and layout independently from its news source partners. Second, Naver does not allow users to write replies using SNS IDs such as Facebook and Twitter, but only allows IDs validated by a mobile phone number. Third, Naver announced its plan for hiding replies on news in the political section from now on, which is what gave rise to the political scandal of fake news.

Unlike Naver's news site, most international portal sites have adopted an out-link system to present news from other sources (Woolley, 2017; Bradshaw, 2019; Hwang & Kim, 2018). Google, for example, shows only the title of news articles on its news sites and connects to the websites of agencies when users click the titles. MSN has no space for readers' comments on its news pages. Additionally, major international news agencies have also tended to eliminate or reduce the function of reply journalism from their news. For example, CNN and Reuters have both announced the closing of the space for reader comments. The New York Times, on the other hand, has strengthened its procedure of accrediting reader comments by confirming users' information and checking for repetitive and problematic comments.

Despite the proclamation of new policies for Naver news sites, disputes and criticism against Naver's part in manipulating public opinion have not decreased. Naver still manages an in-link system on its Internet news site, while the mobile version began to switch to an out-link system in June 2019. Moreover, Naver randomly discloses readers' comments on political news separately from the principles of its new policy. In the meantime, users frequently call out that algorithmic manipulation of reply journalism and macro programs continue to function on the portal.

Concluding Remarks

The political scandal of manipulating reply journalism is a cautionary tale of the downside of innovation in media platform technology and the crisis of democracy. This phenomenon runs counter to the vision that typically accompanies conventional platform narratives: technological advancement has promised to bring people a technical means of direct democracy and political participation. The political scandal of the Druking case in Korea illustrates algorithmic manipulation of public opinion and violation of the democratic process using advanced technologies. The judgement in the case clearly remarked that Governor Kim and Druking distorted public opinion and misrepresented public choice in the election using the algorithmic manipulation of replies on the news. The judges concluded that it was a depraved crime distorting political choice and public opinion.

People were surprised not only by this fake news and political scandal itself, but also by the light sentence received of only two or three years in jail for the serious crime of manipulation of public opinion in the context of the presidential election. The court allowed Governor Kim bail, and he is now returning back to his position and governing the Kyungnam province. Citizens and members of oppositional parties rightly criticize the fact that Governor Kim remains under the protection of the current administration.

Aside from this specific political contestation, the case brings up numerous issues with regard to news manipulation on the Korean portals. First, from a legal point of view, there is no solid legal ground that allows portals to block manipulation of public opinion online, as these are emerging technological phenomena not covered by existing laws. In the case of Governor Kim's manipulation of reply journalism, the court regarded it as a serious case of manipulation of public opinion, but the punishment was limited to two years in jail for obstruction of IT business and 10 months for violations of election law. This is simply because there is no legal basis for punishment of manipulation of public opinion or reply journalism under the current Korean law. As AI in media technology advances rapidly, violations against the fair use of media and fake news are surfacing in various sites, but there is the predictable lag between the legal system and technological developments. The Korean case of reply journalism clearly demonstrates this lag between the legal system and available loopholes.

Second, techniques of manipulation are continuously evolving despite policies against online abuse having been attempted, and the social consequences of the manipulation have been reported in the news media. In the Korean case of manipulating replies on the news, new strategies of

manipulation are likely to emerge, and instances are frequently cited by journalism and Internet users. As Naver adopts new policies against manipulation on their portal and changes the layout of news, more subtle strategies than the KingCrab method of mechanical clicking are being attempted (Park & Kim, 2018). Internet monitoring groups are reported to have recognized 150 suspicious IDs manipulating replies on the news, although the data analysis of replies by these IDs has not been completed yet. These new strategies include complex procedures, staging multiple steps such as sharing news links by Twitter to be manipulated and combining human and robot manipulation. Manipulators also create keywords and disseminate them widely to frame the news; thus shaping public opinion in addition to just mechanical clicking to add numbers. Recently, Korea has again been involved in contestation of algorithmic manipulation of search ranking on Naver in addition to manipulation of replies using these complex methods relating to another political scandal involving the resignation of the former Minister of Justice, Chokook (Kang, 2019; Kwak, 2019). Two groups for and against Chokook were competing with each other by manipulating the search ranking of Naver.

Third, the fundamental problem with fake news and the manipulation of public opinion lies in the political economic structure of new media such as SNSs and Internet portal sites. Advocates for these new media platforms argued they would be a tool for democracy and public participation due to their interactive communication capabilities. However, these new media are becoming more monopolistic in their industrial structure than ever, even though they rely upon users' networking and User Generated Content. As highlighted in this article, in Korea Naver monopolizes the transmission of news to the majority of news readers/citizens. When we look around the world we see other SNS and portal businesses are also monopolistic and are therefore clearly not free from manipulation of journalism as in Korea.

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⁸ http://cyrussd.egloos.com/6463553

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