The Threat of Fake News:

A Systematic Literature Review

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Abstract

Purpose. Fake news is not a new phenomenon and their spreadable has increased due to the social media advent, but their actual impact remains an open question. From the management literature, it emerges that the consequences of the fake news dissemination are crucial for the brands, as in this context brands can lose the control over their marketing communication strategy. However, fake news literature reviews are few and far too little attention has been paid to summarizing the fake news' dimensions in the various research areas. The purpose of this paper is to evaluate existing studies and to provide an appropriate systematic review about the fake news phenomenon.

Design/methodology/approach. To achieve this research objective, the systematic review method was adopted. The work was divided into four phases. The phase 1 was focused on defining the research questions and the scope of the study. The phase 2 regards search criteria definition and bibliographic research. Phase 3 is dedicated to the data extraction and organization. Finally, phase 4 analyzed and synthetizes the contributions with the aim of providing a fake news framework.

Findings. This review reveled fake news topic was addressed in different research areas. By analyzing 209 journal articles, we identify definitions, dimensions and theories of fake news, which we presented in form of three clusters' dimensions, i.e. content, appearance and purpose. Moreover, two main reasons have emerged for providing fake news: (1) economic motivation and (2) ideological motivation. Finally, the fake news' effects are presented both for users and companies.

Originality. The uniqueness of this paper exists in the fact that there was not a systematic review on the analyzed topic. In conclusion, in light of the emerged framework, this research offers new prospects for empirically investigating the fake news phenomenon.

Key words. Fake news, Fake news features, Fake news framework, Fake news studies, Systematic review.

1. Introduction

Fake news have always existed, however, because of the digital environment, their spread is now faster and uncontrollable (Di Franzo and Gloria-Garcia 2017; Grinberg et al. 2019). As a matter of fact, according to some authors, digitization allows fake news to propagate more rapidly than it ever has before (Bovet and Makse 2019; Mills et al. 2019; Vargo et al. 2018).

Especially social media such as Facebook and Twitter, that are Internet-based applications that allow the creation of user-generated content (Kaplan and Haenlein 2010), are to blame because of the fake news dissemination in virtual spaces (Jang and Kim 2018; Spohr 2017). Indeed, social media have a new structure compared to previous technologies: on these platforms, content can be shared among users with no third-party filtering, fact-checking or editorial judgement (Allcott and Gentzkow 2017). To all this, it must be added that the virality of the contents on social media platforms is very difficult to monitor.

Content constructed in such a way that it appears plausible, but often based on falsehood, if published and viral, can harm institutions, companies and brands (Visentin et al. 2019). Fake news could therefore undermine the relationship of trust between consumer and business with serious damage to companies. Companies have therefore understood that they must intercept nodes where false information exists and is disclosed. Indeed, from the management literature, it emerges that the consequences of the fake news dissemination are crucial for the brands (Obada, 2019; Fulgoni and Lipsam, 2017), as in this context brands can lose the control over their marketing communication strategy. As a matter of fact, Visentin et al. (2019) demonstrate empirically the fake news' consequences to the brand advertised alongside the fake news. According to this study, consumer purchase intentions and word-of-mouth also suffer from the impact of fake news circulating on the Internet. Thus, this phenomenon has significant implications both for marketing strategies and corporate reputation (Fulgoni and Lipsman 2017).

Hence, in recent years, there has been an increasing interest in fake news phenomenon which has become relevant both for scholars and professionals (Albright 2017; Spohr 2017). Since the 2016 U.S. election, the phenomenon has been analyzed from different perspectives, and a varied and fragmented literature was formed on the topic of fake

news. There have been several studies in the literature reporting various fake news' interpretations. However, far too little attention has been paid to defining 'fake news' (Gelfert 2018; Shu et al. 2017), and a fake news systematic review is still lacking.
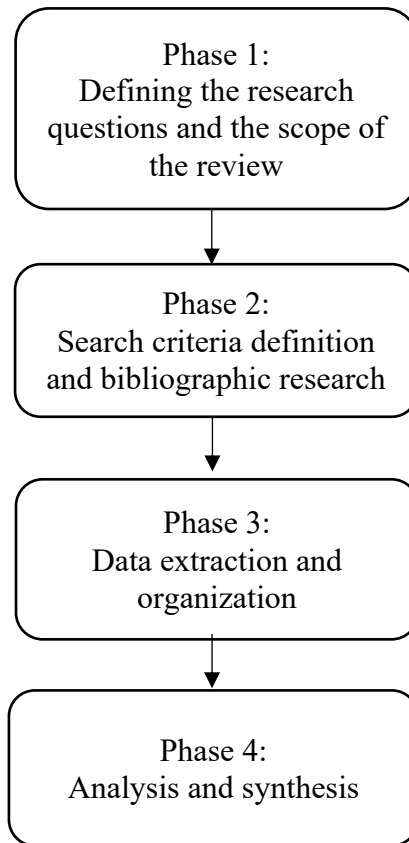
Hence, the aim of this study is twofold: on the one hand, to provide an overview of the fake news phenomenon by conducting a systematic review, with a particular focus on fake news' theoretical underpinnings and methodological issues related to them; on the other hand, to elaborate a fake news framework that could be helpful for better understanding fake news' dimensions, and managing motivational factors for their dissemination and potential effects.

Thus, this paper is organized as follows. First, it presents the research method used for conducting the systematic literary review. Second, authors provide an overview of the findings of this study. Finally, results are discussed and conclusions presented. The paper ends with illustrating limitations and recommendations for future research.

2. Research Method

In order to achieve our research objectives, a systematic review method has been adopted. Systematic review is a methodology used to identify existing studies, evaluate them, analyze data and report contributions to clarify what is not known (Denyer and Tranfield 2009). The study was divided into four phases (see Fig. 1).

Fig. 1: The research process

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┌─────────────────────────────┐
│        Phase 1:             │
│   Defining the research     │
│  questions and the scope of │
│        the review           │
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              │
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│        Phase 2:             │
│  Search criteria definition │
│  and bibliographic research │
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│        Phase 3:             │
│   Data extraction and       │
│      organization           │
└─────────────────────────────┘
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┌─────────────────────────────┐
│        Phase 4:             │
│   Analysis and synthesis    │
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Source: Personal elaboration

Phase 1. The phase 1 was focused on defining the research questions and the scope of this review. Indeed, the general purpose of this paper is to identify, categorize and analyze relevant streams of the literature with the aim to provide new insights about fake news phenomenon. To this end, we developed our study across the following research questions:

RQ1: What are the specific dimensions that distinguish fake news from real news?
RQ2: Which are motivations and the effects of fake news dissemination?

Phase 2. The second phase was focused on identifying inclusion criteria, that are the time period, key words, publications type and academic databases. EBSCO, Digger,

Google Scholar, ResearchGate and OPAC were searched between December 2019 and May 2020. As for the time period, we opted for the time frame 2010-2020 because most of the studies prior to 2010 refers to fake news as entertainment TV shows such as 'The Colbert Report' or 'The Daily Show'. At this stage, the term 'fake news' was used individually and combined with each of the following: 'definitions', 'dimensions', 'features', 'studies'. Reference lists of included studies were inspected to identify additional relevant studies. Furthermore, authors assessed the titles and abstracts of all retrieved references to identify studies that appeared to fulfill the inclusion criteria, and all potentially eligible articles were retrieved in full text. This research step has produced a large number of results, especially in the form of research papers and journal articles, which have been selected and analyzed. The analyzed contributions were both empirical and theoretical.

Phase 3. The phase 3 was focused on data extraction. Relevant data information were extracted by authors into a Microsoft Excel database and organized in a scheme with the aim to categorize authors, journals, year of publication, study type, fake news' definitions, dimensions, features, research questions, theories and limits of the analyzed studies.

In this Microsoft Excel worksheet, the 209 analyzed studies were organized into four disciplinary areas (see Table 1), i.e. technological science, communication, political science and psychology.

Table 1: Systematic literature review sample

Disciplinary areas	Technological science	Communication	Political science	Psychology
No. of analyzed articles	79	75	37	18

Source: Our elaboration

Phase 4. Finally, the phase 4 served to analyze the contributions and to elaborate a synthesis of our findings. At this step, we tried to provide a fake news framework which would fit with our research questions and integrate our results logically. To this end, first we elaborated clusters of fake news' dimensions emerged from the systematic review; second, we identify in literature which are both motivations and effects of fake news' creation and diffusion.

3. Findings

3.1. Dimensions of fake news (RQ1)

Fake news are not a new phenomenon, their origins date back to before the printing press and rumor probably existed as long as people have lived in groups. However, the first fake news date back to the invention of the press: the spread of literacy has made it possible to disseminate information rapidly and in this period the phenomenon has become more visible (Burkhardt 2017). In 1844, the American author Allan Poe wrote a hoax newspaper article saying that a balloonist crossed the Atlantic in just three days. Due to the details used by Allan Poe in the storytelling, many readers believed the news, which turned out to be false only when journalists failed to contact the balloonist. Therefore fake news have existed for a long time and the motivations that prompted the authors to write fake news are different. Some authors probably had good intentions, others intended to harm something or someone (Burkhardt 2017).

Today, as mentioned in the introduction, because of the digitization and especially social media, the fake news power has increased enormously (Albright 2017). Indeed, there has been numerous studies to investigate the link between social media and fake news (Iosifidis et al. 2020; Van Heekeren 2020; Zompetti 2019). Thanks to digital platforms, barriers to entry into the news industry no longer exist (the citizen journalism represents an example). Now, users can create websites and monetize through advertising-sponsored content. In addition, the use of social media has increased and the confidence in mass media ecosystem has fallen significantly. In fact, general trust in mass media collapsed to historic low in 2016, with the Trump election campaign (Lazer et al. 2018). For these reasons, the study of fake news is recent. Indeed, in literature there are several definitions of fake news.

Allcott and Gentzkow (2017, p. 213), defined 'fake news to be news articles that are intentionally and verifiably false, and could mislead readers. According to the authors, this definition includes intentionally fabricated news and many articles originated on satirical websites but could be misunderstood when viewed separately on social media feeds. As an example, the news of the Pope who in 2016 supported Trump's candidacy. In that occasion, the website was 'a fantasy news site. Most of the articles are satire or pure fantasy', but this disclaimer was not seen on the news page and the article was shared a one million times on Facebook.

The concept of 'fabricated information' is present also in the definition by Lazer et al. (2018, p. 1094): 'We define "fake news" to be fabricated information that mimics news media content in form but not in organizational process or intent'. Hence, fake news don't follow media standards and editorial processes to ensure the accuracy and credibility of information. In this sense, fake news are similar to misinformation and disinformation. Misinformation is the voluntary dissemination of fake news for the purpose of deceive people.

In 2017, in their study 'Defining Fake News' Tandoc et al. have examined 34 academic articles using the term 'fake news' between 2003 and 2017. The analyzed articles by authors are few because the phenomenon has been brought to the center of the academic debate by the Trump elections.

Hence, a large number of existing studies in the broader literature have examined the concept of the fake news. Based on the analyzed definitions, we identified the following dimensions of the fake news concept (see Table 2).

Table 2. Fake news' dimensions

Clusters' dimensions	Dimensions	Quote
Content	Anonymous source	Berghel (2017)
	Capacity to defame	Berghel (2017)
	Fabricated	Visentin et al. (2019) Mills et al. (2019) Chen and Cheng (2019) Pennycook et al. (2018)
	Intentionally false	Allcott and Gentzkow (2017) Visentin et al. (2019) Mills et al. (2019) Tandoc et al. (2017)
	Verifiably false	Allcott and Gentzkow (2017) Tandoc et al. (2017) Visentin et al. (2019)
	Wholly false	Bakir and McStay (2017)

Appearance	Emotional appeal	Farhall et al. (2019) Pasławska and Popielska-Borys (2018) Paschen (2019) Bakir and McStay (2017) Alba-Juez and Mackenzie (2019)
	Misleading by design	Gelfert (2018)
Purpose	To go viral	Bovet and Makse (2019) Brummette et al. (2018) Nelson and Taneja (2018) Roozenbeek and Van Der Linden (2019) Tandoc et al. (2018)
	Intention of deliberately disinform	Waisbord (2018) Paschen (2019)
	Intentionally deception	Rini (2017)

Source: Our elaboration

3.2. Fake News' Motivations and Effects (RQ2)

Communication studies that dealt with fake news (Albright 2017; Bakir and McStay 2018; Jacobson et al. 2015; Paschen 2019) consider the phenomenon as a problem both from a social and a democratic point of view on three fronts: (1) fake news produce erroneously informed citizens, who (2) are likely to remain erroneously informed in the 'echo chamber' (Pariser 2011) and (3) that will be emotionally outraged by the phenomenon. A research recently conducted by Bakir and McStay (2018) includes in fake news studies the concept of the 'echo chamber', which is due to a tendency of users to affiliate with individuals with the same political view and to create, consequently, homogeneous groups (Colleoni, Rozza and Arvidsson 2014). In fact, according to Jacobson, Myung and Johnson (2015), in the Internet, users tend to connect with people and organizations that reflect their opinions, limiting the opportunities to be exposed to different ideas. As for social networks of users who share similar beliefs on specific topics, Bovet and Makse (2019) argue that baseless statements or true information aligned with these beliefs have the same probability of spreading virally. Some authors (Di Franzo and Gloria-Garcia 2017) blame digital

platforms and social media such as Facebook, Google, etc. for facilitating the creation of 'echo chambers', where users are not exposed to other points of view and to allow the abruptly spread of fake news.

Furthermore, from this literature review it emerges that there are two main motivations behind the creation of fake news. The first is economic: news which go viral on social media can generate significant advertising revenue when users click on the original site. The second motivation is ideological and linked to propaganda: for example, during election campaigns some fake news creators try to advance the candidates they prefer (Allcott and Gentzkow 2017).

Hence, the social interaction is at the heart of the fake news debate: since the tools that the public relies on to evaluate truth, fairness and accuracy are designed on the base of the sentiment codification and the monetization of attention, the fake news issue cannot be resolved only in terms of content (Albright 2017). Indeed, long-term relationships of trust are worth more than the attention to the facts. According to Albright (2017), the news can in fact be contested politically, ideologically and emotionally. For this reason, it is important to aim for a trust relationship between journalistic organizations and the public. Basically, journalists are good persuaders who leverage the emotional aspect to arouse emotions in readers by influencing their rational judgments and opinions (Alba-Juez & Mackenzie 2019).

However, Cockcroft et al. have distinguished 'the emotion that tends to distort the truth of our perceptions from that which illuminates and deepens our understanding of it' (2014, p. 85). Accordingly, this emotional aspect plays a relevant role in fake news spreading. Indeed, Paschen (2019), in a brand communications study, investigates the emotional appeal of fake news using artificial intelligence and human contributions. According to the author, an emotional appeal in message could be more effective in persuading consumers against a rational message, 'fake news' titles are significantly more "emotional" and less neutral in sentiment than titles of real new articles' (Paschen 2019, p. 7). The research stream with focus on the role of emotions regarding the spread of fake news is broad. This has been successfully established as described by Pasławska and Popielska-Borys (2018). As a result, fake news operate on an emotional or affective process identified with a cognitive error. Emotions like fear, desire and fantasy play an important role in the dissemination of this news especially on social media. Moreover, the emotions dimension plays a key role in the elaboration of the 'discourse of fake news' (Farhall et al. 2019) used by politicians such as Trump to attack and discredit the media and rivals. Fake news, in fact, have a strong impact on the media ecosystem (Brumette et al. 2018) and significantly reduce trust in the media (Van Duyn and Collier 2018) which results in a disinformed society.

However, the consequences of the fake news dissemination not only concern the media, but also the brands. According to Obada (2019), the relationship between fake news and brands is complicated. Indeed, Fulgoni and Lipsman (2017) argue in this context brands can lose the control over their communication strategy, as the brands can interact

both directly and indirectly with fake news. First, brands can interact directly with fake news by becoming victims or purveyors; second, brands can interact indirectly with fake news because they can be linked by transferring images to either where fake news contaminates brands (Berthon et al. 2018). As a matter of fact, Visentin et al. (2019) empirically demonstrate the fake news' consequences to the brand advertised alongside the fake news. According to this study, consumer purchase intentions and word-of-mouth also suffer from the impact of fake news circulating on the Internet. Thus, this phenomenon has significant implications both for marketing strategies and corporate reputation (Fulgoni and Lipsman 2017).

Some scholars investigate technologies as tools for the adoption and development of "fake news detection" (Sirajudeen et al., 2017; Xu et al., 2019; Yun et al., 2018), which is the task of categorizing news along a continuum of veracity (Conroy et al., 2015) with the ability to predict a news being intentionally deceptive (Rubin et al., 2015).

According to Conroy et al. (2015), there are mainly two evaluation methods of news deception, which are based on different techniques: (1) the Linguistic Approach in which the content of potential fake news is extracted and analyzed according to an association of deceptive linguistic schemes; (2) the Network Approaches in which network information can be harnessed to provide aggregate deception measures. More recently, the fake news deception was analyzed by Okoro et al. (2018), who argue that currently there is a wide range of solutions to distinguish fake and real news, however the most effective detection process is based on an approach that involves both the use of machines and human efforts to resolve the issue. As regards the use of machines in fake news deception, an algorithm-based solution were proposed, which considers "a combined steps starting from the state of the sources platform of Internet web, the administrator of web portal, the contents of online fake news and the age of the content are considered to be scrutinized to prevent and filter fake news" (Sirajudeen et al., 2017, p. 4122).

Furthermore, the technology literature identifies other techniques to face the fake news problem. For instance, a Korean study conducted by Yun and Ahn (2018) proposes a fake news detection method using text mining and machine learning techniques. In this case, artificial intelligent represents a key element in detection.

4. Discussion and Conclusions

As discussed above, there is a lack of frameworks which outline motivations and effects of the fake news phenomenon. We seek to fill this gap by proposing such a framework for fake news in the digital environment, which gives a comprehensive overview of the phenomenon (see Fig. 2). Specifically, as mentioned, from this study it emerged that the motivations driving the creation of fake news are economic and/or ideological ones (Allcott and Gentzkow 2017). On the one hand, economic motivations push organizations to spread fake news with the aim of increasing traffic on a specific website by generating clicks; on the other hand, political organizations spread fake

news for propaganda. Logically, the consequences concern both the media ecosystem (i.e. disinformation) and companies. As for the companies, they could have reputational damages (Visentin et al. 2019) because of fake news about their products or services. Also, brands can lose the control over their communication strategy (Fulgoni and Lipsman 2017) especially on social media. At the same time, the spread of fake news can have negative impacts on users, who will thus be disinformed. In particular, social media are condemned by many scholars because they promote the formation of echo chambers. Finally, the other consequence linked to the disinformation of users concerns the trust in the media, which is less due to the spread of fake news.

Fig. 2: Fake news framework
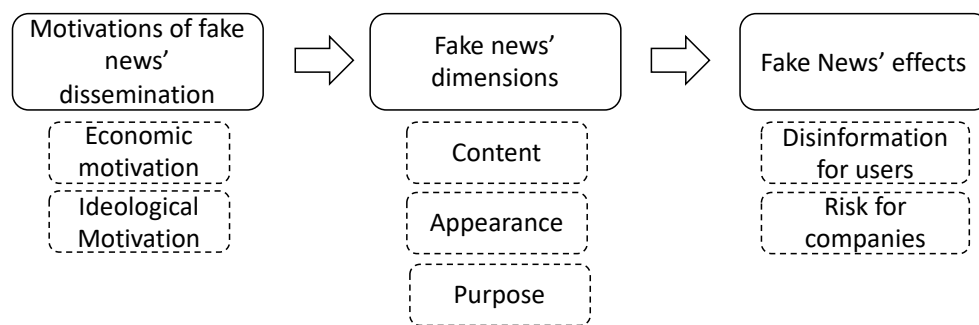
Source: Our elaboration

The aim of this research is to collect existing studies, evaluate them to provide an appropriate systematic literature review about the fake news phenomenon and to elaborate a fake news framework. Our results suggest several fake news' dimensions emerged from the intertwining of the analysis of multiple research streams. Indeed, findings are the result of an interdisciplinary study which took into consideration different literatures, with an in-depth analysis.

Overall, in answering our *RQ1*, we identified specific features and dimensions of fake news which we propose in form of three dimensions' clusters, i.e. content, appearance and purpose. In general, this study found that fake news in literature are identified as fabricated, false and with the capacity to defame. As for the appearance, fake news are misleading by design and have an emotional appeal. For example, title plays a crucial role in the spread of fake news: alarmist tones, a language capable of arousing strong emotions such as anger and fear facilitate the sharing of fake news. Paschen (2019), for example, investigates the emotional appeal of fake news concluding that could be more effective in persuading consumers against a rational message. Finally, the fake news purpose is to go viral as they can in this way disinform users and intentionally deceive. Indeed, fake news pollute the digital environment, and in particular social media, to the detriment of correct information for users. As demonstrated by the analysis of the literature by Tandoc et al. (2018), fake news is a serious danger to the media ecosystem

and above all threatens reliable journalistic information. In this scenario, the social media that favor the formation of the 'echo chamber' do not help users to compare different sources to verify the news. Indeed, social media repeatedly propose contents which the user already expects to read and which confirm his pre-existing beliefs. As a matter of facts, some psychological studies (Sindermann et al. 2020) have shown that, especially in the political sphere, fake news are consistent with pre-existing users' attitudes. In addition to the emotional appeal, the misleading use of the images represents a fake news feature. Indeed, Khaldarova and Pantti (2016) studied the narrative of Russian television in the crisis of Ukraine and the counter-narrative offered by the website Stopfake.org which tried to counter the misinformation and the exposure of misleading images about Ukraine.

Furthermore, in order to identify motivations and effects of fake news dissemination (*RQ3*), this study shows that economic motivations push organizations to spread fake news with the aim of increasing traffic on a specific website, and political organizations spread fake news for ideological motivations. Consequences concern both the media ecosystem, as the users are disinformed, and brands, as they could have reputational damages (Visentin et al. 2019) and can lose the control over their communication strategy (Fulgoni and Lipsman 2017).

This study has implications, particularly regarding suggestions for further research. Indeed, starting from the limitations of this paper, future research could empirically test the proposed framework. Although the originality of this paper lies in having put together different perspectives to provide a critical vision and fill a conceptual gap on the topic of fake news, this study does not aim to propose a new theory but outlines new links between dimensions, characteristics and effects identified by scholars. Future research should develop and test the hypotheses emerging from our theoretical framework. For example, if the consequences such as the reputational risks for companies due to fake news have already been tested empirically by other studies (Visentin et al. 2019), some dimensions identified in the literature from our analysis should be investigated. Particularly, the misleading use of images could be empirically tested through experiments which would investigate what are the characteristics that a misleading image should contain in order to be considered as fake news.

References

Alba-Juez, L. & Mackenzie, J. L. (2019). Emotion, lies, and "bullshit" in journalistic discourse: The case of fake news. *Iberica, 38*, 17-50.

Albright, J. (2017). Welcome to the era of fake news. *Media and Communication*, *5*(2), 87-89.

Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, *31*(2), 211-36.

Anthony, A., & Moulding, R. (2019). Breaking the news: Belief in fake news and conspiracist beliefs. *Australian Journal of Psychology, 71*(2), 154-162.

Bago, B., Rand, D. G., & Pennycook, G. (2020). Fake news, fast and slow: Deliberation reduces belief in false (but not true) news headlines. *Journal of Experimental Psychology: General*, Working Paper, 1-18.

Bakir, V., & McStay, A. (2018). Fake news and the economy of emotions: Problems, causes, solutions. *Digital Journalism, 6*(2), 154-175.

Berthon, P.R., Treen, E.R., & Pitt, L.F (2018). How Truthiness, Fake News and Post-Fact Endanger Brands and What to Do About It. *GfK Marketing Intelligence Review*, *10*(1), 18-23.

Borges-Tiago, T., Tiago, F., Silva, O., Guaita Martínez, J. M., & Botella-Carrubi, D. Online users' attitudes toward fake news: Implications for brand management. *Psychology & Marketing*, 1-14.

Bovet, A., & Makse, H. A. (2019). Influence of fake news in Twitter during the 2016 US presidential election. *Nature Communications, 10*(1), 1-14.

Brummette, J., Di Staso, M., Vafeiadis, M., & Messner, M. (2018). Read all about it: The politicization of "Fake News" on twitter. *Journalism & Mass Communication Quarterly, 95*(2), 497-517.

Burkhardt, J. M. (2017). History of Fake News. *Library Technology Reports*, *53*(8), 5-9.

Charness, G., & Dave, C. (2017). Confirmation bias with motivated beliefs. *Games and Economic Behavior, 104*, 1-23.

Cockcroft, R., Cockcroft, S., Hamilton, C.& Hidalgo Downing, L. (2014). *Persuading People: An Introduction to Rhetoric*. New York: Palgrave Macmillan.

Colleoni, E., Rozza, A., & Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political orientation and measuring political homophily in Twitter using big data. *Journal of Communication, 64*(2), 317-332.

Conroy, N. J., Rubin, V. L., & Chen, Y. (2015). Automatic deception detection: Methods for finding fake news. *Proceedings of the Association for Information Science and Technology, 52*(1), 1-4.

Denyer, D., & Tranfield, D. (2009). Producing a systematic review. In D. A. Buchanan & A. Bryman (Eds.). *The Sage handbook of organizational research methods*, p. 671–689, Newbury: Sage Publications.

Di Franzo, D., & Gloria-Garcia, K. (2017). Filter bubbles and fake news. *XRDS: Crossroads, The ACM Magazine for Students, 23*(3), 32-35.

European Commission (2020). Tackling online disinformation. https://ec.europa.eu/digital-single-market/en/tackling-online-disinformation (Access on 30 July 2020)

Farhall, K., Carson, A., Wright, S., Gibbons, A., & Lukamto, W. (2019). Political Elites' Use of Fake News Discourse Across Communications Platforms. *International Journal of Communication, 13*, 23.

Fulgoni, G. M., & Lipsman, A. (2017). The downside of digital word of mouth and the pursuit of media quality: How social sharing is disrupting digital advertising models and metrics. *Journal of Advertising Research, 57*(2), 127-131.

Gelfert, A. (2018). Fake news: A definition. *Informal Logic*, *38*(1), 84-117.

Grinberg, N., Joseph, K., Friedland, L., Swire-Thompson, B., & Lazer, D. (2019). Fake news on Twitter during the 2016 US presidential election. *Science, 363*(6425), 374-378.

Guess, A., Nyhan, B., & Reifler, J. (2018). Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 US presidential campaign. *European Research Council*, *9*(3), 1-49.

Hennefeld, M. (2017). Fake news: From satirical truthiness to alternative facts. *New Politics*, http://newpol.org.

Iosifidis, P., Nicoli, N., & Flew, T. (2020). The battle to end fake news: A qualitative content analysis of Facebook announcements on how it combats disinformation. *International Communication Gazette, 82*(1), 60-81.

Jacobson, S., Myung, E., & Johnson, S. L. (2016). Open media or echo chamber: The use of links in audience discussions on the Facebook pages of partisan news organizations. *Information, Communication & Society, 19*(7), 875-891.

Jamieson, K., & Cappella, J. (2008). *Echo Chamber: Rush Limbaugh and the Conservative Media Establishment*. New York and Oxford: Oxford University Press.

Jang, S. M., & Kim, J. K. (2018). Third person effects of fake news: Fake news regulation and media literacy interventions. *Computers in Human Behavior, 80*, 295-302.

Kahan, D. M. (2017). *Misconceptions, misinformation, and the logic of identity-protective cognition*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2973067

Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., Braman, D., & Mandel, G. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change, 2*(10), 732-735.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, *53*(1), 59-68.

Khaldarova, I., & Pantti, M. (2016). Fake news: The narrative battle over the Ukrainian conflict. *Journalism Practice, 10*(7), 891-901.

Lazer, D. M., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., ... & Schudson, M. (2018). The science of fake news. *Science*, *359*(6380), 1094-1096.

Mills, A. J., Pitt, C., & Ferguson, S. L. (2019). The relationship between fake news and advertising: brand management in the era of programmatic advertising and prolific falsehood. *Journal of Advertising Research*, *59*(1), 3-8.

Obadă, D. (2019). Sharing Fake News about Brands on Social Media: a New Conceptual Model Based on Flow Theory. *Argumentum: Journal the Seminar of Discursive Logic, Argumentation Theory & Rhetoric*, *17*(2), 144-166.

Okoro, E. M., Abara, B. A., Umagba, A. O., Ajonye, A. A., & Isa, Z. S. (2018). A hybrid approach to fake news detection on social media. *Nigerian Journal of Technology, 37*(2), 454-462.

Pariser, E. (2011). *The filter bubble: what the Internet is hiding from you*. UK: Penguin.

Pasławska, P., & Popielska-Borys, A. (2018). Phenomenon of fake news. *Social Communication, 4*(1), 136-140.

Polletta, F., & Callahan, J. (2019). *Deep stories, nostalgia narratives, and fake news: Storytelling in the Trump era*. In Politics of meaning/meaning of politics, p. 55-73, Cham: Palgrave Macmillan.

Rubin, V. L., Conroy, N. J., & Chen, Y. (2015). Towards news verification: Deception detection methods for news discourse. In *Hawaii International Conference on System Sciences*, 5-8.

Shu, K., Sliva, A., Wang, S., Tang, J., & Liu, H. (2017). Fake news detection on social media: A data mining perspective. *ACM SIGKDD Explorations Newsletter*, *19*(1), 22-36.

Sindermann, C., Cooper, A., & Montag, C. (2020). A short review on susceptibility to falling for fake political news. *Current Opinion in Psychology*, In press.

Sirajudeen, S. M., Azmi, N. F. A., & Abubakar, A. I. (2017). Online Fake News Detection Algorithm. *Journal of Theoretical & Applied Information Technology, 95*(17), 4114-4122.

Sloman, S. A., & Rabb, N. (2019). Thought as a determinant of political opinion. *Cognition, 188*, 1-7.

Spohr, D. (2017). Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review*, *34*(3), 150-160.

Tandoc Jr, E. C., Lim, Z. W., & Ling, R. (2018). Defining "fake news" A typology of scholarly definitions. *Digital journalism*, *6*(2), 137-153.

Van Duyn, E., & Collier, J. (2019). Priming and fake news: The effects of elite discourse on evaluations of news media. *Mass Communication and Society, 22*(1), 29-48.

Van Heekeren, M. (2020). The Curative Effect of Social Media on Fake News: A Historical Re-evaluation. *Journalism Studies, 21*(3), 306-318.

Vargo, C. J., Guo, L., & Amazeen, M. A. (2018). The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016. *New media & society, 20*(5), 2028-2049.

Warner-Søderholm, G., Bertsch, A., Sawe, E., Lee, D., Wolfe, T., Meyer, J., … Fatilua, U. N. (2018). Who trusts social media? *Computers in Human Behavior, 81*, 303-315.

Wells, J. R., Winkler, C. A., & Weinstock, B. (2019). Facebook Fake News in the Post-Truth World. *Harvard Business School*, Working Paper, 1-32.

Xu, K., Wang, F., Wang, H., & Yang, B. (2019). Detecting fake news over online social media via domain reputations and content understanding. *Tsinghua Science and Technology, 25*(1), 20-27.

Yun, T. U., & Ahn, H. (2018). Fake news detection for Korean news using text mining and machine learning techniques. *Journal of Information Technology Applications and Management, 25*(1), 19-32.

Zompetti, J. P. (2019). The fallacy of fake news: exploring the commonsensical argument appeals of fake news rhetoric through a gramscian lens. *Journal of Contemporary Rhetoric, 9*(3-4), 139-159.