

Chapter 29

Statistical Methods for Conducting the Ontology and Classifications of Fake News on Social Media

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ABSTRACT

Fake news and its impacts are serious threats to social media in recent time. Studies on the ontology of these problems reveal that serious cybercrimes such as character assassination, misinformation, and blackmailing that some people intentionally perpetrate through social networks significantly correlate with fake news. Consequently, some classical studies on social anthropology have profiled the problems and motives of perpetrators of fake news on political, rivalry, and religious issues in contemporary society. However, this classification is restrictive and statistically defective in dealing with cyber security, forensic problems, and investigation of social dynamics on social media. This chapter exhaustively discusses the above issues and identifies solutions to challenges confronting research community in the above domain. Thematic analysis of responses of certain respondents reveal three new classifications of fake news that people propagate on social media on the basis of mode of propagation, motives of perpetrators, and impacts on victims.

INTRODUCTION

Fake news is an interdisciplinary problem that is dated back to ancient times in contemporary literature (Lazer et al, 2018; William, 2009). However, the recent dimension of the problem on social media and the depth of its impacts on legitimate news, news' publishers, victims and senders of fake news are serious concerns across the globe. Besides, fake news is seriously threatening the mind-set of people and genuine news on televisions, rmedia and social media. Crime studies have revealed that fake news has been used to commit serious cybercrimes like extortion, character assassination, misinformation,

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swindling and blackmailing of highly dignified personalities on social media (Kohei, 2017; Dominic, 2017). Hence, the quality of the news that young and aged people originate and spread on social media platform is frequently criticized and significant numbers of them are suspected to be unreliable news.

Fundamentally, fake news is a complex issue to foretell, detect and stop for a number of reasons (Pennycook and Rand, 2019; Joshua et al, 2019). Fake news may signify a sequence of logically and deliberately fabricated lies that perpetrators spread among their group members (Allcott and Gentzkow, 2017). Findings suggest that perpetrators can circulate fake news on outbreak of epidemic diseases, vaccines, scientific innovations, technological breakthroughs, insurgency, products and services to cite a few. Consequently, feelers begin to contemplate whether the recipients of fake news on social media endeavour to ponder and consider the ontology of the news before they continue to spread the news to other people. Apart from the discrepancy in the underlying motives of perpetrators of fake news, it is unfortunate that several studies have failed to clarify the hierarchical and logical relationships of the entities that encourage fake news to widely spread on social media (Lazer et al, 2019). For these reasons, fake news on social media is an emerging problem across the globe in a recent survey.

Furthermore, research has also identified brands of fake news that are due to unintentional mistakes, overzealous in journalism and errors inherited from the secondary sources and originator(s) or primary source(s) of the news (Joanna, 2017). Fake news has also been correlated with misconception, rumor, anticipated and incorrect personal views of the sources and originators of the news (Kohei, 2017). Unfortunately, Lazer et al (2018) and Joshua et al (2019) have shown that fake news on social media quickly spread to distance audience but all the underlying motives of its perpetrators and the severity of its impacts on the victims are often contestable in most studies. According to Watts (2018), some perpetrators create fake news to confuse, allure and manipulate readers, certain audience and laypeople. Specifically, Dominic (2017) and classical social anthropologists believe that intruders, propagandists, corporate firms, agencies, activists, terrorists and politicians have disseminated fake news via social media at different occasions in the last two decades.

Moreover, the conceptualization of the significance of capturing in-depth stories, the need to deeply research into public records and the challenges in conducting face-to-face interviews with primary sources of information have led to the development of a paradigm shift in the method, assessment, interpretation, organization and writing of investigative reporting in journalism across the globe. From experience, founders of social media generally designed them for information sharing. Facebook is designed for sharing photos, videos and messages, Twitter is designed for sharing breaking news such as political news, sports and other forms of entertainment, YouTube is designed for downloading and sharing of videos and music with friends. Instagram is designed for video-sharing while WhatsApp is designed for fast sharing of messages and calls. For these reasons, Joshua et al (2019) further submit that most journalists derive their stories from social media platforms of some celebrities, reputable politicians and corporate websites to complement the conventional methods of using face-to-face, interviews and eye witness to explore scenes and events. Nonetheless, the above approaches can lead to serious legal tussles between the victims and the publishers of news that derogate governments and high profile nationalities especially if the stories eventually turn out to be counterfeit and fallacies.

Social and forensic experts have argued that some intruders deliberately create fake news on social media to ridicule, destroy, degrade, expose, humiliate, impoverish and ruin their targets or competitors. Consequently, the central issue is that studies on the impacts of fake news have described fake news as a kind of cybercrime that demands urgent attentions. Some journalists and reputable organizations have

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