

Prophets and Loss: How “Soft Facts” on Social Media Influenced the Brexit Campaign and Social Reactions to the Murder of Jo Cox MP

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This article examines “soft facts” about security issues in the 2016 Brexit referendum campaign. Soft facts arise when information provenance is uncertain, and are forms of malleable and contingent knowledge, such as rumors, conspiracy theories, and propaganda. There is a growing appreciation that digital communications environments are especially conducive to the dissemination of these kinds of information. Informed by empirical data comprising forty-five thousand nine hundred and fifty-seven data points collected by monitoring social media before and after the UK Brexit referendum campaign (June 16–October 12, 2016), the analysis examines how and why a series of soft facts concerning Brexit were mobilized. By developing the concept of “digital prophecy,” the article explores how influence is exerted by online prophets who were connecting current events to past grievances, to advance negative predictions about the future. This starts to capture the tradecraft of digital influencing, in ways that move beyond the structural topologies of communication networks. In policy terms, the analysis reminds us of the need to attend not just to how influence is achieved through fake news (e.g., using social media bots to amplify a message), but also why influence is sought in the first place.

KEY WORDS: Brexit, conspiracy theories, fake news, far-right, social media, terrorism, Twitter

本文检验了一系列有关2016英国脱欧公投运动中安全问题的“软事实”。当信息来源尚不确定时，软事实便随之出现，它由可塑和偶然的知识组成，例如传言、阴谋论和媒体宣传。越来越多的看法认为，数字传播环境尤其有利于此类信息的传播。通过检验英国脱欧公投运动前后（2016年6月16日至同年10月12日）社交媒体所收集的实证数据（包括45,957个数据点），本文检验了有关英国脱欧的一系列软事实是如何组织起来的，以及原因是什么。通过提出“数字预言”这一概念，本文探索了那些将当前事件和过去不满联系在一起的网络预言家们如何充分利用影响力，以期提升对未来的消极预测。因此本文首先通过超越传播网络结构性拓扑的方式，获取了数字影响中的谍报。用政策术语解释，分析结果提示研究人员：不仅需要了解影响力是如何通过虚假新闻（例如使用社交媒体机器人来扩大信息）得以实现的，还需研究达到这些影响力的原因是什么。

关键词： 恐怖主义，社交媒体，英国脱欧，虚假新闻，阴谋论，推特，极右翼

Este artículo examina los “soft facts” (hechos suaves) en los temas de seguridad en la campaña del referéndum de Brexit de 2016. Los soft facts aparecen cuando la proveniencia de la información es

incierta, y hay formas de conocimiento maleable y contingente como los rumores, teorías de conspiración y propaganda. Existe una creciente apreciación de que los entornos de las comunicaciones digitales son especialmente propicios para la difusión de este tipo de información. Al informarse por datos empíricos compuestos por 45.957 puntos de información recolectados al monitorear las redes sociales antes y después de la campaña del referéndum de Brexit en Reino Unido (16 de junio a 12 de octubre de 2016), el análisis examina cómo y por qué una serie de soft facts que tienen que ver con el Brexit fueron movilizados. Al desarrollar el concepto de “profecía digital” el artículo explora cómo la influencia es ejercida por profetas en línea que estaban conectando eventos de la actualidad con malestares pasados para presentar predicciones negativas acerca del futuro. Esto empieza a definir el oficio del “digital influencing” en formas que van más allá de las topologías estructurales de las redes de comunicación. En términos de políticas, el análisis nos recuerda la necesidad de poner atención no solo a cómo se logra la influencia a través de las fake news (por ejemplo: utilizar bots en las redes sociales para amplificar un mensaje), sino también a por qué se busca en un principio la influencia.

PALABRAS CLAVES: Brexit, fake news, redes sociales, terrorismo, teorías de conspiración, Twitter, extrema derecha

Introduction

Innumerable confusions and a profound feeling of despair invariably emerge in periods of great technological and cultural transitions. Our “Age of Anxiety” is, in great part, the result of trying to do today’s job with yesterday’s tools—with yesterday’s concepts.

(McLuhan & Fiore, 1967, pp. 8–9)

For those studying the causes and consequences of the information age, Marshall McLuhan is accorded almost prophetic status. This reflects the prescience of his insights about how a changing communications architecture would induce profound shifts in the social organization of institutions and interactions. Contrary to the boundless enthusiasm of some, McLuhan was sufficiently perceptive to recognize that not all the consequences would be beneficent (neither would they be all bad).

Among contemporary scholars, there is consensus that the new information ecology is having disruptive and transformative effects across the institutional and interactional orders of contemporary social life. Summarizing these intellectual currents, Lynch (2016) and Couldry and Hepp (2016) have asserted that the infiltration of social media platforms into everyday life has contributed to the “deep mediatization” of social order. This rise and permeation of Big Data as a socio-technical, cultural, and scholarly phenomenon, has been found to rest upon an interplay between technology, analysis, and myths (Boyd & Crawford, 2012) that impacts institutions (Pasquale, 2015), identities (Marwick, 2013), politics (Margetts, John, Hale, & Yassera, 2016), and behaviors (Scott, 2015). Advanced analytical algorithms operating across these domains are functioning as powerful “instruments of perception” steering normative judgments about which social issues to attend to (Amoore & Piotukh, 2015).

Contemporary scholarship has generated more insight into the dynamics and mechanics of algorithmic regulation, so there has been mounting interest in the exercise of digital influence and persuasion by "opinion leaders" (Rogers & Cartano, 1962), "everyday influentials" (Katz & Lazarsfeld, 1955, p. 138), or "hidden persuaders" (Packard, 1957) empowered and emboldened by the new information environment (Gorry & Westbrook, 2009). But what renders the topic of "digital influencing" especially intriguing is how social media blends the power of interpersonal persuasion with the reach of mass media (Fogg, 2008, p. 23). This has been afforded increased impetus by the increasing use of social bots to amplify the reach and travel of messages, absent any interpersonal and human element (Bessi & Ferrara, 2017; Howard & Kollanyi, 2016). Several studies have applied social network analysis techniques to large social media data sets to identify how key nodes disseminate information across these communications networks (Benkler, Faris, & Roberts, 2018). However, Centola (2015) has evidenced that while "weak ties" may promote information dissemination, behavior change is far more likely when any message is reinforced by those with stronger interpersonal ties to the subject.

Accompanying this increasing interest in digital influencing, has been mounting consternation about the possibility for the misdirection of public attitudes and opinion, through exposure to false or misleading information. In popular and political discourse considerable attention has been paid to the concept of "fake news" as part of the broader phenomenon of "posttruth" or "postfactual" politics (Allcott & Gentzkow, 2017). Such worries became especially pronounced in the campaign leading up to the UK's Brexit Referendum held on June 23, 2016 (White, 2016). It was a political process marked by highly contested "truth-claims" concerning Britain's future membership of the European Union. The murder of pro-EU MP Jo Cox approximately one week before the vote triggered a further round of soft facts, many circulating on social media as part of a chaotic public sense-making process.

Informed by a data set collected by monitoring social media around this episode, this article develops three principal insights:

- Empirically, it attends to the sense-making role of soft facts circulating on social media in the aftermath of high-profile terrorist crimes. This contributes to our understanding of social reactions to terrorism; a relatively neglected topic when compared with the study of radicalization.
- Second, the analysis sets out how a small number of "digital prophets" played a key role in propagating several soft facts about Brexit and the murder. The conceptual innovation here is that while a lot of social network analysis studies of communication have identified the presence of these "nodal" roles, they have not disaggregated how they accomplish their influencing work. The concept of "prophecy"—defined as connecting a current crisis to a past grievance narrative, in order to predict future consequences—starts to do this.
- More generally, the article makes a distinctive contribution to mapping out how the new media ecology is re-shaping social institutions and interactions, and in

particular how forms of influence are performed online. Furthermore, it illuminates how “the digital traces of social action” make it possible for researchers to study previously imperceptible phenomena.

The next section summarizes the extensive literature on rumors, propaganda, and conspiracy theories, showing how they function as soft facts. This is followed by an overview of the methodology and naturalistic research design. This frames the introduction of the empirical data relating to the murder of MP Jo Cox in the midst of the Brexit campaign. In turn, this develops into a more focused disquisition upon the role and techniques of digital prophets. We conclude, by turning to consider the policy implications.

Understanding Soft Facts

Concerns about the political and social impacts of a “polluted” media ecosystem, and its tendency to propagate misinformation and disinformation, are increasingly well documented (Kakutani, 2018; Margetts et al., 2016). To capture some of the complexities engaged by these processes we introduce “soft facts” as an umbrella concept to illuminate the family resemblances shared by a number of established, related concepts, specifically: rumors, conspiracy theories, fake news, and propaganda. This conceptual maneuver is required owing to how, while previous generations of scholars could isolate and fix upon one or other of these phenomena, in today’s information environment they routinely intermingle and interact. And especially in the aftermath of high-profile crisis events, such as terror attacks, they mutually create the conditions for each other (Innes, Roberts, Preece, & Rogers, 2016).

Rather than re-purposing established concepts originally fitted to a very different communications ecosystem, we need tools that reflect the particular features of contemporary information environments. For example, propaganda studies is currently divided as to whether a communicative action involved has to be purposive (Jowett & O’Donnell, 2012) or not (Stanley, 2015) to count as propaganda. Layered on top of which are more subtle inflections. Notably, Woolley and Philip (2017, p. 6) refresh of propaganda theory defines “computational propaganda” as the “use of algorithms, automation and human curation to purposefully distribute misleading information over social media networks.” Others, however, talk of “network propaganda” to convey how underpinning social and political dynamics exert a structuring influence upon communication patterns (Benkler et al., 2018). Moreover, the latter study makes the important point that effective propaganda is not always wholly false or misleading. Ultimately, there is a risk in reworking established concepts to encompass new arrangements, if they are stretched so far that they lose their original conceptual essence.

In addition to these intrafield contests about who possesses the “correct” definition, there are also interfield tensions that can be circumvented by introducing a new conceptual frame. Students of rumors, conspiracies, and propaganda typically invoke their own preferred lexicon and concepts. The value

of the term "soft facts" is that it tilts the conceptual focus away from the intents or purposes of the communicating actor, and more to the unit of information being communicated. In a decentered media ecosystem, this shift helps capture how different audience segments may construct different interpretations of the same material (Couldry, 2002). What counts as one person's propaganda or conspiracy theory may be another's "suppressed truth." Moreover, perceptions may change over time. A story or interpretation that was initially dismissed as a conspiracy theory can turn out to be a fairly accurate rendering of what happened. As noted above, the critical issue is not the ultimate truthfulness or falsity of the information, but whether people treat it as such. This is a quality that is also coherent with growing evidence from social psychology—that is, that knowledge claims are more persuasive when they "go with the grain" of an individual or group's existing beliefs and value structures.

Soft facts can be defined as imperfect knowledge, where reliability and validity cannot be firmly established, as opposed to the more routinely invoked notion of "hard" (verifiable) facts (Innes, 2014). Soft facts typically "fill the gaps" in public understanding, especially in the absence of "harder" authenticated information. By comparison, rumors are more provisional and unstable forms of knowledge that contain "newer" and more "open" information, and conspiracy theories are more traditional and repetitive narratives. Digital prophecies, on the other hand, are a novel concept defined here as predictions for the "future," which function as reactions to uncertain and troubling events, and seek to interpret their salience and significance.

While there has been a rapid growth in contemporary interest in misinformation and disinformation, the academic study of rumors and conspiracy theories (and allied constructs such as propaganda) has been much longer-standing. Indeed, there is now a sprawling multidisciplinary literature that has attributed a range of effects to these forms of communication, across a range of different social problems. To frame and inform our analysis, we have organized our review of this mass of material around five key vectors: concepts, causes, conditions, chronology, and consequences.

Concepts

Early psychological definitions saw rumors as propositions for belief about topics of relevance that circulated without official and factual verification (Allport & Postman, 1946; Knapp, 1944). Contrastingly, sociologists depicted them as "collective problem-solving activities" (Shibutani, 1966). Early studies of conspiracy theories defined them as irrational and unscientific (Butter & Knight, 2016), forms of clinical sickness (Hofstadter, 1964), or collective delusional ideations (Groh, 1987, p. 2). Later work, however, has taken into consideration the sociological formation of belief and the social context within which it arises (Waters, 1997).

Several more recent studies emanating from computer science have adopted and adapted these notions of "misinformation," albeit framed differently from their earlier sociological and social-psychological predecessors. Rumor is treated as a

unit to be analyzed and quantified (Qazvinian, Rosengren, Radev, & Mei, 2011), rather than as an interpretative process. Many recent approaches have focused upon rumor detection and dissemination (Friggeri, Adamic, Eckles, & Cheng., 2014; Gupta, Kumaraguru, Castillo, & Meier, 2014) as opposed to impact.

Causes

Various explanations for how and why soft facts thrive under certain conditions have been offered, including that they interpret ambiguous events (Shibutani, 1966), reduce informational complexity and cognitive dissonance (Festinger, 1957), allow for the retention of a personal sense of control by lowering the perception of randomly distributed risk (Sullivan, Landau, & Rothschild, 2010), and that they help maintain more positive self-concepts by evaluating negative information more critically (Allport & Postman, 1946). These are qualities and attributes that are easily amplified by the confirmation biases and informational cascades that occur daily on social media (Friggeri et al., 2014), thus increasing group polarization (Anagnostopoulos et al., 2015).

Conditions

Traditionally, the two central conditions supporting rumor propagation were held to be the ambiguity of the situation and the importance of the rumor in the lives of individuals (Allport & Postman, 1946). Later work expanded these to include other psychological variables, including general uncertainty/cognitive unclarity (Festinger, 1957), source and content ambiguity (Oh, Agrawal, & Rao, 2013), outcome-relevant involvement (Rosnow, 1991), personal anxiety, credulity, and externalization of control.

In terms of belief in conspiracy theories, work in social psychology has identified a number of underlying conditions, such as anomie and alienation (Goertzel, 1994), feelings of powerlessness (Hofstadter, 1964), “enemyship” (Sullivan et al., 2010), the perceived morality of authorities (van Prooijen & Jostmann, 2013), and the social-psychological mechanism of projection (Douglas & Sutton, 2011). Individually and collectively these traits have been found to render individuals more likely to invest in conspiracy theories.

Chronology

Modern research on rumors and conspiracy theories can be traced back to the psychological and social-psychological formulations of scholars such as Allport and Postman (1946, 1947) and Hofstadter (1964). Studies in sociology and anthropology developed as a reaction or a continuation of their influential work (Buckner, 1965; Peterson & Gist, 1951; Rosnow, 1991; Shibutani, 1966). Thematic shifts in the study of rumor have largely refracted the concerns of the historical moment in which the researcher was situated. While wartime scholars were primarily concerned with sinister and demoralizing soft facts, during the 1960–90s,

focus alighted upon rumors inciting social unrest, ethnic tension, and aggression (Davis, 1985; Knopf, 1975). Today, more importance is placed on investigating the veracity of digital soft facts and finding technical solutions for mediating widespread misinformation online (Gupta et al., 2014). In contrast, this article investigates the power of unconfirmed—rather than strictly “false”—soft facts to exercise certain types of digital influence.

Consequences

The World Economic Forum (Howell, 2013) situated digital misinformation at the center of a constellation of technological and geopolitical risks, ranging from terrorism to cyberattacks and global governance failure. This reflects how unsubstantiated soft facts can have serious consequences for public opinion regarding important matters such as health (Mitra, Counts & Pennebaker, 2016), environmental politics (Douglas, Sutton, Jolley, & Wood, 2015), and people’s understanding of political reality (Garrett, 2011). It has been emphasized that some conspiracy theories, such as those about antivaccinations, can have exceptionally detrimental and even lethal consequences (Poland & Jacobson, 2011). Rumors, particularly in the context of security events, can exacerbate conflict between groups, incite and justify violence, and inhibit its resolution (Greenhill & Oppenheim, 2017).

Methodology and Data

During the Brexit Referendum campaign, two consecutive episodes functioned as “epicenters” for the circulation of multiple soft facts: the aftermath of the murder of Jo Cox MP; and the lesser known “#Usepens” conspiracy about possible voting fraud. Data on both episodes were collected via Sentinel, a research-grade social media monitoring and analysis platform, which retrieves data through Twitter’s Streaming API (Preece et al., 2018). Sentinel’s data collection is organized around a series of “channels” comprising search terms (such as “Jo Cox” and “Brexit”), which act as filters, screening out irrelevant material and capturing units of thematically relevant social media traffic. For the purposes of this paper Sentinel functioned solely as a data collection tool, and analyses were conducted separately.

Applied to the Brexit campaign, we collated a data set of forty-three thousand nine hundred and fifty-seven tweets mentioning the key terms “Jo Cox” and “Brexit” between June 16–24, 2016. In addition, a second smaller data set was retrospectively compiled about the “#Usepens” episode comprising one thousand one hundred and fourteen tweets, based on advanced Twitter searches for the key words “pens,” “pencils,” and “Brexit” in different combinations, and capturing data manually. Analysis of the data blended qualitative dissections of tweet contents with a network analysis of the reposting activities within the wider corpus. Data associated with each episode were subject to in-depth content analysis to identify and describe the soft facts being propagated.

A key innovation of this article is the adoption of a “naturalistic” research design. Many studies of rumors and conspiracies have been based on single case

designs—selecting a particular soft fact, and tracking its emergence and adaptation over time. In contrast to which, our interest was in capturing how a range of complementary and/or competing soft facts coalesced around the Brexit campaign in these two consecutive episodes. Specifically, the “#Usepens” case helps to empirically illuminate the Brexit conflict in terms of attitude polarization by Leave and Remain affiliates. This ideological division was amplified by the murder of pro-EU MP Jo Cox approximately one week before the vote, which influenced the formation and propagation of soft facts, consistent with earlier observations that “each rumour has its own public” (Allport & Postman, 1947).

Integrating network analysis methods quantifies the impact of specific individuals on the tone of the social media conversation over time, thus delineating several key interacting “thought communities.” These afford insights into the degree to which communities within the corpus are isolated from one another and in effect form “echo chambers,” the amount of activity each community performs at different moments in time, and whether these communities have a key node that functions as the source of the majority of onward distribution by a “following.” It is these key nodes that we believe may demonstrate the roles performed by digital prophets, functioning as authoritative sources for their respective communities.

Positioned in this way, the analysis illuminates how soft facts circulating on social media before and after the 2016 referendum vote was not an isolated pattern of social reaction, but should be understood as illustrative of the dynamics and mechanics of postfactual politics. Furthermore, it showcases how such communication dynamics shape the definitions of the situation that arise in the aftermath of troubling and unsettling events.

“#USEPENS”

Prior to the referendum, a conspiracy theory developed around the belief that the vote would be rigged in favor of Remain by the provision of pencils in the voting booths so that the voting cross could be rubbed off the ballot papers. As Twitter users started to express concern about this possibility, the hashtag “#Usepens” was introduced advocating that voters use pens instead of pencils:

Don't take any chances today guys. Take 3/4 pens. DO NOT USE A PENCIL AS THEY WILL CHANGE YOUR VOTE (10:27, June 23, 2016).

The “establishment,” the Remain campaign and its supporters were recurrently portrayed as corrupt, malevolent, and with a secret agenda:

Northamptonshire council is having problems with people using pens to vote. What is the government hiding? #usepens (14:02, June 23, 2016).

Police came to Chichester polling station called by REMAIN side to stop me LENDING my PEN to all voters.#fraud (12:13, June 24, 2016).

These sentiments were mirrored in a YouGov poll suggesting that 46 percent of Leave supporters believed that the referendum would be rigged, and 28 percent that MI5 was working with the UK government to try and stop Britain leaving the EU (YouGov, 2016). On June 23, the Manchester Evening News reported that scores of voters in Greater Manchester were taking their own pens to the polling stations and refusing to use the pencils provided (Fitzgerald, 2016).

We collected 1,114 tweets on the "#Usepens" conspiracy theory tweeted on June 22–23, 2016. Following qualitative coding, three modes of behavior were derived from the data. First, some Twitter users simply expressed "concern and suspicion" over the fact that only pencils were provided at polling stations:

So today we vote for the future of OUR country,so why is it vote stations are using pencils NOT PENS!!. Anybody else think that's dodgy??? □ (11:54, June 23, 2016).

I keep reading about taking a black pen, I have always used what is supplied but wondering if to take my own now (7:39, June 23, 2016).

Others "urged" their fellow voters to take their own pens:

BTW, everyone make sure you take your own pens to vote and DONT USE A PENCIL OR ANYTHING THEY GIVE YOU (08:17, June 23, 2016).

Finally, a small number of Twitter users were not only promoting the use of pens online, but were physically handing out pens to voters in front of polling stations:

@ProudPatriot101 I used my vote leave pen to mark my ballot paper and then stood outside and handed out more pens! (14:53, June 23, 2016).

Differentiating between these three response modes illuminates how a single conspiracy theory can induce a spectrum of behaviors, as not all adherents reacted in the same way. Moreover, the #Usepens episode resonates with earlier theoretical work on the functionality of conspiracy theories to maintain a simplified ordering of reality (Groh, 1987). The conspiracy content externalized tangible and comprehensible enemies—that is, the "conspirators"—in addition to boosting perceptions of personal control through providing a "solution." Bringing their own pens inserted control back into the hands (literally) of Leave supporters.

Although not especially consequential in terms of its social impacts, the "use pens" conspiracy theory illuminates the vulnerability of social media platforms to the propagation of soft facts. But more intriguing was the subsequent finding that individuals who were active in spreading the "use pens" conspiracy online, also engaged in spreading rumors and conspiracies following the murder of Jo Cox MP. Seventy-six individuals were identified as propagating soft facts relating to both

cases, of whom thirty-one distributed more than one soft fact, and ten distributed more than five such messages.

Rumor and Conspiracy Following Jo Cox's Murder

Jo Cox was a British MP who openly supported the United Kingdom remaining in the European Union. Her murder by Thomas Mair on June 16, approximately one week before the Referendum vote, amplified the already heightened ideological polarity between the Leave and Remain campaigns and supporters. From a database comprising more than forty-four thousand tweets, a data set of seven thousand one hundred original messages from the first day of the incident was selected for detailed qualitative analysis. This reflected how, similar to the immediate aftermath of the murder of Lee Rigby in 2013, a public sense-making process was enacted via social media, prior to any official statement by the police (Innes et al., 2016). On June 16, very little authoritative information coming from the police investigation was available to the public to convey what had happened. Instead, the ambiguity of the situation created a "knowledge vacuum," conducive for propagating multiple interpretations. Evidence for three principal types of soft facts was collected: ideologically motivated "truth claim" rumors, "false flag" conspiracy theories, and prophecies.

Remain versus Leave Rumors

Although, at the time there was no police investigation into Thomas Mair's interest and involvement in Brexit, this plausible yet unverified connection emerged rapidly on social media following Jo Cox's death. Very different accounts were narrated by some Remain and Leave supporters.

The most widespread Remain suggestion was that the murder was exacerbated by the Brexit campaign, or indeed committed by a radicalized Brexit supporter. In these messages, the victim was "a politician slaughtered over #Brexit," whose death was a direct consequence of a "hate-driven" and "divisive" campaign:

Boris Johnson had the gun. Nigel Farage held the knife. Jo Cox is dead (17:01, June 16, 2016).

Brexit militants killing MPs, great bunch them lot. Appalling act, a mother of 2. RIP Jo Cox (17:56, June 16, 2016).

Such motivated reasoning, whereby individuals defend their prior position through biased evaluations of new information, especially when negative toward the in-group (Allport & Postman, 1947; Knapp, 1944), was mirrored among Leave supporters. Their narratives mainly sought to disassociate the murder from the Brexit campaign, emphasizing that such suggestions were only propagated by "biased" Remainers:

NO evidence that Jo Cox killer was alligned with Brexit, but (((Bremain))) pushes it as fact, sad! (17:19, June 16, 2016).

Remain using tragic death of Jo Cox to smear Brexit. Just how low are they willing to go!!! (16:56, June 16, 2016).

In these versions, the killing was an isolated incident, the work of a mentally ill madman with no Brexit affiliation, and should not be used against the campaign:

Jo Cox killer a psychiatric patient with no political leanings. Looks like remain owe Brexit an apology (17:22, June 16, 2016).

Guy with mental health problems killed Jo cox but let's blame brexit.coz we so evil for wanting best for our country.how dare we (17:45, June 16, 2016).

Both sides of the political campaign were involved in constructing and communicating soft facts—that is, unverified and politically biased interpretations of the event—that played into a process of reaction and counter-reaction between Leave and Remain supporters. Allport and Postman (1946) famously observed that “aggressive rumours” rationalize while they relieve. This was equally true for both thought communities who engaged in powerful claims-making to express their frustrations. Strong emotive language and harsh rhetoric referring to the opposition was common: “vile #Brexit morons,” “mindless bigots that support Brexit,” “fascist #Brexit preachers” on the one hand. And, referring to Remain supporters: “disgusting,” “sickening,” “shameful,” “despicable human beings,” and “total scum.” The self-enhancement function of wedge-driving rumors (Knapp, 1944) can explain why both sides expressed an array of defensive sentiments, while concurrently demeaning their “adversaries.”

“False Flag” Conspiracy Theories

In addition to rumors, the murder of Jo Cox also gave rise to a “false flag” theory. “False flag” conspiracy theories describe covert operations designed to appear as being carried out by certain individuals or groups, other than the actual “masterminds” (DeHaven-Smith, 2013, pp. 225–6). In the context of Jo Cox’s murder, the suggestion was that the pro-EU MP was “sacrificed” by pro-EU forces to swing the referendum in favor of Remain by portraying the British right and Leave supporters as dangerous and untrustworthy:

I'm in no doubt that MI5 were behind this murder of the MP.jo Cox.it's to much of an coincidence that Brexit was winning the argument (17:45, June 16, 2016).

The assassination of Jo Cox was likely a false flag operation by Globalists to turn popular sentiment against #Brexit. And it may work (17:59, June 16, 2016).

False flag conspiracies have been shown to prosper in febrile and emotionally charged situations. For instance, following the Oklahoma City bombing of 1995 there was a conspiracy narrative that the attackers were set up to take the fall for the crime, because certain elements within the US government were interested in swaying public sentiment against “far-right” ideologies (Keeley, 1999).

Network-Derived Communities

As open source social media is a structured digital record of social activity, the identity of individuals reposting others allows us to delineate and quantify the “thought communities” that mention a core topic. This method classifies groups of individuals talking about a topic according to *who* they are reposting. For this analysis, we simplify the reasoning behind retweeting a message to an act intending to purposefully increase a message’s visibility to another user’s following. This action forms a directional network of communication distribution, which here is taken to be a user (B) being connected to an original poster (A), where B retweets one of A’s tweets. The strength of the directed connection between the two users is derived from the number of times this behavior is repeated within a time period. Herein, network clusters were identified using the Louvain Method for community detection run over the entire timespan simultaneously (Blondel, Guillaume, Lambiotte, & Lefebvre, 2008).

Of the forty-three thousand nine hundred and fifty-seven tweets in our corpus over the eight days following the murder, twenty-eight thousand one hundred and seventy of those were retweets. Calculating tweets per hour (Figure 1) identifies a large initial peak in the rate of tweets. However, over a 24-hour average, an exponential decline is evident which takes place until June 23 at 22:00. Two anomalies in this trajectory can be detected, one in the afternoon of June 19, and again in the evening of June 22. Up until these points, the rate of retweets to nonretweets was largely consistent. However, following the June 24 at 01:00 another significant rise in tweeting activity occurred, following a quote by Nigel

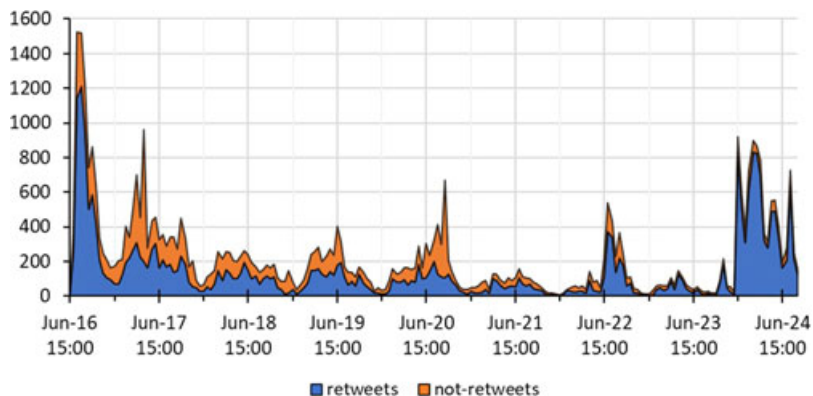


Figure 1. Volume of Tweets and Retweets per Hour Mentioning Jo Cox MP and Brexit in the Eight Days Following Her Murder.

Farage (former leader of the UK Independence Party) after the referendum result announcement. This involved a much higher ratio of retweets than the initial reaction to Jo Cox's murder.

The network formed by these retweets resulted in 23,759 distinct users, which when clustered using the Louvain Method (modularity equal to 0.845), resulted in three communities with more than thousand users, seven with five hundred to thousand users, and a further twenty involving two hundred to five hundred users. Consequently, most clusters comprised small disconnected components. However, it is the small number of large communities, which are of the greatest interest due to their significant influence over the outward appearance of the topic's discussion (see Figure 2).

Among the thirty communities involving more than two hundred users, on average 90 percent (standard deviation equal to 6.5 percent) of reposting activities were between two members of the same community. This suggests that although these larger communities have large memberships, they have a low degree of

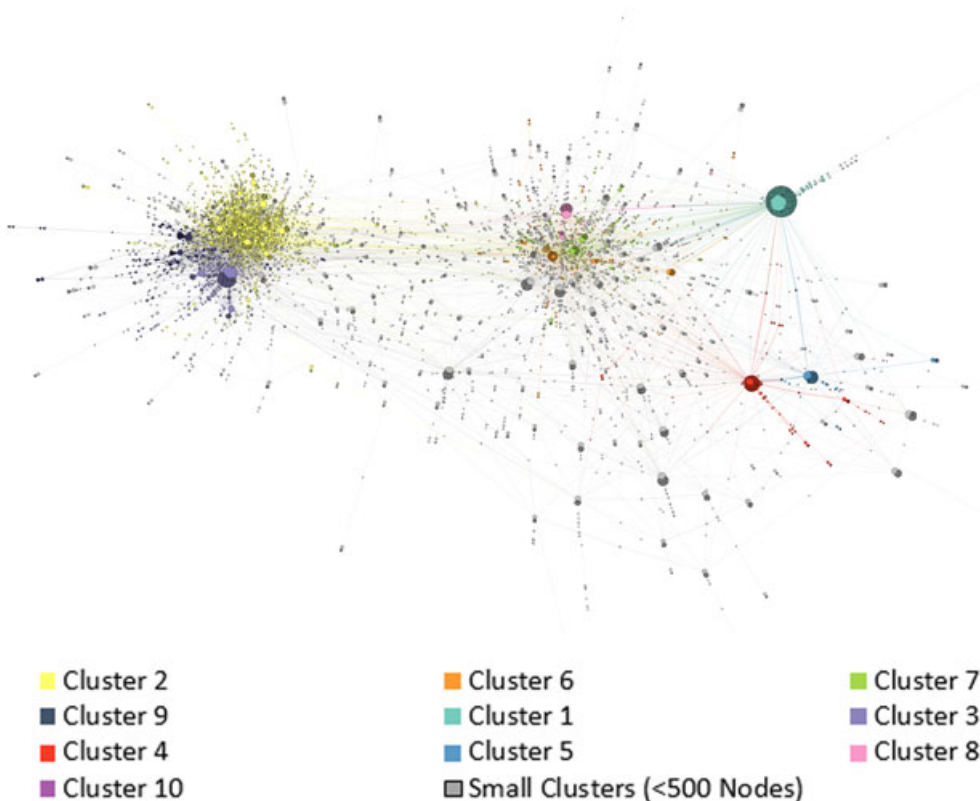


Figure 2. Network Graph of All Users Mentioning "Jo Cox" and "Brexit" in the Eight Days Following Her Murder.

Notes: Nodes represent users, edges are formed by the directional relationship between a posting user to a reposting user. Edge weight represents the abundance of this action over this time. Node size is the total number of times a user was themselves reposted. Node color indicates the ten largest communities.

intracommunity interactions and thus a strong definition from one another, forming “echo chambers.” These thirty communities divided into two classes: those characterized by one highly central user who was the original poster of more than 90 percent of the communities’ reposting activities (type 1), and those where a more diverse number of original posters with lower dominance over the overall flow of communications were present (type 2).

Behavior measured in “reposts per hour” by these communities was distinct for each (Figure 3). However, the two types of communities were characteristically different, with “type 1” communities displaying high amplitude acute activity, and “type 2” communities demonstrating more protracted messaging (Figure 4).

For type 1 communities, two distinct events caused acute reactions pertaining to Jo Cox and Brexit: (i) the immediate aftermath of her murder, and (ii) Nigel Farage’s comment that Brexit had been achieved “without a single shot being fired,” after the referendum result was announced. Within the former of these two events, clearly pro- and anti-Brexit communities were present, which reposted the messages in Table 1 nearly exclusively.

Some of these highly polarized soft facts were presented as prophecies by small numbers of individuals within each community, and were redistributed in large volumes within a short space of time. These communities were themselves largely isolated from reposting each other’s statements and as such, were largely different audiences. The temporal activity signature of these communities coupled with the strong dominance of one individual’s voice tie in well with the concept of a “prophet” with a “following.” The role and influence of prophets, in the context of the Brexit campaign, can be assessed by examining common features in the content communicated by prophets, in addition to the temporal activity signatures discussed above.

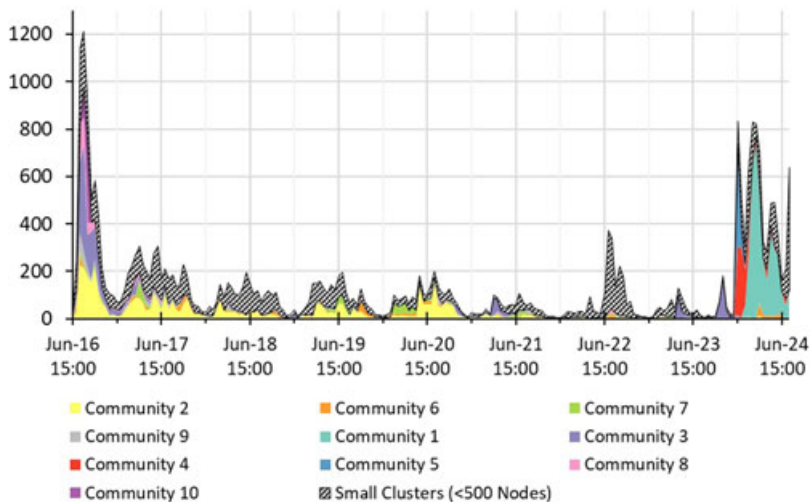


Figure 3. Repost Volume of Posts Mentioning “Jo Cox” and “Brexit” in the Eight Days Following Her Murder per Hour, Stratified by Network-Derived Community.

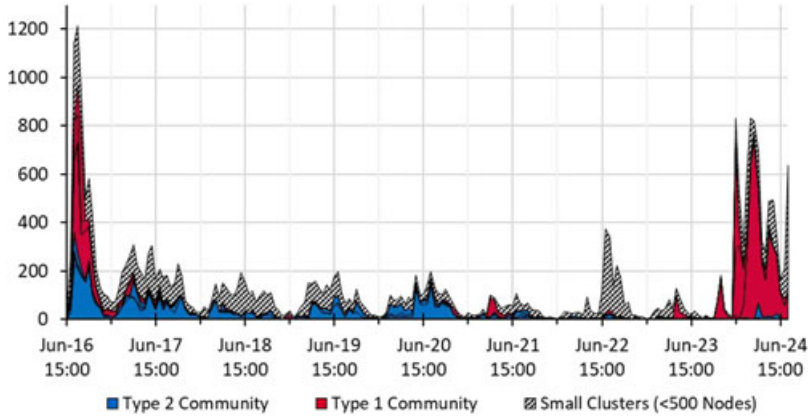


Figure 4. Repost Volume of Posts mentioning “Jo Cox” and “Brexit” in the Eight Days Following Her Murder Per Hour, Stratified By Network-Derived Community Type.

Prophecies and their Prophets

Within the complex swirl of claims, counter-claims, rumors, and conspiracies that marked the public and political conversation about Brexit on social media, the analysis identified a small number of soft facts that shared a distinctive “signature.” These communications took on an especially emotive and contentious issue or episode, connected it with and wrapped it into an ideologically grounded narrative of grievance, and used it to make predictions about the future and what it portends. We call these “prophecies.” Prophecies afford collective sense-making in the face of ambiguous, uncertain and potentially troubling events. Digital prophecies, like biblical prophecies, do not always have to come true to be influential. Because of the in-group socialization around certain core beliefs, committed followers often retain their faith in the face of the “failure of prophecy” (Dawson, 2011; Stone, 2000). This retention of group belief depends heavily upon the prompt response of charismatic leaders and the strength of the “prophetic milieu” (Dawson, 2011).

Two main types of digital prophecy were identified in the data—speculative and assertive. Speculative prophecies tended to be a bit less specific and were more qualified in the predictions leveraged:

Table 1. Most Reposted Messages per Type 1 Community in the 24 hours Following Jo Cox’s Murder

Far-right (Brexit)	Cluster 3	“The Political Establishment Will Exploit the Murder of Jo Cox to Kill Brexit” (RTed 794)
		“Anti #Brexit MP @Jo_Cox1 shot in British gun free zone!” (RTed 127)
Left (Bremain)	Cluster 8	“RIP Jo Cox. To those saying don't politicise Jo Cox’s murder I say wake up. The fascism of Britain First, Ukip & Brexit i...” (RTed 536)
		“Man who shot & stabbed Jo Cox MP chanted 'Britain First' I worry that the Brexit campaign is giving oxygen to the forc...” (RTed 49)
	Cluster 10	“MP Jo Cox #dies after #attack stabbed by man shouting "Britain First" #RIPJoCox #STOPHATE #UKtoStay #nobrexit #RIP” (RTed 500)

This Jo Cox assassination is so weird, I wonder if it will end up swinging the Brexit vote for the IN forces... (23:04, June 16, 2016).

Just been to cast my vote, and worryingly they have provided pencils instead of pens. Is it rigged from the start? #BrexitOrNot (13:17, June 23, 2016).

Contrastingly, assertive prophecies were far more confident and clear in setting out what the consequences and impacts were perceived to be:

#Remain will win. put money on it. the death of Jo Cox will make people think twice before supporting the brexit people #euref (16:07, June 18, 2016).

I can tell you that the #Brexit vote will be as rigged as the Scottish independence vote was but it will come out really close (19:31, June 14, 2016).

Especially in the context of Jo Cox's murder, a number of prophecies predicted how the incident would (or already had) affected the Brexit vote the following week. The most popular opinion seemed to be that "Brexit died with Jo Cox"—anticipating that her death would sway the referendum in favor of Remain. This particular soft fact was picked up by both sides of the Brexit debate.

The concept of "prophecy" has an explicit religious connotation, which we are seeking to "re-purpose" for the digital age. In the Bible, individuals are accorded the status of prophet on the basis of possessing a special power to interpret the future and influence the perceptions, norms, and attitudes of their followers. Similar qualities pertain to individuals authoring the prophecies and soft facts detected on social media. They have "followers" over whom they exert a degree of influence in terms of seeding and propagating certain ideas, values, and beliefs. Moreover, analogous to how biblical prophets galvanize the commitment of their following to the extent that members are socialized to the prophet's worldview within a "prophetic milieu," digital prophets seek influence among established online communities (e.g., Remain or Leave supporters).

In his seminal account of charismatic authority, Weber (1920/1993)/1993) defined the prophet as an individual who influences through personal gifts and charismatic demonstration. He elaborates that charisma is sometimes a "crude swindle" that is variously deployed for profane or sacred, secular, or religious purposes. The decisive quality is "how it is valued by those ruled charismatically" (Friedrich, 1961, p. 15). In this context, Weber's account of prophetic leadership has much in common with the behaviors of some key social media influencers.

Within our data sets, there are several individuals whose digital performances seem to exemplify the traits of the "digital prophet" as set out above, and whose communications clearly disseminated soft facts on social media about the "use pens" and Jo Cox episodes. One such account belonged to a right wing Twitter user with over five hundred and fifty thousand followers, who is the epitome of a digital influencer. On the June 16, between 15:15 and 21:30 this account sent at least twenty-eight tweets reflecting on the murder of Jo Cox. The first message, sent

shortly after she was shot, was prefaced with the claim "Exactly as I predicted" and concluded by anticipating significant consequences:

Exactly as I predicted, a violent incident right before #Brexit. They're gonna blame this on #VoteLeave (15:15, June 16, 2016).

This generated one hundred and forty-nine comments, five hundred and twenty-five retweets, and five hundred and seventy-six likes. This author's second most discussed post (one hundred and twenty-four comments, one thousand two hundred and fifty-one retweets, and one thousand two hundred and twenty-one likes) propagated a familiar Leave rumor disputing that Thomas Mair was influenced by the Brexit campaign by citing as "fact" that, according to neighbors, he was not "politically minded." As a consequence of which it was asserted that:

Jo Cox killer "had no political views," said nothing about EU referendum. But the left will still exploit this. #Brexit (19:03, June 16, 2016).

This was followed by posting a link to a commentary piece entitled "The Political Establishment Will Exploit the Murder of Jo Cox to Kill Brexit." This was retweeted five hundred and sixty times and liked five hundred and thirty-nine times. Another piece by the same social media user, which went viral on Twitter was a YouTube video entitled "#Brexit: Vote Remain Exploits Jo Cox Murder." This video was shared five hundred and nineteen times. In aggregate, about 9.50 percent of the social media data collected on June 16 (seven thousand one hundred tweets), based on keyword searches of "Jo Cox + Brexit" were influenced by these two messages in some way. This clearly suggests how some social media users and their messages achieve significant reach and influence in terms of how definitions of the situation about troubling and problematic events are assembled by some thought communities.

Conclusion

The title of this article refers to how several digital prophecies were constructed and communicated following Jo Cox's murder, and how this was anticipated to translate into a political loss. Although not entirely accurate in their predictions, these messages were influential among a segment of social media users. Framed in this way, prophecies can be understood as a particular "species" of soft fact. Of particular interest, is how the forecasts that are offered by digital prophets do not just report or represent events, but can influence the future if followers mobilize around them.

Across the social sciences, there is an increasingly sophisticated and nuanced account developing about the disruptive effects of social media and big data on the interactional and institutional ordering of society. The insights and evidence reported in this article are designed to advance this agenda, introducing a key

conceptual innovation by identifying the role of the “digital prophet” and their “prophecies.” Studies of the contemporary information environment that apply network analytic methodologies have done much to describe the topological structures that shape communication patterns, evidencing that the power to influence is not uniformly distributed. But what they have not unpicked is *what* these influential nodes are communicating, and *how*. Fusing Weber’s conceptualization of prophetic motives to the digital data collected provides one potentially useful, albeit tentative, line of enquiry. Further research on other cases is required to see if “digital prophets” influence the tenor and tone of public reactions across other settings and situations.

Several implications for policy development can be distilled from the blend of conceptual and empirical themes reported above, reflecting the considerable contemporary political consternation about the social causes and consequences of “fake news” and its public impacts. The approach outlined has illuminated why it is important to not just focus attention upon deliberate disinformation, but to understand these informational configurations as part of a swirling constellation of soft facts that arise in the process of public sense-making about troublesome and problematic events. The presence of these other types of malleable information help to create an environment where explicitly fabricated news can acquire reach and traction. Importantly, the capacity and capability of digital prophets to influence their “followers” may be built across less important events, but becomes increasingly visible and important in the aftermath of major incidents, such as terrorist attacks.

Relatedly, the analysis further suggests it is important that those responsible for regulating the socio-technical systems propagating fake news and soft facts do not treat the “thought communities” where these circulate as an undifferentiated mass. Aspects of the quantitative analysis imply multiple distinctive clusters where specific conspiracies gained particular traction. Some of these gravitated around their own particular “prophets” who actively propagated multiple conspiracy theories across multiple events. Potentially, this might signal that the originating sources of many fake news narratives and conspiracies may actually be relatively small in number, affording opportunities for preventative intervention.

A third key policy implication concerns how the aftermaths of major crime and terrorism events are “teachable moments” where particular risks and threats are made manifest. Significantly, digital communications platforms are now wholly enmeshed in these processes of social reaction, where the meaning of the violence is interpreted and definitions of the situation constructed and contested. As such, there are opportunities for authorities to think about how the communications they issue following such atrocities either amplify or mitigate the longer-term public impacts of the incident.

In thinking about responses to the social problems brought about by the widespread dissemination of fake news, much attention has focused on how “social bots” and other forms of algorithmically modulated communication are promoting its promulgation and public impacts. Counterpointed with such perspectives, in figuring the role of the digital prophet, this analysis dives beneath the surface of

these technological changes to bring through a deeper social function. Across all cultures, prophecies are a recurring means by which social groups absorb troubling and unsettling events into their collective ordering of reality. This is important on the grounds that, in attending to what is new and innovative about the contemporary information environment, it is vital we do not obscure the presence of some deep continuities with the past.

To revisit the quotation from McLuhan that opened this article, while it is undoubtedly important that our vision should not be constricted by using yesterday's tools, equally we need to recognize how seemingly innovative communications technologies can, in fact, be performing deeper, recurring, cultural functions.

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References

- Allcott, H., and M. Gentzkow. 2017. "Social Media and Fake News in the 2016 Election." *Journal of Economic Perspectives* 31(2): 211–36.
- Allport, G.W., and L. Postman. 1946. "An Analysis of Rumor." *Public Opinion Quarterly* 10(4): 501–17.
- Allport, G.W., and L. Postman. 1947. *The Psychology of Rumor*. New York: Henry Holt & Co.
- Amoore, L., and V. Piotukh. 2015. "Life Beyond Big Data: Governing With Little Analytics." *Economy and Society* 44(3): 341–66.
- Anagnostopoulos, A., A. Bessi, G. Caldarelli, M.D. Vicario, F. Petroni, A. Scala, F. Zollo, et al. 2015. "Viral Misinformation: The Role of Homophily and Polarization." In *Proceedings of the 24th International Conference on World Wide Web*. New York: ACM, 355–56. <https://arxiv.org/abs/1411.2893>.
- Benkler, Y., R. Faris, and H. Roberts. 2018. *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics*. New York: Oxford University Press.
- Bessi, A., and E. Ferrara. 2017. "Social Bots Distort the 2016 US Presidential Election Online Discussion." *First Monday* 21, 1–15.
- Blondel, V.D., J.-L. Guillaume, R. Lambiotte, and E. Lefebvre. 2008. "Fast unfolding of communities in large networks." *Journal of Statistical Mechanics: Theory and Experiment* 2008, P10008.
- Boyd, D., and K. Crawford. 2012. "Critical Questions for Big Data." *Information, Communication & Society* 15(5): 662–79.
- Buckner, H.T. 1965. "A Theory of Rumor Transmission." *Public Opinion Quarterly* 29(1): 54–70.
- Butter, M., and P. Knight. 2016. "Bridging the Great Divide: Conspiracy Theory Research for the 21st Century." *Diogenes* 1–13. <https://doi.org/journals.sagepub.com/abs/10.1177/0392192116669289>.
- Centola, D. 2015. "The Social Origins of Networks and Diffusion." *American Journal of Sociology* 120(5): 1295–338.
- Couldry, N. 2002. "Mediation and Alternative Media, or Relocating the Centre of Media and Communication Studies." *Media International Australia Incorporating Culture and Policy* 103(1): 24–31.
- Couldry, N., and A. Hepp. 2016. *The Mediated Construction of Reality*. Basingstoke: Palgrave Macmillan.
- Davis, T.J. 1985. *A Rumor of Revolt: The "Great Negro Plot" in Colonial New York*. New York: Free Press.

- Dawson, L.D. 2011. "Prophetic Failure in Millennial Movements." In *The Oxford Handbook of Millennialism*, ed. C. Wessinger. Oxford: Oxford University Press, 150-70.
- DeHaven-Smith, L. 2013. *Conspiracy Theory in America*. Austin, TX: University of Texas Press.
- Douglas, K.M., R.M. Sutton, D. Jolley, and M. Wood. 2015. "The Social, Political, Environmental, and Health-Related Consequences of Conspiracy Theories." In *The Psychology of Conspiracy*, eds. M. Bilewicz, A. Cichocka and W. Soral. Hove: Routledge, 183-96.
- Douglas, K.M., and R.M. Sutton. 2011. "Does It Take One To Know One? Endorsement of Conspiracy Theories is Influenced by Personal Willingness to Conspire." *British Journal of Social Psychology* 50(3): 544-52.
- Festinger, L. 1957. *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press.
- Fitzgerald, T. 2016. "'Pencilgate' As Voters Bring Pens to Polling Stations After Fears EU Referendum Could Be 'Rigged'." *Manchester Evening News* (June 23). <http://www.manchestereveningnews.co.uk/news/greater-manchester-news/pencil-referendum-vote-rigging-claim-11514432>.
- Fogg, B.J. 2008. "Mass Interpersonal Persuasion: An Early View of a New Phenomenon." In *Persuasive Technology: Third International Conference, PERSUASIVE*. Oulu: Springer, 23-34.
- Friedrich, C.J. 1961. "Political Leadership and the Problem of the Charismatic Leader." *The Journal of Politics* 23, 3-24.
- Frigerri, A., L.A. Adamic, D. Eckles, and J. Cheng. 2014. "Rumor Cascades." In *Proceedings from the 8th International AAAI Conference. Weblogs Social Media*, 101-10. <http://www.aaai.org/ocs/index.php/ICWSM/ICWSM14/paper/download/8122/8110>.
- Garrett, R.K. 2011. "Troubling Consequences of Online Political Rumoring." *Human Communication Research* 37(2): 255-74.
- Goertzel, T. 1994. "Belief in Conspiracy Theories." *Political Psychology* 15(4): 731-42.
- Gorry, G.A., and R. Westbrook. 2009. "Winning the Internet Confidence Game." *Corporate Reputation Review* 12(3): 195-203.
- Greenhill, K.M., and B. Oppenheim. 2017. "Rumor Has It: The Adoption of Unverified Information in Conflict Zones." *International Studies Quarterly* 61(3): 660-676.
- Groh, D. 1987. "The Temptation of Conspiracy Theory, or: Why Do Bad Things Happen to Good People? Part I: Preliminary Draft of a Theory of Conspiracy Theories." In *Changing Conceptions of Conspiracy*, eds. C.F. Graumann and S. Moscovici New York: Springer, 1-13.
- Gupta, A., P. Kumaraguru, C. Castillo, and P. Meier. 2014. "TweetCred: A Real-time Web-based System for Assessing Credibility of Content on Twitter." In *6th International Conference on Social Informatics*, 13.
- Hofstadter, R. 1964. "The Paranoid Style in American Politics." In *The Paranoid Style in American Politics and Other Essays*, ed. R. Hofstadter Cambridge: Harvard University Press, 3-40.
- Howard, P.N., and B. Kollanyi . 2016. "Bots, #StrongerIn, and #Brexit: Computational Propaganda During the UK-EU Referendum." SSRN. <https://arxiv.org/pdf/1606.06356.pdf>.
- Howell, L. 2013. *Digital Wildfires in a Hyperconnected World*. <http://reports.weforum.org/global-risks-2013/risk-case-1/digital-wildfires-in-a-hyperconnected-world/>.
- Jowett, G.S., and V. O'Donnell. 2012. *Propaganda and Persuasion*. London: SAGE Publications.
- Innes, M. 2014. *Signal Crimes: Social Reaction to Crime, Disorder and Control*. Oxford: Oxford University Press.
- Innes, M., C. Roberts, A. Preece, and D. Rogers. 2016. "Ten 'Rs' of Social Reaction: Using Social Media to Analyse the 'Post-Event' Impacts of the Murder of Lee Rigby." *Terrorism and Political Violence* 30(3): 454-474.
- Kakutani, M. 2018. *The Death of Truth*. London: William Collins.
- Katz, E., and P.E. Lazarsfeld. 1955. *Personal Influence: The Part Played by People in the Flow of Mass Communications*. New York: The Free Press.
- Keeley, B.L. 1999. "Of Conspiracy Theories." *The Journal of Philosophy* 96(3): 109-26.
- Knapp, R.H. 1944. "A Psychology of Rumor." *Public Opinion Quarterly* 8(1): 22-37.

- Knopf, T.A. 1975. *Rumors, Race, and Riots*. New Brunswick: Transaction Books.
- Lynch, M. 2016. *The Internet of Us: Knowing More and Understanding Less in the Age of Big Data*. New York: Liveright.
- Margetts, H., P. John, S. Hale, and T. Yassera. 2016. *Political Turbulence: How Social Media Shape Collective Action*. Princeton: Princeton University Press.
- Marwick, A. 2013. *Status Update: Celebrity, Publicity and Branding in the Social Media Age*. New Haven, CT: Yale University Press.
- McLuhan, M., and E. Fiore. 1967. *The Medium is the Massage: An Inventory of Effects*. London: Allen Lane.
- Mitra, T., S. Counts and J. Pennebaker. 2016. "Understanding Anti-Vaccination Attitudes in Social Media." In *Proceedings of the 10th International Conference on Web and Social Media, ICWSM*, 269–78.
- Oh, O., M. Agrawal, and H.R. Rao. 2013. "Community Intelligence and Social Media Services: A Rumor Theoretic Analysis of Tweets During Social Crises." *MIS Quarterly* 37 (2): 407–26.
- Packard, V. 1957. *The Hidden Persuaders*. New York: David McKay.
- Pasquale, F. 2015. *The Black Box Society*. Cambridge: Harvard University Press.
- Peterson, W.A., and N.P. Gist. 1951. "Rumor and Public Opinion." *American Journal of Sociology* 57(2): 159–67.
- Poland, G.A., and R. M. Jacobson. 2011. "The Age-Old Struggle against the Anti-Vaccinationists." *New England Journal of Medicine* 364(2): 97–9.
- Preece, A., I. Spasic, K. Evans, D. Rogers, W. Webberley, C. Roberts, and M. Innes. 2018. "Sentinel: A Codedigned Platform for Semantic Enrichment of Social Media Streams." *IEEE Transactions on Computational Social Systems* 5(1): 118–31. <https://doi.org/10.1109/TCSS.2017.2763684>.
- van Prooijen, J.W., and N.B. Jostmann. 2013. "Belief in Conspiracy Theories: The influence of Uncertainty and Perceived Morality." *European Journal of Social Psychology* 43(1): 109–15.
- Qazvinian, V., E. Rosengren, D.R. Radev, and Q. Mei .2011. "Rumor Has It: Identifying Misinformation in Microblogs." In *Conference on Empirical Methods in Natural Language Processing*, 1589–99.
- Rogers, E.M., and D.G. Cartano. 1962. "Methods of Measuring Opinion Leadership." *Public Opinion Quarterly* 26(3): 435–41.
- Rosnow, R.L. 1991. "Inside Rumor: A Personal Journey." *American Psychologist* 46(5): 484–96.
- Scott, L. 2015. *The Four Dimensional Human: Ways of Being in the Digital World*. London: William Heineman.
- Shibutani, T. 1966. *Improvised News: A Sociological Study of Rumor*. Oxford: Bobbs-Merrill.
- Stanley, J. 2015. *How Propaganda Works*. Princeton, NJ: Princeton University Press.
- Stone, J.R., ed. 2000. *Expecting Armageddon: Essential Readings in Failed Prophecy*, New York: Routledge.
- Sullivan, D., M.J. Landau, and Z. K. Rothschild. 2010. "An Existential Function of Enemyship: Evidence that People Attribute Influence to Personal and Political Enemies to Compensate for Threats to Control." *Journal of Personality and Social Psychology* 98(3): 434–49.
- Waters, A.M. 1997. "Conspiracy Theories as Ethnosociologies: Explanation and Intention in African American Political Culture." *Journal of Black Studies* 28(1): 112–25.
- Weber, M. 1920/1993. *The Sociology of Religion*. Boston, MA: Beacon.
- White, M. 2016 "Should we listen to experts on the EU referendum?" *The Guardian* (June 8). <https://www.theguardian.com/politics/blog/2016/jun/08/experts-eu-referendum-michael-gove>.
- Woolley, S.C., and N.H. Philip. 2017. *Computational Propaganda Worldwide: Executive Summary*. Oxford: Project on Computational Propaganda. <http://comprop.oii.ox.ac.uk/2017/06/19/computational-propaganda-worldwide-executive-summary/>.
- YouGov. 2016. *LBC Survey Results*. http://d25d2506sfb94s.cloudfront.net/cumulus_uploads/document/463g4e5e0e/LBCResults_160614_EUReferendum_W.pdf.