

# **#MacronLeaks as a “warning shot” for European Democracies: Challenges to Election Blackouts Presented by Social Media and Election Meddling During the 2017 French Presidential Election**

## **Abstract:**

Election silence periods feature in several European democracies. However this paper argues that they have become democratic vulnerabilities in a context with increased internet based electoral meddling such as during #MacronLeaks. Using both discourse and social network analysis this study shows that the vacuum created by the inability of politicians and established media outlets to comment on the leaks empowered unregulated and unreliable sources which sought to drag the direction of the election away from the centre and towards the far right. Our findings have broad implications for understanding how social media activity is structured under the conditions of information leaks. The findings of this study may be relevant to other political events which involve the release of sensitive information via social media.

**Keywords:** Election Meddling, Election Silence, Twitter, Politics, Social Media, Leaks, Hashtags



## **1. Introducing the French Presidential Campaign, #MacronLeaks and the Vulnerability of Election Blackouts**

On the eve of the 2017 French presidential election a massive cache of emails from the En Marche!, a centralist, liberal and social liberal party, candidate Emmanuel Macron, were leaked onto the internet. This coincided with the start of an enforced media blackout (or election silence) which covers 44 hours and prohibits both media coverage of the elections and campaigning by candidates (Conseil Constitutionnelle 2017). This paper argues that the example of #MacronLeaks acts as a “warning shot” to the inbuilt vulnerabilities of election blackout periods enshrined in democratic law. While for decades these periods have remained unchallenged elements of the democratic process, the spectre of outside electoral meddling transforms these periods into vulnerabilities where real or fake dumps of information can be made online concerning candidates without the possibility for redress by the candidates nor regulated and reliable national media outlets.

This discretionary period is enshrined in the French electoral code (Conseil Constitutionnelle 2017), with similar campaign blackout periods of varying lengths enforced in a number of established European democracies, including Ireland, Italy, Bulgaria, Poland, Spain and the United Kingdom. Political scientists have paid little attention to these blackout periods because they have come under very limited challenges. This has even been reflected in reduced political social media activity in black-out periods in the run up to polls, such as the 2011 Spanish elections where even the unregulated sphere of Twitter (Aragón et al 2013). As such, owing to

the reluctance of established media outlets or candidates themselves to fall foul of election blackout laws, and the “self-regulation” of the social media sphere, election silences have remained unchallenged.

The election silence of the French presidential campaign presents the first case that has exposed the vulnerability of election silence periods and demonstrates that the changing media landscape has made them into vulnerabilities of democracy rather than strengths. This is rendered all the more important in a context where online forms of election manipulation have come to the fore as one of the key challenges to established democracies across the world (Laurinavičius 2018). This dovetails with observations about the leak of Macron’s emails as ‘clearly aimed at disrupting the electoral process’ (Tual and Leloup 2017) where the leak was timed with only hours to go before the French press were stopped by electoral laws from reporting on the election campaign. This gave established media outlets in France just enough time to cover that there had been an information breach, but did not provide enough time to give any substantive guidance on what this leak contained, let alone what the implications for what any politically damaging information would be. This meant that social media platforms such as Twitter became important places where coverage of the leak took place. This series of events has significant implications for the current French political landscape because it renders the laws governing electoral press blackouts as dangerously out of date because new media and un-regulated actors such as Wikileaks are not subject to this law.

This paper seeks to intervene in the understudied context of election blackouts to use #MacronLeaks as a means to understand the threats that such periods now

pose to democracy and to make the policy recommendation that governments need to re-examine how they engage with attempts at online election meddling during blackout periods. To do this, this paper uses digital methods to pursue three key research aims. Firstly the paper seeks to uncover the influential actor types using InDegree, Out Degree, and Betweenness Centrality during the initial time period when events surrounding Macron Leaks were at their height. This enables us to ascertain which actors are influential in the online discussion and understand the implications this has for election meddling during blackout periods. This directly identifies the way in which information spreads and what kinds of networks are created on social media during this period of attempted election meddling. Secondly, the paper conducts a discourse analysis of tweets to understand the content of influential tweets. This develops a better understanding of the types of discussions taking place on Twitter during #MacronLeaks. This enables the understanding of the way in which this election meddling was discussed by actors on Twitter and thus to see which narratives emerge as the most influential. Finally, as a macro aim of this paper, it seeks to use these insights to critically consider the implications of unregulated news media outlets and the role that they can have during elections and in particular the implications for the ongoing viability of election blackout periods in European democracies.

## **2. Conceptualising Social Media, Fake News and European Elections**

An important empirical and conceptual starting point of this paper is the current position of election silence, or “blackout” periods, being as they are understudied and

unproblematised in current politics scholarship. This is because there have been little means by which European media organisations or political parties have been willing to breach such periods and face the political and legal consequences. In France the legal consequences of breaking such a ban are potentially very serious. Article L.52-1 of the French electoral code prohibits all discussion of the candidates of the second round for 44 hours prior to the close of voting, with article L.90-1 legislating a maximum fine for transgressions of €75,000 (Conseil Constitutionnel 2017). This does not include the inevitable damage to public image of any politician or media outlet in France which would result in transgressing this ban. However, the law does not simply make provisions for official media outlets and politicians to be silent during this 44 hour period. Interestingly in the French case this total silence also applies to voters – so in theory a private individual posting on their private social media account could be prosecuted (Satter 2017). Thus France sits in a context which directly contradicts one of the few available studies on election silence conducted in Spain (Aragón et al 2013). This is because in the Spanish context, it was recorded that the election blackout period applied in a self-regulating way to social media as voters themselves tweet less about the election in the blackout period in Spain where “even in the unregulated space of Twitter, the so called reflection day was followed.” In 2011 (Aragón et al 2013).

Going beyond the specifics of France, the findings of this study may be relevant to other political events which involve the release of information via social media. This is because in the context of the decision by the UK to cede from the European Union, and the election of Donald Trump in the USA both relied heavily on the spread of false facts and information specifically designed to influence voters and

change the outcome of the democratic process (Allcott & Gentzkow, 2017; Nussbaum, 2017). Both of these contexts are, however, different from France as the role of social media in these contexts relied on the content and activity generated primarily by domestic political audiences as a means to create support for anti-status quo political movements. Within this it has been argued that social media '*memed*' into existence Donald Trump (Nussbaum, 2017) through the ability of alt-right activists to create and distribute their own political memes. While #MacronLeaks did involve some meme generation, the primary cause of the episode is something very different – the direct attempt at the manipulating the electoral process through the vulnerability created by the electoral silence period.

Specifically important here is the central role in social media platforms such as Twitter and Facebook in facilitating and the online sphere in shaping political events in France at the time of the election. While 2017 was not the first French election in the internet era by a long way –it was the first year in which significant concerns were raised about the ability of social media being used to manipulate the electoral outcome. In tandem with increased terrorist activity online, resulted in France's internet freedom score declining during 2018 as the French government sought to work with social media companies to take down content (Freedom House 2017). This demonstrates how important social media and web based platforms were during this period in France . Whereas journalistic rigour and ethics would have required narratives to be substantiated, social media allowed groups to create unverifiable narratives that could be spread to tens-of thousands, and in some cases hundreds-of thousands of individuals with little to no checks and balances (See inter alia Gerbaudo, 2012; Bennett, 2012; Wolfsfeld, Segev, and Sheaffer, 2013). This was

exactly the kind of mechanism that those behind the #MacronLeaks data breach hoped to harness to taint a candidate whose weakness was the contradiction of him running as an 'independent', outside of the political establishment, while paradoxically having worked as an investment banker and served in the previous socialist government. The leaks, creating uncertainty about his previous, and unknown, record on corruption and personal wealth, attempted to shake the certainty of voters, taking aim directly at the weak point of the untested candidate Macron.

This attempt at disrupting the electoral process had particularly high stakes, given that Macron was running against what some opponents argued was a xenophobic, far-right candidate in Marine Le Pen. Thus, had the leak unseated Macron and paved the way for Marine to win, it would have resulted in a pro-Frexit, and potentially xenophobic candidate to take power that would have potentially sent shockwaves across Europe and put the European integration projects very existence into question. At a time when the stakes were so high, this meant that anyone interested in what this leak would have contained was confronted with one route to information: social media. This presents somewhat of a conceptual paradox to established theories of the relationship between social media and established forms of journalism. The literature thus far (Gerbaudo, 2012; Bennett, 2012; Wolfsfeld, Segev, and Sheafer, 2013) has contended with the emergence of social media as a means through which complementary, uncontrolled sources of information disrupt established forms of journalism and shorten the news cycle with information spreading across the globe at an unprecedented rate where those actually at the centre of unfolding stories can not only post written accounts of what is going on but also can post images, video and even live stream unfolding news stories.

Social media platforms are applications built on the Internet which have extended ideological and technological foundations of Web 2.0 and they permit the sharing of content generated by users with one another (Kaplan & Haenlein, 2010). Facebook and Twitter are two examples of popular social media platforms (Stockdale et al., 2012). Social media platforms were originally intended for people to use them in a personal capacity. Overtime it became apparent that these platforms were generating vast amounts of data that could be utilised for marketing purposes as well as academic research. Another principal consequential use of social media was its potential to bypass governmental censorship and allow users to freely critique politicians and political parties. Once such platform which has thrived for its use in the political sphere is Twitter. Twitter reports as having 328 million monthly active users with 1 billion unique monthly visits to tweets with 82% of users which access the platform via mobile devices (About Twitter, n.d.). Twitter has the potential to affect those who do not use the platform, for instance, family, friends, or news reports might share information to their immediate social network. This makes it exceedingly essential to study the types of content shared at the time of Macron Leaks, as well as the Twitter users that rose to prominence and were found to be influential.

Social media platforms, therefore, can provide spaces for discussions to take place without government censorship because of the ability to create user-generated content. It is not surprising, therefore, that there has been a burst of social media research conducted on examining social media in the domains of politics (Gerbaudo, 2012; Bennett, 2012; Wolfsfeld, Segev, and Sheaffer, 2013). However, the politics of

internet leaks and hacks remains very much an under studied field in the emerging cyber politics of the contemporary era. This is remarkable given the frequency with which, over the past decade, important and sensitive political information has been leaked over the internet. There has been some work on the main player in the leaks game over the past decade, however this is still an understudied area. Some early work saw the rise of WikiLeaks in tandem with the broader advances in Information Technology and social media as a radical game changer, for instance, Sifry (2011) wrote that:

'We have clearly entered a new chapter in human history, where information technology has advanced so far as to render law, regulation, and social contentions powerless to keep up with its ability to change the course of human events' (p.9)

However, while leaks and their spread through social media clearly are important, they are not, a panacea when it comes to increasing government transparency. Roberts (2011) rightly argues that much of the hype around the 2010 WikiLeaks which hailed it as the beginning of an age of 'radical transparency' and the end of the ability of government to maintain a monopoly on classified information where over estimations of the role that such disruptive forces can play. Indeed, in relation to the Macron leaks scandal, it is precisely the power to disrupt, rather than any significant attempt at transparency or government accountability which becomes increasingly important as the leak was done in such a way that there was no time nor reporting capacity [1] to radically increase transparency. The significance of repeated breaches of sensitive information in the run up to major elections has led some

observers to question if this is to become the new normal, with Borger (2017) declaring that these repeated breaches signalled that 'the onslaught has arrived'. This is highly significant given the opening up of influence in major electoral campaigns to potentially dark and destabilising forces. Work has been conducted on the political polarization of the far-right on Twitter (Conover et al, 2011) but this does not touch on how the far right use Twitter to influence the unfolding news agenda around politically influential leaks.

Early work around networked democracy in relation to social media noted that social media platforms have inherent democratic capacities (Loader and Mercea, 2011) and there was much technological optimism surrounding the use of social media. However, it was noted that divisions between mainstream and citizen-generated content had become blurred. The case of the leaks relating to Emmanuel Macron highlight a different aspect of these social media platforms a means of disrupting the political sphere for contemptable reasons. The disruption capabilities provided, which were initially applauded, for instance as being instrumental in helping over throw totalitarian regimes also have a darker side, as they can be utilised to negatively affect and disrupt a democratic process. Clearly, as highlighted by data from Google Trends we could see that there was a rush among the general public within France and around the world to access information relating to the leaks. As long as those wishing to disrupt democratic processes have a venue for the dissemination of information on platform such as Twitter citizens out of inquisitiveness and due to the increased media attention may venture onto search engines and social media to access information pertaining to leaks.

Social media platforms have allowed millions of people from across the world to connect with one another and the extent to which social media platforms can support collective action has long been debated by scholars (Wolfsfeld, Segev, and Sheaffer, 2013). However, although the extent to which these platforms can support collective action is debated it is apparent that social media platforms can provide political movements with powerful, fast, and low-cost tools in order to recruit, fund-raise, and distribute images, collective discussions and mobilise users in order to take action (Bennett, 2006; Wolfsfeld, Segev, and Sheaffer, 2013).

Papacharissi (2016) writing on the construct of affective publics has noted that in the context of political movements that social media platforms can amplify visibility and voice and as a result they can amplify the expectations that citizens hold of these platforms. Moreover, Papacharissi (2016) argues that due to the speed and rapid spread of information it may lead us to have high expectations because we may believe that if a story has emerged on social media and spread quickly that “it should be followed by immediate political, legislative, systemic change” (p.15). When these events do not occur social media may be blamed for having no political impact, however, it is argued that it is our expectations that will mislead us and that our own expectations may let us down. In the context of this present study it can be argued that news of the leaks relating to Emmanuel Macron may have raised the expectations of users that these leaks would have a devastating effect on the outcome of the election.

It is also important to discuss the concept of hashtags. Hashtags present a layer of social media action which goes beyond tweeting, which in itself is an ‘emergent site

of discourse' (Kress 2012:36). Hashtags add to this allowing actors to render their actions even more relevant through a link to a broader issue or campaign. To do this, hashtags are readily searchable phrase or keywords that follow a '#' symbol. Thus, hashtags are important units around which broader discussions can be structured by quoting the hashtag. As such, hashtags instances of the use of 'language about language, performing an affiliate (or reflective) function' (Zappavigna 2012, location 1620). Hashtags then bridge the processes of 'speech production and the situation of speech reception' (Reisigl and Wodak 2012:89). This is because they link an individual's tweet to a broader campaign or 'trend' in addition to contextualising in a far broader debate or political movement what the individual is saying and thus rendering it a particular, albeit varying, relevance to readers. Thus, situating the analysis of tweets within a hashtag 'allows transcending static spotlights and focusing on the diachronic reconstruction and explanation of discursive change' (Reisigl and Wodak 2012, 120).

Twitter, the focus of this article, has become an important platform for the dissemination of news, and certain incidents have the potential to unfold on Twitter before traditional news reports (Kwak, Lee, Park, Moon, 2010; Bruns, Highfield, Lind, 2012), and research on Twitter has examined whether social media can bring about collective action (Segeberg and Bennett, 2011). However, manipulating Twitter to answer important political science questions like those presented for election black-out periods by #MacronLeaks is not totally straight forward and requires significant methodological reflection.

### **3. Methodological Approaches to understanding #MacronLeaks**

This paper uses a digital mixed methods approach to understand different dimensions of how #MacronLeaks emerged and unfolded on Twitter. It is worth noting that there are several issues with the use of social media data to answer important political questions. In particular twitter does not allow free and open access to its complete data whether in real time or historical data. Rather, this requires purchasing from a licensed third-party data provider. A cost-free alternative is to use software to capture data in real time from the Twitter Search API, which was the approach employed in this paper. Here, NodeXL was utilised to retrieve n=15,346 tweets with a total of n=7,313 unique users from 06 May, 2017. A network of users was retrieved whose tweets would contain “MacronLeaks”, or who were replied to and/or were mentioned in the tweets that were retrieved.

It should be noted that there are limitations to using this cost free alternative to third party “Firehose” data providers. A problem of using Twitter Search API as a data source is that it can never guarantee that it will produce 100% of available data set (McCormick et al 2017). This is because the search API is a ‘black box’ whose working is not known to the public. However, it is generally considered a reliable method to retrieve data even though researchers can never fully know the completeness of their data set (McCormick et al 2017). As such, the sample presented for analysis here is assumed to be a valid and robust means by which to use Twitter to investigate the problem of election meddling during election blackout periods, with the given caveats that the exact and specific penetration of the full data set is not known and thus cannot be presented. Once the data was collected it then

required further manipulation to fulfil the research aims of this study. This was conducted utilising two different digital methods.

### **3.1 Digital Social Network Analysis as a Method for Identifying Influential Users**

The first methodology employed to analyse the collected data set was social network analysis (SNA). The fundamental goal of SNA is to examine what structures relationships between individuals (Ahmed & Bath, 2015; Gardy et al., 2011; Scott, 2017), here with how ideas spread and importantly what actors emerge as important in the spreading of messages across twitter. This gives important insights into not only which individuals emerge as important, but connections which they are embedded in (De Nooy, Mrvar, & Batagelj, 2018). Thus, a fundamental feature of SNA is that it examines the structural relationships between socially connected actors (Davies, 2009). Applying SNA to Twitter data offers many insights into social media behaviour including establishing patterns of situational awareness, alongside insights into the salience of particular messages (Ahmed and Lugovic , 2019) with this in mind it is possible to examine conversations on Twitter not just in terms of their content, but also in their particular patterns of information flow (Himmelboim et al 2017). Some scholars have viewed social media as the “new public square” and here social network analysis enables us to map the various constituents of this space and their relations to each other (Smith et al 2014). This is important because in this “new public square” the election blackout meant that many of the established actors one would expect to find as important in the debate were silenced by electoral laws and were thus absent.

Social network analysis was utilised as the primary method in identifying Twitter users who were influential during this time period using several quantitative metrics. In-degree tells us how many in-bound mentions a Twitter user received, and is one measure of influence. Out-degree tells us the frequency of out-bound mentions of Twitter accounts that used the keyword WikiLeaks. Betweenness centrality is a measure which is formed on accounts with strong communication paths and therefore regulate the flow of information. All of these come together to give us insights into how information relations are structured in the “new public square” (Smith et al 2004) and importantly who became important and how in the context of the removal of established actors from this context.

### **3.3 Methods for Qualitative Content Analysis to Understand the Content of Discourses Spread During #MacronLeaks**

To conduct a detailed discourse analysis of the tweets and what messages they spread, a randomised 10% sample of the Twitter data set was taken using Microsoft Excel. This was done because it was not viable to code the entire data set. To this effect, a discourse analysis of the tweets was conducted. Discourse analysis is an inter-disciplinary methodology (Brown et al 1983) that seeks to understand how language enacts social and cultural perspectives and identities (Gee 2004). Within this, critical discourse analysis (CDA) seeks to bring power relations into the analysis to examine how power relations are established and re-produced through the use of language (Fairclough 2010). Discourse analysis, however, presents simply an approach to understanding text, and thus requires operationalization to be completed in a robust and reproducible fashion. This operationalization was conducted using a

6-step coding methodology suggested by Braun (2006) and Muir-Cochran (2006). The themes emerged through the six-phase method which involved: familiarisation with data, generating initial codes, searching for themes among codes, reviewing themes, designing and naming themes and then producing the final report (Braun 2006; Fereday and Muir-Cochran 2006). Thus, several passes through the data were required to establish initial coding categories, and then to follow this up with further refinement and adjustment to the coding categories. Once this was completed, the entire 10% of tweets were coded. This process was conducted using the qualitative analysis software NVivo.

#### **4. Results and Reflections on #MacronLeaks: Empowering the Fringes in Both Network Structures and Discourse**

In line with the mixed methodology applied to the data collected for this study the results provide several important insights into the process through which #MacronLeaks created both forms of social networks and themes of discourse that necessitate both France and other European democracies to question their vulnerabilities to interferences created by their election blackout periods. The ongoing instability of European politics and political party structures and the rise of populism make this all the more relevant.

It is important to understand the French political context in which #MacronLeaks occurred to understand both the empirical content of the discourse created and also the high stakes for France, and Europe more broadly, presented by the spectre of a far-right, Eurosceptic candidate being elected in the heart of Europe.

The election was unusual in recent European history with Macron, a candidate without the backing of a major party, placed in a run off with the leader of the far-right party the Nation Front, Marine Le Pen. As such, this was not business as usual, and the electoral context was highly uncertain given that candidates from the 'safe', established parities of French politics on both the left and right eliminated from the race, leaving the young, unproven, inexperienced Macron alone defending the centre ground in the wake of the political upsets of Brexit (the term given to the 2016 United Kingdom referendum to leave the European Union) and the 2016 U.S presidential election which saw Donald Trump elected president. While Macron was the odds on favourite it was also widely thought that this was a new political context where anything could happen. The leak was distributed via Pastebin (Almasy 2017) and further spread on the American forum '4Chan' and relayed around the world by Wikileaks (Pierron 2017). The leak contained 14.5 GB of personal correspondence (Almasy 2017) with the En Marche! movement accusing Russia and Russian agencies of being behind the leak (Pierron 2017).

Thus while the rules around media and candidate coverage in the French elections contain provisions for exceptions to the normal communications rules for certain events, for example natural disasters or physical attacks on France (Vie Publique 2017). However, exceptions for foreign electronic election interference do not exist and #MacronLeaks poses the question as to whether France, and indeed other European democracies, would be wise to add such an exception to their electoral blackout laws to mitigate for future attempts at the influencing of election results. However, never before have circumstances conspired in this way, with an established media blackout, to make social media the dominant, if not the only, route

for the spread of information and the primary sources of news and information for voters in a major European democracy. It is important to state that this article does not endeavour to reveal the identity of those who obtained and leaked the information, their motives nor does it pertain to answer how the leak influenced voters. However, it does seek to provide scholars and policymakers with an understanding of what a social media response to such a leak during the crucial closing stages of an election look like – what the content of the key messages and indeed who are the key influencers in such a social media episode. This is important not just for furthering the understanding of social media, its study and situating its place in a rapidly changing and dynamic world, but also understanding which actors are key in such potentially influential political moments. By ascertaining this information, this article opens up significant questions about the accountability and trustworthiness of these influencers under such anarchical social media conditions.

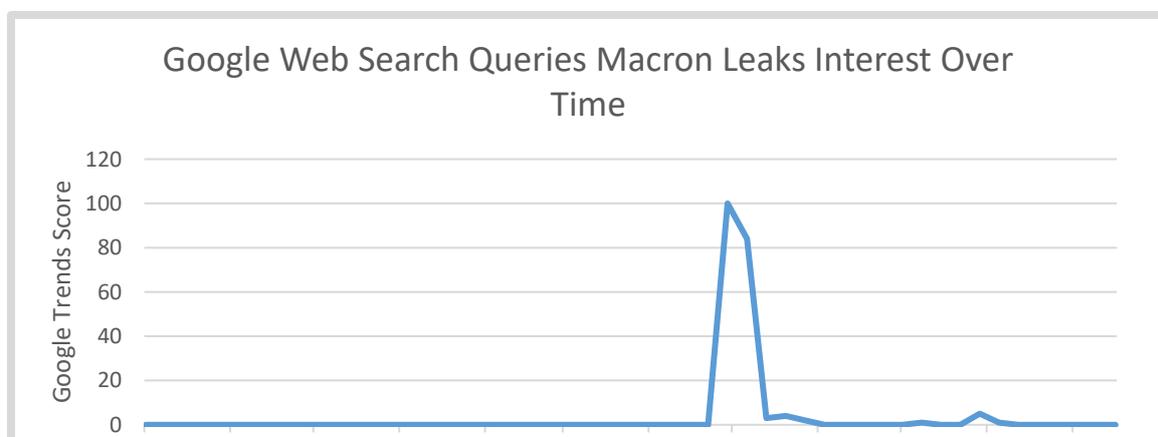
#### **4.1 Substantiating the Importance of the Web as Information Source during #MacronLeaks: The sharp increase in web activity:**

#MacronLeaks was timed to coincide with the start of the blackout period – being released only hours before both candidates and media outlets were barred from further election coverage (Almasy 2017). This meant that the only place for citizens to get information was online. This was reflected with heightened interest in citizens seeking information related to the leaks during this time, and the figure below was created by utilising data from Google Trends and it shows how there was a substantial increase in Google Web Search queries for leaks concerning Emmual Macron. Google ranks search popularity from 0 to 100, where a value of 100 is the

peak popularity for a term, and 50 half as popular. The largest peak in Web search queries occurred on the day the leaks were announced.

Moreover, when examining the geographical distribution of tweets it was found that the highest rate of interest derived from France with a Google Trends score of 100 (the highest). Google also identifies related Web search queries which were the following Emmanuel Macron (100), Twitter (10), WikilLeaks (10), 4chan (5), and France (5). It is interesting to note the heightened interest in Web search queries from France as the mainstream media were not reporting the content of the leaks and this finding indicates that citizens would take to the World Wide Web in order to locate information on the leaks. The second most related query consisted of Twitter indicating that users were searching for information on the platform. This is important because it demonstrates the primacy of Twitter in the case even over and above other social media platforms. This primacy is a key reason why this study chooses Twitter as its main focus. Thus in the vacuum of information from established news sources, the open, google indexed and searchable nature of Twitter offered those who sought information on a leak and easier way to access information compared with other, less easily accessible, alternatives such as Facebook.

**Figure 1 – Google Web Search Queries for ‘Macron Leaks’**



## **4.2 Using Social Network Metrics to Understand who Spread Messages and How: Results Related to Influential Twitter users**

The first set of results presented by this paper are a set of Twitter metrics that demonstrate the most influential actors in spreading messages about #MacronLeaks. This is important in understanding the importance of #MacronLeaks beyond both the effect that the leak had on the election outcome and also moving beyond simply the importance of what was contained in the leak itself. This is because in examining #MacronLeaks as demonstrating the vulnerability presented by blackout periods to election meddling it is important to think not just about the content of the leaks but also who is put in important discursive positions by the fact

that established media is shut out of the picture by the blackout. In examining the Twitter response to the #MacronLeaks hashtag, using data recorded from TrendsMap by 9.30am GMT there were at least 207,600 tweets using the hashtag #Macronleaks, and many of these tweets were retweets (177,800 – 86%), while 4,300 (2%) were replies which highlights how information propagation occurred very rapidly during this time. Moreover, it was found that there were around 25,500 individual unique tweets that were sent in a very short amount of time. Table 1, below, ranks Twitter users across metrics of In-Degree, Out-Degree, and Betweenness Centrality.

**Table 1 - Top ten 5 influential users**

<b>No</b>	<b>User</b>	<b>In-Degree</b>	<b>Out-Degree</b>	<b>Betweenness Centrality</b>
1	WikiLeaks	497	1	13161586.433
2	Jackposobiec	488	2	10197959
3	David_vanh	211	8	3155062.424
4	Malcolmance	219	1	2870010.223

The most influential account ranked by betweenness centrality was that of WikiLeaks who had become a main player in the dissemination of the materials related to the leaks. The Twitter account was also receiving a number of inbound connections (In-Degree) from Twitter users because users would refer to WikiLeaks as the source of the account and/or critique the account. This positions WikiLeaks as being a key player in the discussions of the leaks. The second most influential Twitter account was that of 'Jackposobiec', Donald Trump supporter and author of '*Citizens for Trump: The Inside Story of the People's Movement to Take Back America*' made headlines at the time because the user was sharing links to their followers (currently over 207 thousand) leading people to WebPages with links to Macron Leaks. The third most influential Twitter user was a Dutch activist who was critical of Macron during the height of the leaks. The fourth most influential Twitter account related to a former US intelligence operative and terrorist expert who is the author of *The Plot to Hack America* which is a Spy thriller and was the user was tweeting about the potential link between Macron Leaks and Russian Military Intelligence. The fifth most influential Twitter account was that of Emmanuel Macron who did not specifically tweet about the leaks himself but who was caught up in the controversy and was subsequently tagged by other users indicating that although not tweeting directly that Emanuel Macron was an important in the discussions that were taking place.

These are important observations for the key message of this paper that #MacronLeaks represents an important warning shot about the vulnerabilities to European democracies presented by election meddling during blackout periods. This

is because examining the most influential actors shows that those who were the most influential were the most likely to pose a threat not only to the Macron campaign, but to the established rules of the election blackout. Thus wikileaks and right wing actors in America were not covered by the election blackout, and importantly neither are covered by rules around media conduct. Thus this gives the possibility of a highly skewed take on #MacronLeaks. This shows through social media analysis we can see that it is not just the fact that a leak occurs, or indeed the content of the leaks which are the only aspects of such a leak that are important for democracy but rather also who is put in primary positions to spread narratives in the conditions of election blackouts.

Now that it has been understood who was important in spreading the messages during #MacronLeaks it is also important to understand which messages were the most spread. Table 2 below provides an overview of some of the most shared URLs on Twitter during the height of the leaks.

**Table 2 – Top 5 most shared URLs**

<b>Rank</b>	<b>Title of Page (URL)</b>	<b>No. of Shares</b>
1	Hashtag Campaign: #MacronLeaks Alt-right attacks Macron in last ditch effort to sway French Election ( <a href="https://medium.com/dfrlab/hashtag-campaign-macronleaks-4a3fb870c4e8">https://medium.com/dfrlab/hashtag-campaign-macronleaks-4a3fb870c4e8</a> )	108

- |   |   |    |
|---|---|----|
| 2 | Archeive.is page of to download Macron Leaks  | 73 |
| 3 | <p>WikiLeaks Confirms Leaked Macron Campaign Emails Are Authentic #MacronLeaks</p> <p>(<a href="http://www.thegatewaypundit.com/2017/05/breaking-WikiLeaks-confirms-leaked-macron-campaign-emails-authentic-macronleaks/">http://www.thegatewaypundit.com/2017/05/breaking-WikiLeaks-confirms-leaked-macron-campaign-emails-authentic-macronleaks/</a>)</p>   | 57 |
| 4 | <p>#MacronLeaks : WikiLeaks confirme l'authenticité des mails sur Macron, les médias français ont ordre de taire les révélations !!! La question de l'invalidation de l'élection présidentielle est posée</p> <p>(<a href="https://civilwarineurope.com/2017/05/06/france-alerte-WikiLeaks-confirme-la-fuite-de-milliers-de-mails-authentiques-sur-macron-les-medias-francais-ont-ordre-de-taire-les-revelations">https://civilwarineurope.com/2017/05/06/france-alerte-WikiLeaks-confirme-la-fuite-de-milliers-de-mails-authentiques-sur-macron-les-medias-francais-ont-ordre-de-taire-les-revelations</a> )</p> | 26 |
| 5 | <p>L'équipe de Macron dénonce un «piratage massif» de documents internes (<a href="http://plus.lesoir.be/92806/article/2017-05-05/lequipe-de-macron-denonce-un-piratage-massif-de-documents-internes">http://plus.lesoir.be/92806/article/2017-05-05/lequipe-de-macron-denonce-un-piratage-massif-de-documents-internes</a>)</p>  | 26 |

The most shared Web link was that related to a Medium article (a blogging platform) which provided information on how the alt-right were attempting to alter the outcome

of the French election. It is interesting to note that no mainstream media outlet had covered the leaks because they were prevented from doing so. This is again important because this demonstrates that not only were marginal media outlets and actors important in spreading messages about #MacronLeaks, they were also pivotal in creating what messages were spread again in the absence of comment from trusted and established media outlets. This is again worrying because this opens up the possibility for a more complex and sophisticated election meddling campaign to exploit the press blackout to manipulate unregulated sources of information to spread campaign changing messages.

The second most shared Web URL pointed to a page whereby it was possible to download the leaks which highlights how Twitter was an important back channel utilised to share links allowing users to access the leaks. This is again important because it made it possible for the public to have direct access to the leaked documents themselves. While in this case the leaked documents were authentic, and did not contain any problematic information for Macron, this direct sharing of information demonstrates the vulnerability of blackout periods to the possibility of false information being spread without the ability of mainstream media outlets nor political campaigns themselves to be able to comment on them. The third most frequently shared URL was a news article indicating that the Macron leaks were authentic. The fourth most shared URL was a further article which indicated that the Macron Leaks were confirmed as being authentic and the article raised the question of whether the presidential election had become invalidated. The fifth most shared article was relaying the news that the Macron election team denounced the leaks as that of mass piracy.

### 4.3 Understanding Which Themes were Important in the discussion of #MacronLeaks: Results of Qualitative Discourse Analysis of the tweets

Moving beyond just examining the most shared URLs for #Macronleaks it is also important to understand the broader spread of discourse which accompanied the incident. This is important because in what has been dubbed the “post-truth” era where scholars have argued that a US president could be “memed” into existence (Nussbaum 2016), it is important to understand the broader discursive context in which such a leak occurs and which discussions accompany it. In the absence of the ability of mainstream media or the political candidates themselves to create content which can be shared by social media users it is key to consider which narratives emerged to fill this void. This section provides results from an in-depth analysis of tweets which was performed on the data. The table below provides a summary of results from the in-depth qualitative analysis of tweets.

**Table 3: Summary of coding categories and coding totals**

<b>Theme:</b>	<b>Description:</b>	<b>Percentage</b>
<b>Conspiracy theory/anti-systemic</b>	Presented the leak as occurring in the context of conspiracies or expressed anti-systemic sentiments	18
<b>Anti-Macron</b>	Expressed anti-Macron sentiments	17
<b>Neutral</b>	Neutral retweets of links	14
<b>Press Blackout</b>	Referenced the French legal press blackout	12
<b>Russia</b>	Referenced Russian involvement	10

<b>WikiLeaks</b>	Referenced WikiLeaks	8
<b>Humour</b>	Described the leak in humorous terms	7
<b>Analysis</b>	Linked to expert analysis	5
<b>Anti-Marine Le Pen bias</b>	Referenced anti Marine Le Pen bias of mainstream media/politics	4
<b>Pro-Macron</b>	Expressed pro-Macron sentiments	3
<b>USA</b>	References USA involvement or politics	2

The data was sorted into 11 categories, however, only 5 of these are deemed as important for furthering our understanding how the #MacronLeaks scandal was discussed on Twitter<sup>1</sup>. These 5 categories accounted for 58% of the total Twitter traffic, and will be analysed separately here. These five categories are described below.

### ***Theme 1 – Conspiracy Theories***

In the absence of the possibility of neither the French media nor the candidates themselves to comment on #MacronLeaks the most common form of discourse which accompanied the leaks were discussions of conspiracy theories surrounding Macron and his election campaign. Thus again this demonstrates the importance of #MacronLeaks in demonstrating the vulnerabilities presented by election blackout periods in creating a discursive vacuum into which conspiracy theory tweets can become important. The category contained the highest frequency of tweets referenced conspiracy theories and included anti-systemic narratives, with 16% of the total. This included such things as referencing Macron’s association with the

Rothschild's as a reason why he was so widely defended during the leak, a Twitter user noted:

*'Hmmm I wonder why someone who's a Rothschild is defending one of their bankers 😏'.*

This also included the depiction of the general political landscape as unfairly weighted in favour of Macron, including arguing that the French media network Agence France-Presse (AFP) was continuing their campaign for Macron after the official midnight press blackout on election campaigning. This occurs in this context of a lack of media sources such as Agence France-Presse being able to cover the leak nor the broader political context of election meddling. Thus voters taking to twitter to get information under the hashtag of #MacronLeaks would have been confronted with these narratives.

### ***Theme 2– Anti-Macron Discussions***

Complimenting the prominence of conspiracy theories in the coverage of #MacronLeaks was the second most prominent theme which emerges in the discourse which were anti-Macron discourses. These include individuals tweeting about Macron being dishonest and corrupt. Maligning that the French would never the less vote for him as a user noted:

*"Macron could well be the biggest crook in the country, but the French would still vote for him".*

The tweets also sought to tie Macron negatively to recent terror attacks in France, citing that the emails contained communication between himself and as one Twitter user noted the “terror funding Saudis”. This again demonstrates that it is not simply the origin event of election meddling that demonstrates the vulnerability of democracies during media blackout periods, but also the broader social media messages which are created by users and shared in a context where established political candidates and media outlets are banned from making comments. Thus more than one third (35%) of the social media response is constituted by conspiracy theory and anti-Macron sentiment demonstrating how skewed the discourses created in the wake of #MacronLeaks were. Thus by being “blacked out” the absence of media or political comment on the leaks empowers fringe narratives to become numerically the most important in shaping the political discourse during this event.

These conspiracy theory narratives were also supplemented with user created visual ‘memes’ that linked Macron and his stance to being dangerous for France in it’s ability to facilitate terror attacks. Figure 2 below shows a shared visual meme that connects Macron’s liberal political stance with facilitating terror in France. Here, it quotes Macron as saying ‘there is not French culture’ and situates him with a thumbs up with the devastation of the Bataclan concert hall attack behind him. This is a decontextualized quote from a speech he made where the full quote is “there is no French culture. There is a culture on France. It is diverse’ (Jégo 2017). Obviously this changes the context of what he is saying significantly. This ties in with tactics used on social media by the American Alt-right where they create highly stylised

graphical memes that depicted politicians as being globalist, pro-immigration and anti-‘native’ cultures. This graphic was also shared in tandem with another in figure 3.

Figure 2: Twitter meme about Macron



Figure 3: Twitter meme showing Marine le Pen and her niece as defenders of France



Here, this meme shows the leader of the far right national front and her niece as heroic knights with swords standing ready to defend the colours of the French flag. Again these two memes show the way that Twitter users are attempting to use a scandal to shift political opinion to the fringes. This is especially important given the two contextual points in which the leaks operate – where there is actually no tangible evidence for any wrong doings to discredit Macron, but where the media blackout pushes the power to cover the scandal into the hands of social media users promoting fringe political agendas.

Others pointed out, without referencing any particular offense, that the leaks would ruin Macrons presidency even if he was elected. Here, these tweets attempt to render the Macron leaks scandal as something that cements negative opinions of Macron, founded or not, and create a climate where the favourite to win the French presidential election should be seen in a negative light.

This, combined with the above theme of anti-systemic and conspiracy theory related narratives accounts for 31% of the tweets coded in this sample. While much attention has been made to hackers, and indeed leaks, affecting politics with the content of the documents released, these discussions emphasise the importance of also looking at how the social media traffic related to such incidents can have

political impact. This is because they are extremely numerous, and indeed extremely slanted against mainstream and centrist politicians in the case of Macron leaks. In terms of a contrast, pro-macron tweets accounted for a low 2% within the sample. Thus, especially under conditions of a campaign blackout where mainstream media that is required to uphold rigorous standards is completely silenced, the overwhelming bias related to discussions on Twitter are important.

### ***Theme 3– Midnight Campaign Blackout***

The third theme which is the reference to the midnight campaign blackout imposed during all French presidential elections. This is important because the leak was timed specifically to coincide with this deadline of the legal end of reporting so that the rousing uncertainty created by the media being unable to report on the leak would create an atmosphere of uncertainty about what the leak contained and whether it was important or not. Arguably, this could have been because the stolen files themselves did not actually contain anything explosive, thus there would be no utility in leaking them with enough time to let the media report on them. It is this blackout, and period of uncertainty, that makes the emergence of the top two themes of the tweets, being anti-Macron and anti-system/conspiracy theories all the more important because Twitter was one of the few places that voters could go for news on the leaks before they actually casted their votes.

The final two themes which are important for analysis reference Russia (9%) and WikiLeaks (7%) outlined next. Both of these themes are interesting because of the multitude of messages contained within them.

#### ***Theme 4 – Russia***

Russia in particular polarises the Twitter traffic, with many referencing Russia as intervening to create the leaks and thus the uncertainty because they have sympathies for far-right politicians such as Marie Le Pen who had a specifically more pro-Russian image than the other candidates in the French elections. Others simply re-tweeted or reported the detection of Cyrillic in the files, arguing that this was enough to tie the leaks directly to Russia.

#### ***Theme 5 – WikiLeaks***

WikiLeaks featured in a far more descriptive way, with the organisation referenced as important in the dissemination of the leaked data, and as working to interpret exactly what the emails contained with no discussion of the legitimacy of it as a source of information at such an important time in a major democratic election. Thus, a reading of this could be that the Twitter traffic presents WikiLeaks as a reliable source of information, another worrying trend given that the organisation is not held up to any formal regulations or rigour.

### **5. A Warning for Election Blackout Periods: Conclusions on #MacronLeaks**

This paper has demonstrated that election silence periods have metamorphosed into vulnerabilities to European democracy in the context of increased attempts at election meddling. Thus while social media has long been established to have potential for collective action (Author removed, 2017; Papacharissi, 2016) its behaviour during election meddling in silence periods has not been studied. Doing this has enabled this paper to make a contribution to not only this literature but in understanding the importance of thinking about the need to reform the way in which democratic processes are conducted in the digital age. Thus neither the effect of the leaks on the polls nor the content of the leak are the only things that are important but rather the ability of social media to empower fringe voices in spreading and covering the leaks is a worrying trend. While in the case of #MacronLeaks the leak did not cost Macron the election, analysing it's anatomy as a Twitter episode is an important warning to Europe in that a more sophisticated and well planned attempt at election meddling could capitalise on the vulnerabilities created by election silence periods to seek to sway other elections. Indeed, in this particular case the laws in France which regulate election coverage have exemptions for certain disruptive events, including natural disasters or physical attacks on France (Vie Publique 2017), it may now be time to re-evaluate these laws and add election meddling and cyber-attacks as an exemption to the current press laws.

When reflecting on the users that were tweeting during #MacronLeaks it appears that those accounts who were found to be most influential had considerable reach on Twitter. Indeed, our results indicate that Twitter was a central platform for the public to access information related to the leaks. Importantly, our results have highlighted how, at the time of the leaks which were a major political scandal, the majority of the

content on Twitter contained anti-Macron narratives. A significant difference between mainstream media and Twitter is its unregulated nature. This allows potentially unfounded claims to emerge and rise to prominence dubbed as '*fake news*' which has received considerable interest in recent years. The implications for this is important because political opponents can utilise social media platforms such as Twitter to generate and propagate false information rapidly, and potentially anonymously. WikiLeaks appeared to be an influential Twitter account during the leaks and the narratives indicated that the account appeared to be a reputable source of information. This is a potential cause for alarm because the account and organisation is not designed to follow formal regulations or the rigour which is applied to mainstream organisations. Moreover, the fact that traditional media may not report and/or comment on material released online may lead to greater interest among the general public. Currently, the politics of Internet leaks and hacks remains an under studied field, however, it is clear that modern communication devices such as Twitter have had a profound effect on how politics is conducted. In regards to limitations of our study it was limited because it retrieved data via the Search API which is a sample of discussion taking place and certain tweets may have been excluded. Further research could seek examine the extent to which Twitter may have influenced the voting behaviour of users that were observing and viewing tweets at the time, for instance, via interviews and surveys. The results of this study may be of interest to researchers interested in examining how information is leaked on social media.

Overall, our article has shed new light on the users that were engaging with the #Macronleaks hashtag and raises significant questions for the role of social media in such a delicate election context. Moreover, it highlights the potential of social

media platforms and Web 2.0 technologies to give a platform for those wishing to disrupt and undermine democratic processes. The prominence of WikiLeaks as a prominent influencer of the narrative of Macron leaks raises significant questions because it falls outside of any national or professional regulations about journalistic integrity. In this case, Macron was fortunate that WikiLeaks acted ethically in this case and did not disseminate 'fake news' about the content of the leaks which could have seriously damaged his chances of election.

Thus, these findings should be of interest to government organisations, politicians, and academics within the field of social media and political participation in an era where 'fake news' and memes spread on social media are becoming increasingly important, yet unregulated and under-considered features of the political landscape. Here, governments and policy makers are lagging behind emergent trends and these findings may require France in particular to re-consider its ban on media coverage of presidential campaigns under specific circumstances as other interventions of this type are unlikely to be limited to this election campaign and by forbidding mainstream media to report on the leak, France inadvertently favoured fringe political voices and pushed its citizens to unregulated media outlets. Thus it would be wise for European, and indeed global, democracies to heed the "warning shot" fired during #MacronLeaks to critically assess press coverage rules around presidential campaigns and to think carefully about whether the contemporary context of foreign election meddling and cyber-attacks makes election blackouts an "Achilles heel" of democratic processes.



## References

About Twitter, (n.d.). Twitter Usage/ Company Facts. (Online). Available at:  
<https://about.Twitter.com/company> [Last Accessed 19/06/17]

Aragón P, Kappler K E, Kaltenbrunner A, Laniado D, Volkovich Y (2013)

Communication dynamics in twitter during political campaigns: The case of the 2011 Spanish National election, *Policy and Internet* 5:2, pps 1-24

<https://doi.org/10.1002/1944-2866.POI327>

Author removed (2017)

Author removed (2017)

Ahmed, Wasim, Bath, Peter and Demartini, Gianluca (2017) Using Twitter as a Data Source: An Overview of Ethical, Legal, and Methodological Challenges. In: The Ethics of Online Research. *Advances in Research Ethics and Integrity* (2). Emerald, pp. 79-107. ISBN 9781787144866

Ahmed, W., & Lugovic, S. (2019). Social Media Analytics: Analysis and Visualisation of News Diffusion using NodeXL. *Online Information Review*.

Allcott, H., & Gentzkow, M. (2017). Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives*, 31(2), 211–236. <https://doi.org/10.1257/jep.31.2.211>

Bennett L. 2006. "Communicating Global Activism: Strength and Vulnerabilities of Networked Politics." In *Cyberprotest: New Media, Citizens and Social Movements*, ed. van de Donk W., Loader B. D., Nixon P. G., Rucht D. London: Routledge.

Benkler Y (2011) *A Free Irresponsible Press: WikiLeaks and the Battle over the Soul of the Networked Fourth Estate* in Brevini B, Hintz A, McCurdy C (2013) *Beyond WikiLeaks: Implications for the Future of Communications, Journalism and Society*, Palgrave, London, United Kingdom.

Borger J (2017) As France becomes latest target, are election hacks the new normal? The Guardian [online] available at <https://www.theguardian.com/world/2017/may/05/french-election-hack-emmanuel-macron> accessed 10/07/2017

Braun V (2006) Using thematic analysis in psychology, *qualitative research in psychology*, 3:2 pps 77-101.

Brown G, Gillian B, Yule G (1983) *Discourse Analysis*, Cambridge University Press, Cambridge, UK

Bruns, A., Highfield, T., & Lind, R. A. (2012). Blogs, Twitter, and breaking news: The produsage of citizen journalism. *Producing theory in a digital world: The*

*intersection of audiences and production in contemporary theory*, 80(2012), 15-32.

Brevini B, Hintz A, McCurdy C (2013) *Beyond WikiLeaks: Implications for the Future of Communications, Journalism and Society*, Palgrave, London, United Kingdom.

Conover, M., Ratkiewicz, J., Francisco, M. R., Gonçalves, B., Menczer, F., & Flammini, A. (2011). Political polarization on Twitter. *ICWSM*, 133, 89-96.

Conseil Constitutionnel (2017) Élection Présidentielle 2017 [online] at <https://presidentielle2017.conseil-constitutionnel.fr/tout-savoir/en-resume/textes-de-reference/dispositions-code-electoral-rendues-applicables/dispositions-penales-partie-legislative-vigueur/index.html>

accessed 25/05/2019

De Nooy, W., Mrvar, A., & Batagelj, V. (2018). *Exploratory social network analysis with Pajek*. Cambridge University Press.

Fairclough N (2010) *Critical Discourse Analysis: The Critical Study of Language*, Taylor and Francis, London, UK

Fereday J and Muir-Cochrane (2006) Demonstrating Rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development, *international Journal of Qualitative Methods*, 5:1 pps

Freedom House (2017) Freedom on the Net 2017: Country Profile France [online]  
<https://freedomhouse.org/report/freedom-net/2017/france> accessed 20/05/2019

Gardy J et al (2011) Whole-Genome Sequencing and Social-Network Analysis of a Tuberculosis outbreak, *The New England Journal of Medicine*, 364, pps 730 - 739

Gee, JP (2004) An Introduction to discourse analysis: Theory and Method, Routledge, London

Himmelboim, I., Smith, M. A., Rainie, L., Shneiderman, B., & Espina, C. (2017).  
Classifying Twitter topic-networks using social network analysis. *Social Media+ Society*, 3(1), 2056305117691545.

Jégo Y (2017) Emmanuel Macron et la reniement de la culture française [online]  
<http://www.lefigaro.fr/vox/politique/2017/02/06/31001-20170206ARTFIG00209-emmanuel-macron-et-le-reniement-de-la-culture-francaise.php> accessed  
12/01/2018

Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media?. In *Proceedings of the 19th international conference on World wide web* (pp. 591-600). ACM.

Loader, B. D., & Mercea, D. (2011). Networking democracy? Social media innovations and participatory politics. *Information, Communication & Society*, 14(6), 757-769.

Laurinavičius M (2018) A guide to the Russian tool box of election meddling: a platform to analyse the long term comprehensive strategy of malign influence, [online] at [http://iesc.lt/app/uploads/2018/10/IESC\\_Guide\\_ToolBox\\_2018\\_FINAL.pdf](http://iesc.lt/app/uploads/2018/10/IESC_Guide_ToolBox_2018_FINAL.pdf) accessed 23/05/2019

McCormick T H, Lee H, Cesare N, Shojaie A, Spiro E S (2017) *Using Twitter for Demographic and Social Science Research: Tools for Data Collection and Processing*, *Social Media Research*, 46(3) pps 390-421

Nussbaum, E. (2017, January 16). *How Jokes Won the Election*. Retrieved from <https://www.newyorker.com/magazine/2017/01/23/how-jokes-won-the-election>

Papacharissi, Z. (2016). Affective publics and structures of storytelling: Sentiment, events and mediality. *Information, Communication & Society*, 19(3), 307-324.

Pierron M (2017) MacronLeaks: En Marche! piraté, dénonce une “operation de destabilisation” l’express [online] [https://www.lexpress.fr/actualite/politique/elections/macronleaks-des-milliers-d-emails-de-l-equipe-de-campagne-de-macron-pirates\\_1905721.html](https://www.lexpress.fr/actualite/politique/elections/macronleaks-des-milliers-d-emails-de-l-equipe-de-campagne-de-macron-pirates_1905721.html) accessed 24/05/2019

Reisigl, M., and Wodak, R. (2001), *Discourse and Discrimination: Rhetorics of racism and anti-semitism* (London: Routledge).

Roberts A (2012) WikiLeaks: The illusion of transparency, *International Review of Administrative Sciences*

Scott, J. (2017). *Social Network Analysis*. SAGE.

Seegerberg, A., & Bennett, W. L. (2011). Social media and the organization of collective action: Using Twitter to explore the ecologies of two climate change protests. *The Communication Review*, 14(3), 197-215.

Satter R (2017) Social media timeout as French election reaches final state, Associated Press [online] at <https://apnews.com/40196d9f917840aeb6efaf06b3300c78> accessed 24/05/2019

Sifry M (2011) *WikiLeaks and the Age of Transparency*, Counterpoint Publishing, United States of America.

Smith, M. A., Rainie, L., Shneiderman, B., & Himelboim, I. (2014). Mapping Twitter topic networks: From polarized crowds to community clusters. *Pew Research Center*, 20, 1-56.

Tual M and Leloup D (2017) <<MacronLeaks>>: Les questions qui se posent après le piratage d'En marche! Online at [http://www.lemonde.fr/pixels/article/2017/05/06/piratage-d-en-marche-les-questions-qui-se-posent\\_5123507\\_4408996.html](http://www.lemonde.fr/pixels/article/2017/05/06/piratage-d-en-marche-les-questions-qui-se-posent_5123507_4408996.html) accessed 10/07/2017

Vie Publique (2017) Les règles de la campagne électorale audiovisuelle et sur internet [online] at <https://www.vie-publique.fr/actualite/dossier/presidentielle-2017/regles-campagne-electorale-audiovisuelle-internet.html> Accessed 24/05/2019

Wolfsfeld, G., Segev, E., & Sheaffer, T. (2013). Social media and the Arab Spring: Politics comes first. *The International Journal of Press/Politics*, 18(2), 115-137.

Zappavigna, M. (2012). *Discourse of Twitter and Social Media: How We Use Language to Create Affiliation on the Web*, digital edition. London: Bloomsbury

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<sup>i</sup> Two categories did not contain any narratives important to understanding the political discourses about Macronleaks. One was neutral and retweets which contains no important discursive statements, the other was 'humour' which made jokes and parodies about macron leaks. A further 4 categories were not frequent enough to warrant further discussion as they each represented under 5% of the total discussion.