



Junk News During the EU Parliamentary Elections: Lessons from a Seven-Language Study of Twitter and Facebook

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Introduction

In Europe, there is widespread concern that coordinated misinformation campaigns and computational propaganda are undermining the integrity of political processes. Our previous research has shown that traffic manipulation and ‘junk news’ – ideologically extreme, misleading, and factually incorrect information – are widespread during elections and other critical moments of public life to manipulate public opinion.¹

In light of these threats, policy-makers have raised concerns about the potential risk of disruption of and tampering with the forthcoming European elections. In December, the European Commission rolled out an action plan to build capacity for joint responses to misinformation campaigns in the EU, to mobilize industry leaders to implement best practices for transparency, accountability and detection, and to raise awareness.² The malicious use of social media for political goals also prompted a number of legal and regulatory interventions across Europe, from

forcing social media companies to disclose financial information about political campaign advertising to criminalizing hate speech and illegal content and broader efforts to support media literacy.³

Access to accurate information about politics and electoral processes is critical to the health of democratic systems. With this in mind, this data memo examines the quality and quantity of political news and information that social media users were sharing across seven European languages in the lead-up to the 2019 European parliamentary elections.

We ask: **(1)** What type of political news and information were social media users sharing in the English, French, German, Italian, Polish, Spanish, and Swedish language spheres ahead of the vote? **(2)** How much of it is extremist, sensationalist, or conspiratorial junk news? **(3)** What engagement did these sites have on Facebook and Twitter in the

weeks leading up to the vote? And **(4)** What are the most common narratives and themes relayed by junk news outlets?

To answer these research questions, we collected 584,062 tweets related to the European parliamentary elections from 187,743 unique users between 5 April and 20 April using election-related hashtags. From this sample, we extracted 137,658 tweets containing a URL link, which pointed to a total of 5,774 unique media sources. Sources that were shared five times or more across our collection period were manually classified by a team of nine multi-lingual coders based on a rigorous grounded typology developed and refined through the project's previous studies of eight elections in several countries around the world (see online supplement for full specification of methods).^{4,5,6} Each source was coded individually by two separate coders. Using this technique, we were able to successfully label nearly 91% of all links shared during our data collection.

To provide a snapshot of public engagement with sources of misinformation shared ahead of the European elections, we extracted the five most popular sources of junk news in each language sphere and measured the volume of Facebook interactions with these outlets in the month preceding the election (5 April–5 May) using the NewsWhip Analytics dashboard. As points of comparison, we computed the same metrics for the five most popular professional news sources from each language sphere. Finally, to gain a better understanding of the different political narratives favoured by junk news outlets, we conducted a thematic analysis of the 20 most engaging junk news stories on Facebook during our data collection period.

Our main findings are:

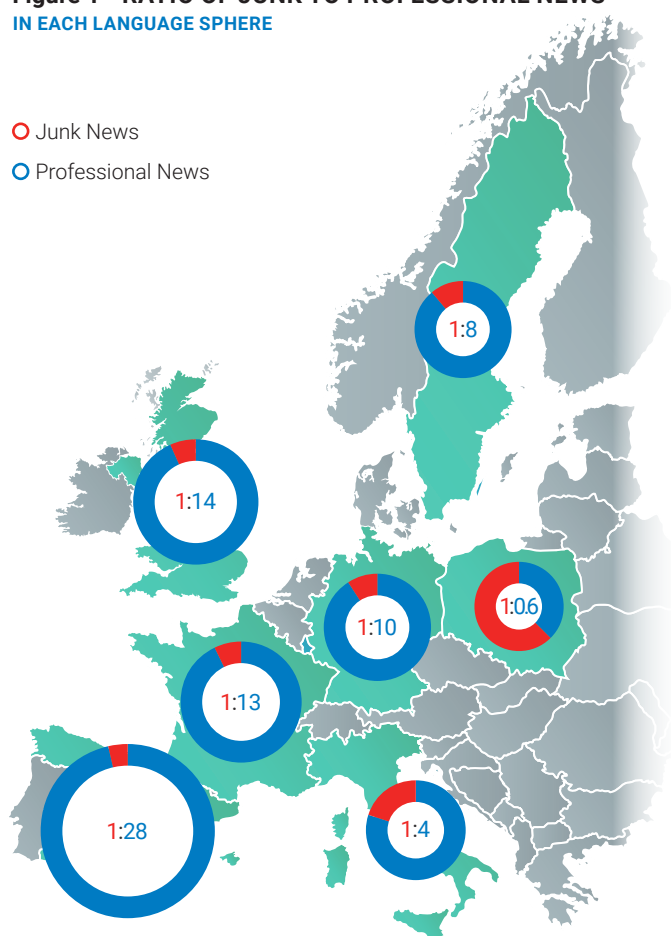
- Less than 4% of sources circulating on Twitter during our data collection period were junk news or known Russian sources, with users sharing far more links to mainstream news outlets overall (34%), except in the Polish sphere, where junk news made up 21% of traffic.
- On Facebook, while many more users interact with mainstream content overall, individual junk news stories can still hugely outperform even the best, most important professionally produced stories, drawing as much as four times the volume of shares, likes, and comments.
- The most successful junk news stories in our data set tend to revolve around populist themes such as anti-immigration and Islamophobic sentiment, with few expressing Euroscepticism or directly mentioning European leaders or parties.

Types of News and Information Shared over Twitter



Overall, we found very low proportions of junk news and almost no content from known Russian websites (see *Table 1*), except a few links to *rt.com* and *sputniknews.com*, which made up less than 1% of traffic in the Swedish, French, and German language spheres.

**Figure 1 - RATIO OF JUNK TO PROFESSIONAL NEWS
IN EACH LANGUAGE SPHERE**



Instead, identified sources of junk news consisted mostly of homegrown, alternative, or hyper-partisan media outlets. Content produced by independent citizen, civic groups and civil society organizations, including a number of get-out-the-vote initiatives, were widely circulated, notably in the German and English spheres (16% and 21% of traffic respectively).

Surprisingly, given the nature of the campaign, links to political party, government, and political candidate websites represented only a modest percentage of overall traffic, particularly for tweets associated with Italian (14%), Polish (7%), and Swedish election hashtags (6%). In many instances, this benefited professional and mainstream news outlets, which dominated shares on Twitter, especially in the Swedish sphere (55%). Likewise, the vast majority of Spanish and French tweets linked to professional sources of news and information, mirroring trends highlighted in our previous memos.

Out of the seven languages monitored, tweets associated with Polish hashtags returned the highest volume of junk news (21%), while junk news diffusion in the Spanish and English language spheres was negligible in comparison (1.6% and 1.4% respectively). A significant proportion of Polish traffic linked to social media platforms (30%), with two-thirds of these links redirecting to the official Facebook page of the right-wing Law and Justice Party. In contrast to our 2018 findings, the ratio of professional news to junk news shared using Swedish hashtags had significantly dropped (see *Figure 1*). It is noteworthy, however, that traffic in the Polish and Swedish spheres was the lowest overall in our sample (see *Table 2* in the online supplement).

**Table 1 - TYPES OF POLITICAL NEWS AND INFORMATION SHARED OVER TWITTER (%)
BETWEEN 5 APRIL - 20 APRIL 2019**

Type of Source	English	French	German	Italian	Polish	Spanish	Swedish	Total
Professional News Outlets	20.1	51.5	28.1	38.9	13.0	44.6	54.8	33.9
Professional Political Sources	29.5	18.7	16.9	13.6	7.1	20.2	6.3	22.2
Junk News Content	1.4	4.0	2.8	8.7	21.0	1.6	6.7	3.6
Other Political News & Information	36.5	18.6	36.9	23.5	27.4	19.1	21.6	29.0
Other Social Media Types	12.5	7.2	15.4	15.3	31.5	14.5	10.6	11.3

Trends in User Interactions with Junk and Professional Content on Facebook



User engagement on Facebook is a useful way to gauge the popularity and impact of various sources of news and information. Using the NewsWhip Analytics dashboard, our team measured the total and average volumes of Facebook interactions (comments, likes, and shares) with content published by the five most popular sources of junk and professional news in each language sphere – seventy in total – between 5 April and 5 May.

While junk news sites were less prolific publishers than professional news producers, their stories tend to be much more engaging. Indeed, in five out of the seven languages (English, French, German, Spanish, and Swedish), individual stories from popular junk news outlets received on average between 1.2 to 4 times as many likes, comments, and shares than stories from professional media sources (see *Figure 2*). In the German sphere, for instance,

interactions with mainstream stories averaged only 315 (the lowest across this sub-sample) while nearing 1,973 for equivalent junk news stories. This is unsurprising given that junk news sites typically resort to clickbait, emotive language, and outrage-mongering in their headlines, and this generates more clicks and engagement on social media.

This should nonetheless be contrasted with overall public engagement with mainstream outlets across the Facebook network. Not only do mainstream publishers have a higher following and therefore wider access to drive activity around their content, but their stories tend to be seen, liked, and shared by far more users overall. Stories from theguardian.com, for example, were shared over 3.4 million times between early April and early May – about sixteen times as much as stories from all of the top junk news websites combined. Likewise, as can be seen in *Table 2*, even prolific German and Italian junk news outlets, such as *journalistenwatch.com* and *ilprimatonazionale.it*, received far fewer total likes, comments, and shares than the equivalent professional news sources (e.g. 331,568 for *tagesspiegel.de* and 3,377,674 for *ansa.it*).

Figure 2 - AVERAGE FACEBOOK INTERACTIONS, PER STORY (SHARES, LIKES & COMMENTS) BETWEEN 5 APRIL - 5 MAY 2019

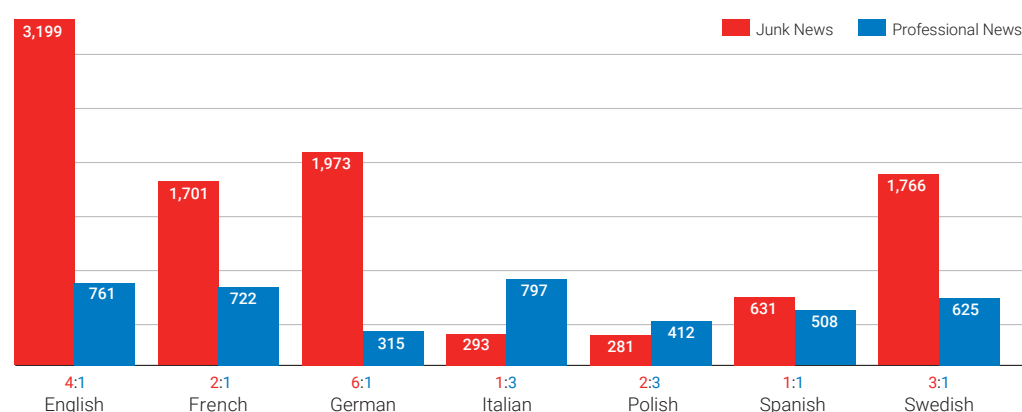


Table 2 - TOTAL FACEBOOK INTERACTIONS, MOST SHARED JUNK NEWS SOURCES BETWEEN 5 APRIL - 5 MAY 2019

Domain	Article Count	Like	Share	Comment
infowars.com	102	83,659	29,511	28,573
damocles.co	10	31,640	13,324	13,126
journalistenwatch.com	1,065	91,842	60,279	26,758
ilprimatonazionale.it	299	202,019	41,718	50,261
publiszer.pl	63	3,573	4,825	705
elcorreodemadrid.com	241	46,136	14,859	11,364
friatider.se	313	275,948	42,300	68,182

Table 3 - TOTAL FACEBOOK INTERACTIONS, MOST SHARED PROFESSIONAL NEWS SOURCES BETWEEN 5 APRIL - 5 MAY 2019

Domain	Article Count	Like	Share	Comment
theguardian.com	8,420	12,520,907	3,398,042	3,305,281
lefigaro.fr	12,682	4,343,473	1,040,745	1,262,727
tagesspiegel.de	3,384	184,199	64,589	73,755
ansa.it	16,699	2,115,803	557,857	587,936
wgospodarce.pl	1,223	44,025	7,704	10,427
publico.es	2,812	2,252,549	771,029	541,380
svd.se	5,351	253,131	48,600	65,299

Key Themes across the Most Popular Junk News Stories

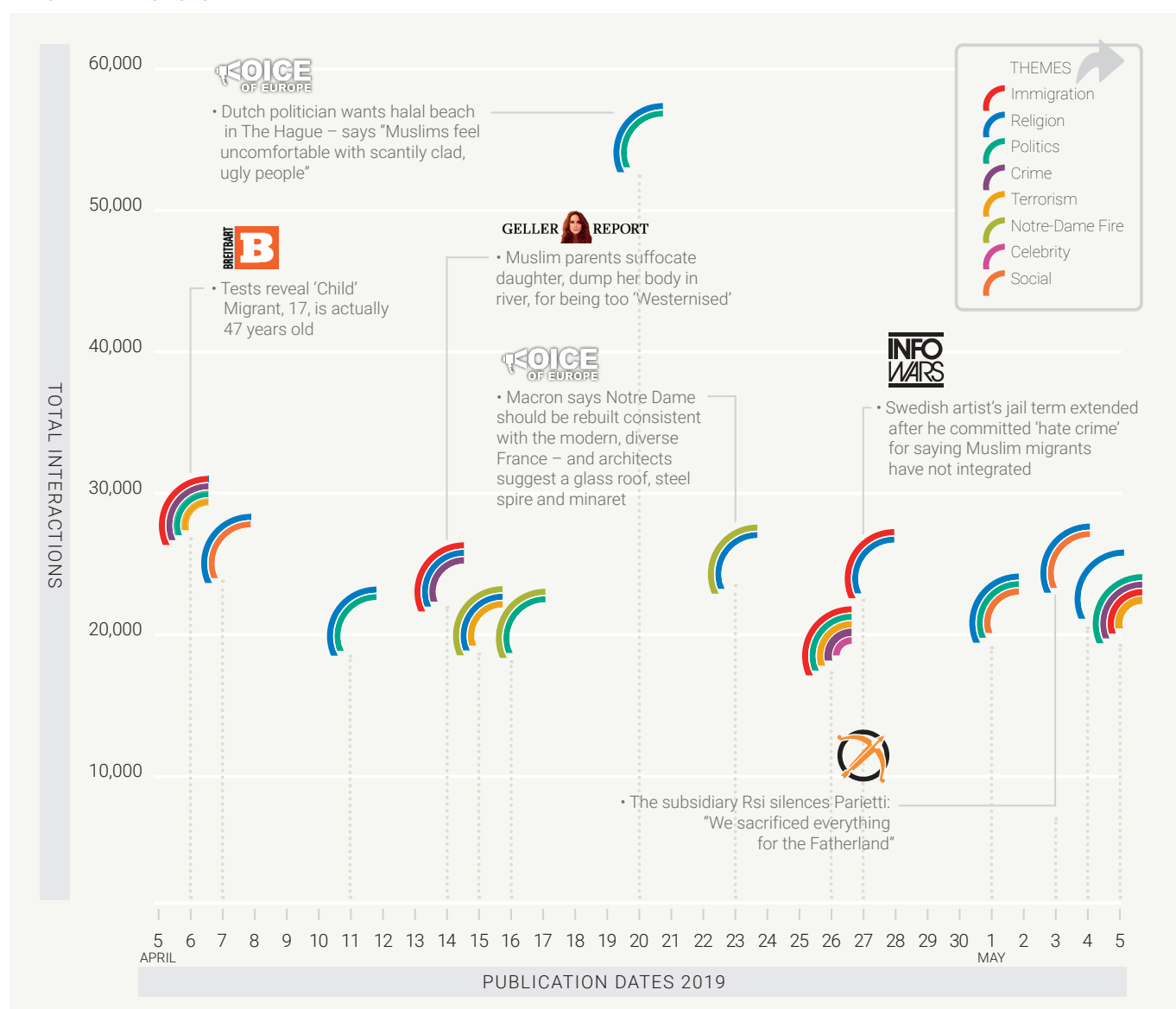
Most junk news sources being shared during our data collection either sensationalized or spun political and social events covered by mainstream media sources to serve a political and ideological agenda. There are two noticeable patterns in the thematic content of these stories.

Out of the twenty stories we analysed, 9 featured explicit mentions of 'Muslims' and the Islamic faith in general, while seven mentioned 'migrants', 'immigration', or 'refugees' (see *Figure 3*). In seven instances, mentions of Muslims and immigrants were coupled with reporting on terrorism or violent crime, including sexual assault and honour killings. Several stories also mentioned the Notre Dame fire, some propagating the idea that the arson had been deliberately plotted by Islamist terrorists, for example, or suggesting that the

French government's reconstruction plans for the cathedral would include a minaret.

In contrast, only 4 stories featured Euroscepticism or direct mention of European Union leaders and parties (see *Table 5* in the online supplement). The ones that did either turned a specific political figure into one of derision – such as Arnoud van Doorn, former member of PVV, the Dutch nationalist and far-right party of Geert Wilders, who converted to Islam in 2012 – or revolved around domestic politics. One such story relayed allegations that Emmanuel Macron had been using public taxes to finance ISIS jihadists in Syrian camps, while another highlighted an offer by Vladimir Putin to provide financial assistance to rebuild Notre Dame.

Figure 3 - TOP STORIES FROM MOST SHARED JUNK NEWS SITES
BY TOTAL INTERACTIONS



Conclusion

Our previous research has demonstrated that junk news and traffic manipulation are commonly used to influence public life in Europe. Extensive interviews conducted with campaign managers, journalists, and social media employees in 2016 revealed that sockpuppet accounts thrive in Poland, where they are deployed to troll political activists.⁷ During the 2017 German elections, homegrown alternative media and extremist right-wing outlets disseminated junk news about political issues.⁸ In 2018, we found that junk news and traffic manipulation played critical roles in shaping the national conversation around issues of migration and security during electoral campaigns in France and Sweden.⁹ Similar tactics were deployed to erode faith in public institutions and encourage discord during the independence vote in Catalonia and the yellow vests protests in France.^{10,11} Most recently, our work also provided evidence of the use of sophisticated digital tools, including amplifier accounts and targeted ads to exert influence on British politics ahead of the 2016 Brexit referendum.¹²

In this data memo, after analysing sources of news and information in seven different language spheres, we found that **(1)** less than 4% of the sources circulating on Twitter during our data collection were junk news, with users sharing higher proportions of links to professional news sources overall; **(2)** on Facebook, junk news outlets tended to receive more engagement per story, but are seen, shared, and liked by far less people overall, and **(3)** most viral junk news stories in our data set revolved around controversial political issues such as immigration and security rather than focusing directly on European politics. Taken together, these findings indicate that individuals discussing politics on social media ahead of the European parliamentary elections shared links to high-quality news content, including high volumes of content produced by independent citizen, civic groups and civil society organizations, compared to other elections we monitored in France, Sweden, and Germany.

About the Project

The Computational Propaganda Project (COMPPOP), which is based at the Oxford Internet Institute, University of Oxford, is an interdisciplinary team of social and information scientists researching how political actors manipulate public opinion over social networks. This work includes analysing how the interaction of algorithms, automation, politics, and social media amplifies or represses political content, disinformation, hate speech, and junk news. Data memos are designed to present quick snapshots of

analysis on current events in a short format, and although they reflect and although they reflect methodological experience and considered analysis, they have not been peer reviewed. Working papers present deeper analysis and extended arguments that have been collegially reviewed and engage with public issues. COMPPOP's articles, book chapters, and books are significant manuscripts that have been through peer review and formally published.

Acknowledgments

The authors gratefully acknowledge the support of the European Research Council for the project 'Computational Propaganda: Investigating the Impact of Algorithms and Bots on Political Discourse in Europe', Proposal 648311, 2015–2020, Philip N. Howard, Principal Investigator. Project activities were approved by the University of Oxford's Research Ethics Committee, CUREC OII C1A 15-044. We are also grateful to the Adessium Foundation, Microsoft and the Omidyar Network for supporting our Election Observatory and our research in Europe.

Any opinions, findings, conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the University of Oxford or our funders. We are grateful to Silvia Cavaola, Samuele Chinellato, Didac Fabregas, Freja Hedman, Tomasz Hollanek, Jędrzej Niklas, Juan Lopez Martin, Karolina Partyga, Francesco Pierri, Ralph Schroeder, Karolin Schwarz and Silvia Majo Vazquez for their contributions to this data memo.

References

- [1] S. C. Woolley and P. N. Howard, Eds., *Computational Propaganda: Political Parties, Politicians, and Political Manipulation on Social Media*. Oxford, New York: Oxford University Press, 2018.
- [2] European Commission, "Action Plan on disinformation: Commission contribution to the European Council," *European Commission - European Commission*, 2018. [Online]. Available: https://ec.europa.eu/commission/publications/action-plan-disinformation-commission-contribution-european-council-13-14-december-2018_en. [Accessed: 13-May-2019].
- [3] S. Bradshaw, L.-M. Neudert, and P. N. Howard, "Government Responses to Malicious Use of Social Media," Nov. 2018.
- [4] N. Marchal, L.-M. Neudert, B. Kollanyi, and Howard, Philip N., "Polarization, Partisanship and Junk News Consumption on Social Media During the 2018 US Midterm Elections," *Data Memo* 2018.5, Jan. 2018.
- [5] C. Machado et al., "News and Political Information Consumption in Brazil: Mapping the First Round of the 2018 Brazilian Presidential Election on Twitter," *Data Memo* 2018.4, 2018.
- [6] M. Glowacki et al., "News and Political Information Consumption in Mexico: Mapping the 2018 Mexican Presidential Election on Twitter and Facebook," *Data Memo* 2018.2, 2018.
- [7] R. Gorwa, "Computational Propaganda in Poland: Unpacking the Ecosystem of Social Media Manipulation," in *Computational Propaganda: Political Parties, Politicians, and Political Manipulation on Social Media*, Oxford, United Kingdom: Oxford Internet Institute, University of Oxford, 2017, pp. 86–103.
- [8] L. M. Neudert, "Computational Propaganda in Germany: A Cautionary Tale," in *Computational Propaganda: Political Parties, Politicians, and Political Manipulation on Social Media*, Oxford, United Kingdom: Oxford Internet Institute, University of Oxford, 2017, p. 31.
- [9] F. Hedman, F. Sivnert, B. Kollanyi, V. Narayanan, L. M. Neudert, and P. N. Howard, "News and Political Information Consumption in Sweden: Mapping the 2018 Swedish General Election on Twitter," *Oxford University*, Oxford, UK, 2018.3, 2018.
- [10] L. M. Neudert and N. Marchal, *Polarisation and the use of technology in political campaigns and communication*. European Parliament, 2019.
- [11] Avaaz, "Yellow Vests Flooded by Fake News," *Avaaz*, New York City, 1.2, 2019.
- [12] P. N. Howard and B. Kollanyi, "Bots, # StrongerIn, and # Brexit: Computational Propaganda during the UK-EU Referendum," Available at SSRN 2798311, 2016.