

## **API AND BEYOND: DETECTING COORDINATED BEHAVIOURS IN FACEBOOK INTERACTIONS AROUND POLITICAL NEWS STORIES**

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This proposal is a follow-up of the project “Mapping Italian News Media Political Coverage in the Lead-up to 2018 General Election” (MINE). MINE aimed at creating a comprehensive map of the political news coverage created by the Italian online news media in the lead-up to 2018 general election. The project collected 84,815 news stories published by over 4,000 news sources shared on Facebook in the six months before the elections, monitoring in real time their engagement (number of shares, reactions and comments).

The final report of the project (Giglietto et al., 2018) highlighted how the populist narrative dominated the news (both in terms of volume of coverage and Facebook engagement) in the run-up to the Italian elections, and pinpointed the diverging patterns of Facebook interactions employed by different partisan communities (particularly those related to populist parties) to amplify the reach of the content aligned with their worldview by sharing news stories on social media, while trying to reframe, through comments, the negative coverage of the party they support. These insights led to further questions concerning the nature of the observed diverging patterns of Facebook interactions around political news. In particular, we wondered if the observed patterns were the result of a spontaneous grassroots effort, i.e. the consequence of a combination of non-coordinated individual actions, or instead of a strategically organized attempt to manipulate the online news media landscape in order to game platforms algorithms in support of specific viewpoints, candidates and parties.

Despite several studies have already pointed out the systematic use of bots and fake accounts in electoral campaigns (Bastos & Marcea, 2018; Bessi & Ferrara, 2016; Tucker *et al.*, 2018), few studies directly focused on strategically coordinated online behaviours aimed at hacking the attention economy on Facebook.

Social media like Facebook have increasingly become sources of information for the citizens (e.g. Pew Research Center, 2018). It is thus crucial to understand to what extent social media users are exposed on Facebook to news-stories amplified or

criticized through authentic and inauthentic coordinated behaviour (Gleicher, 2018) with the aim of twisting the perception of public opinion and, in turn, influence the behaviour of professional journalists and other citizens.

Data originally collected for MINE during 2018 via publically available Facebook API proved useful to identify the patterns, but fall short of providing compelling evidence on the nature of these behaviours. In order to shed some light on this question, we thus requested and obtained access to two additional datasets directly provided by Facebook and made available through the Social Science One (SSO) initiative<sup>1</sup>. Informed by the results of MINE 2018 project (Giglietto et al., 2018; Giglietto, Righetti, Marino & Rossi, 2019) and by the existing literature on echo-chambers (Garrett, 2009; Sunstein, 2001; Vaccari, 2013), news preferential exposure (Bakshy et al., 2015; Messing & Westwood, 2014;), attention economy and strategic amplification (Philips, 2018; Webster, 2014; Zhang et al., 2017), we thus designed a set of hypothesis articulated in three areas:

- A) The first area pertains to the social infrastructure. The main hypothesis is that an organized effort may have employed an existing network of Facebook pages and groups aimed at facilitating certain collective behaviour. Higher percentages of news-stories shares performed by pages and groups (as opposed to personal profiles) may thus be a sign of a coordinated behaviour;
- B) The second area employs insularity (a measure - developed for MINE - of the extent to which an online news source is exclusively shared by actors affiliated to a specific online partisan community) to understand at what extent shares and comments without-clicks (interactions performed on a shared news-story based on the information displayed by Facebook - title, part of the blurb - rather than after reading the article) are affected by this characteristic of the news source. Higher percentages of interactions-without-click on overall interactions may be a sign of coordinate behaviour;
- C) Lastly, the exposure to news stories area addresses the frequency and typology of views of certain content. Both Facebook algorithms and the structure of the user's social networks affect exposure. We hypothesize that due to the combination of these factors, news-stories published by insular online news sources are shown more frequently to a single user and more prominently (top news-feed slot) than other news stories.

In this paper, the authors present the measures developed to address the research questions articulated in the three areas with respective findings. Although based on 2018 general election and 2019 European election in Italy, the results will be discussed in a broader context with the aim to shed light on the opportunities provided by SSO datasets to identify coordinated inauthentic behaviours on Facebook. The research findings are presented in the report "Understanding Coordinated and Inauthentic Link Sharing Behavior on Facebook in the Run-up to 2018 General Election and 2019 European Election in Italy" (Giglietto, Righetti & Marino, 2019; available at [10.31235/osf.io/3jteh](https://doi.org/10.31235/osf.io/3jteh)).

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<sup>1</sup> URL Share Dataset and CrowdTangle API described in depth at <https://socialscience.one/>.

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