f i B S t M X ñ d Q ¥

Vinci Salvini! Boosting engagement in the 2019 European elections campaign in Italy by Roberta Bracciale, Francesco Grisolia, Antonio Martella, and Maurizio Tesconi

Abstract

Our study examines the 2019 European elections campaign in the Italian Twittersphere and the online activity of Matteo Salvini, former Italian Interior Minister and leader of the League. We consider the social media contest Vinci Salvini! ("Win Salvini!") and we demonstrate how gamification, in the form of casual games, can affect participation and content visibility. The contest involved less committed citizens, offering an easy and interruptible mode of participation, crowdsourcing part of the campaign effort to them. Motivated by simple rewards, they spread the leader's messages more and faster than other users, affecting in turn the algorithmic logic of the platforms. Therefore, we conclude that although online participation is very skewed, gamification can rebalance and widen it.

Contents

Introduction Gamification and political engagement Salvini's gamification strategy Social bots and engagement Research design Results and discussion Conclusions Limitations and future work

Introduction

Social media platforms have changed the contemporary public sphere. They are decisive arenas for political communication, and they can affect citizens' political and voting behaviours (Jones, *et al.*, 2017; Ceron, *et al.*, 2014). On social media political leaders can directly speak to their constituency and to the elites, bypassing legacy media gatekeeping (Engesser, *et al.*, 2017), and influencing media coverage (Jungherr, 2016). Political actors seek different ways to "stand out from the pack" (Bossetta, 2019) and, in so doing, to stimulate participation from their supporters and engage potential voters.

In hybrid political campaigning, social media is the main hub of propaganda and self-promotion for

political actors, and it offers the infrastructure for online and off-line fan base mobilization (Bimber, 2017; Vaccari, *et al.*, 2015). The effectiveness of their communication strategy is increasingly linked to their ability to exploit the networked media logic (Klinger and Svenson, 2015) and the inner workings of the platforms' algorithms, which functions as "the curators of public discourse" [1] as they make content visible and talked about.

We are witnessing a transition from traditional forms of political engagement (attending political meetings, election canvassing and so on) to new and emerging forms of participation, as signing an online petition or sharing a political story on social media (Lilleker and Jackson, 2017).

Our study examines a social media contest, "Vinci Salvini!", precisely designed to increase supporters' engagement in a simple but effective way. It was promoted on Twitter by Matteo Salvini, the leader of the League (Lega — Salvini Premier) in the 2019 European elections campaign.

Among social media platforms, Twitter has become a pervasive tool in election campaigns, widely used by candidates, parties, journalists and an increasing share of the public (Jungherr, 2016; Larsson, 2017). With its 353 million active users at the end of 2020 [2], Twitter is not the largest social network in size and reach, but it is a fundamental venue for news production, dissemination and consumption (Bruns and Highfield, 2012). Content visibility on Twitter is associated with a combination of volume (number of likes and retweets) and time, because its algorithm favours sharp spikes rather than gradual sustained growth [3].

Salvini's gamification strategy was tailored to the social media logic, and it successfully exploited Twitter's algorithm: the online contest significantly increased the visibility of his message by encouraging contenders to retweet as much and as quickly as possible. Moreover, it seems reasonable to expect that this strategy contributed to bringing Salvini's hashtags and keywords into the trending topics list, increasing the chance to affect the public agenda and mainstream media discourses (Larsson, 2017).

Our work has two main aims: first, to understand if the gamification strategy was successful in stimulating participation and engagement on Twitter; second, to clarify whether the participation triggered by the contest differs from other forms acknowledged in the literature.

Our findings highlight the presence of distinctive users, simultaneously showing a quasi-automated behaviour and typical human features. We label them as devotees for their intense and specific retweeting activity, which algorithmically increased the visibility of Salvini's tweets in the run-up to the elections. They emerge as a peculiar type of crowdsourced and gamified political agents, and they seem to be an example of casual politicking (Gekker, 2019).

The remainder of this paper is organized as follows: first, we discuss the relationship between gamification and political engagement, focusing on casual games and their consequences on political participation. In the next sections we examine the peculiarities of Matteo Salvini's gamification strategy, and we consider the possibility that his campaign was supported by automated accounts (social bots). Fourth, we introduce our research methodology. Fifth, we discuss the research questions which informed our study. Lastly, in the concluding remarks, we acknowledge the limitations of our work and suggest the need for further research on political gamification, to continue the investigation of this recent and challenging phenomenon.

Gamification and political engagement

Voters' distrust of parties and politicians and the resulting citizens' estrangement from politics are among the issues that postmodern democracies face (Brants and Voltmer, 2011). Among other possible therapies, gamification has been recently applied to governance (Sgueo, 2018) and politics, with the intended goal of increasing citizen participation and voter engagement. Indeed, gamification strategies are designed to foster

motivation, leveraging different types of reward (Jackson, 2018) and fulfilling basic psychological needs (Sailer, *et al.*, 2017). As several studies have shown, gamification can promote key dimensions and concrete aspects of political participation and civic engagement (Jackson, 2018) and e-participation (Hassan and Hamari, 2019).

Two main goals can encourage political leaders to adopt gamification strategies in election campaigns, especially in online environments. First, they venture into new forms of voter contact to distinguish themselves from competitors (Bossetta, 2019). Second, vast and heterogeneous content production makes the struggle for attention intense. Consequently, the ability to engage innovatively with audiences, beyond traditional supporters and party militants, becomes crucial to gain visibility and broaden the message distribution (Maly, 2020). Moreover, citizens may want to engage with politics without commitment [4]; consistently, gamification strategies usually set aside ideology commitment and focus on entertainment (Quevedo-Redondo, *et al.*, 2021).

There is no single agreed definition of gamification. Scholars have conceptualized it alternatively as a seepage of game mechanics and objectives into everyday life (Jagoda, 2013), or as the process of making activities more game-like, and as "the intentional use of game elements for a gameful experience of non-game tasks and contexts" [5]. All these perspectives, however, can be traced back to the most influential definition of gamification, that is the use of video game elements in non-gaming domains (Deterding, *et al.*, 2011), the three most popular elements being points, badges and leaderboards (Hamari, Koivisto, and Pakkanen, 2014).

Games can be divided into two main types: casual and serious (Juul, 2010; Gekker, 2019). The first type is designed to be entertaining, easy to play, and aimed at a broad audience (Juul, 2010). By contrast, serious games are usually conceived for educational purposes, such as illustrating policy measures or raising awareness on a certain issue (Bossetta, 2019; Fernández-Vara, 2014).

Differently from serious games, which require a certain amount of commitment, casual games applied to politics allow less involved and ideologically committed citizens to engage with politics in a playful form, which unfolds in several steps: 1) fast and easy access to participation through apps, social media, etc.; 2) focus on themes and entertainment based on individual's availability and desires, instead of traditional participation practices; 3) low penalties on failure, which means low levels of frustration associated with experience of politics; and 4) the construction of temporary communities, based more on fun than on ideologically similarity (Gekker, 2012; Quevedo-Redondo, *et al.*, 2021).

Indeed, casual games seem to have features perfectly consistent with times of "casual politicking", which Gekker (2019) conceives as a nuanced alternative to the binary opposition between "serious" traditional political participation, on the one hand, and shallow computer-mediated engagement, on the other. Casual politicking is facilitated by platforms, and it is fleeting and interruptible, as it "relies on issue-centred rather than ideology-centred conduct" [6]. Moreover, it promotes a "fluid and continuous engagement that allows for quick recuperation in case of failure" [7], in analogy with casual games. Finally, casual politicking has sociability at its core, being based on networks of like-minded people and driven by participatory experiences (Gekker, 2019).

Gamification, especially in the form of casual games, can affect political participation and communication in several ways. First, in widening participation, gamification influences the motivation of citizens to engage in politics. Gamified casual politicking is mainly focused on extrinsic (badges, points, etc.) and intrinsic (fun and entertainment) rewards (McGonigal, 2011; Mahnič, 2014), as it goes beyond (or includes) political goals, in a sort of concealment of aims. Secondly, gamification and games need some human effort to work. On the one hand, this can be satisfying due to rewards and game mechanics themselves (McGonigal, 2011); on the other, when applied to an electoral campaign, it can foster crowdsourcing practices and result in the datafication of users' actions. Social media, apps and other gamification tools generally collect users data and actions and rank them, offering in turn opportunities for micro-targeting campaigns and the creation of databases of engaged supporters (Maly, 2020; Mahnič, 2014). Indeed, as "politicians need to build a network that actively interacts with their message", that is "crucial to gain visibility and get people to pay attention and potentially influence people" [8], outsourcing campaign tasks and mobilising citizens through casual politicking can be a useful strategy. Finally, gamification is often centred on the leader's figure, further reinforcing the personalization of politics to the extent that sometimes the leader becomes the "theme" or "issue" at stake.

Examples of gamified political communication can be observed in several countries, ranging from simple contests and apps to proper video games, developed to support or criticize political candidates, parties or specific policies (Bossetta, 2019). For the sake of brevity, we will not discuss video games, as their logic and mechanics are too different from "VinciSalvini!". As for the United States, in the 2012 election campaign President Barack Obama launched an app, "Obama for America", to offer volunteers and voters a set of organizing tools [9], rewarding users with fresh and tailored information. Mitt Romney's app "With Mitt" allowed users to personalize their photos with campaign slogans, rewarding them with exclusive news [10]. Ted Cruz, Republican candidate in the primary elections in 2016, adopted "Cruz Crew", an app that ranked users according to their efforts and rewarded them in similar ways to the previous ones. The app also offered voter profiling opportunities through the registered users' phonebooks [11]. As we note below, voter profiling was one of the controversial features of Salvini's social media contest too. The mentioned strategies were mainly focused on engaging citizens with the campaign, without providing any extrinsic motivation as a concrete reward. Differently, "Hillary 2016" included a role-playing game, in which Hillary Clinton's supporters were pitted against each other, by scoring them on who was working harder for the candidate [12]. By reaching a certain score users would get an off-line prize, such as autographed items from Hillary Clinton herself, that is extrinsic motivations beyond their involvement in the campaign.

As regards Italy, the Movimento 5 Stelle (Five Star Movement) was the first to launch an app, "Attivista 5 Stelle" (5 Star Activist), in February 2013 [13]. Any interested user had to register using a Facebook account, thereby providing potentially sensitive information. Contenders would become loyal online and off-line activists performing several activities, and in so doing they would score points and improve their ranking. The first 100 activists would win a dinner with the M5S cofounder Beppe Grillo, a former comedian, that is a strong extrinsic motivation. In the 2013 Italian parliamentary elections, Mario Monti and his newly founded party "Scelta Civica" (Civic Choice) included a contest in the official Web site launched for the campaign, allowing registered users to make proposals for the program, to get in touch with local supporters, and to promote events in support of their proposals [14]. Through these activities, Monti's supporters would receive badges to testify their engagement with the campaign. Lacking any concrete reward, this contest provided a more advanced form of participation. Indeed, except for the latter, all the above-mentioned apps and contests were seemingly conceived as casual games, requiring different levels of effort and mainly aimed to widen public participation and the reach of political messages by outsourcing campaign tasks to users.

Salvini's gamification strategy

Matteo Salvini's electoral campaign was planned and carried out to capitalize on the social media logic and the workings of social media algorithms. In the last few years, Salvini has managed to bring his party, the League, from four percent (2013 Italian general elections) to 34 percent (2019 European elections), thanks to an effective ideological repositioning and his clear communication style (Diamanti and Pregliasco, 2019). His communication and digital leadership model proved to be more adaptive than other leaders' approaches to the logic of networked politics (Cepernich and Bracciale, 2019). The first sign of his successful strategy is the sheer size of his social media audience; the second element is the channel saturation (frequency of his social media content productivity) and engagement (Bracciale and Cepernich, 2018).

His skills in using the features of social media platforms are the third component of his dominant

communication strategy. Salvini is by far the most effective Italian political leader in implementing a crossplatform integration model. Supported by his staff and their social media analysis tools, evocatively referred to by the press as "la Bestia" (the Beast), he employs a strategy to maximize the number of supporters on social media platforms, called "Television-Internet-Territory": a game of mirrors in which the three communication contexts are constantly connected to each other. In fact, in the current communication landscape, political campaigners need to mix traditional forms of engagement with new ways of digital participation, for instance promoting the interaction of clicktivists with parties, leaders and their campaigns in off-line contexts too (Lilleker and Jackson, 2017).

"Vinci Salvini!" can be understood as a casual, reward-based, political campaigning game (Juul, 2010; Gekker, 2019; Bossetta, 2019) in the Italian context. It made its first appearance in the 2018 general election campaign, and its second edition was launched three weeks before the 2019 European elections (5–26 May 2019). To enter the game [15] any contender had to have a Facebook account, through which they had to register to the contest Web site. The contenders were asked to share personal data, e-mail addresses and mobile numbers, which might offer opportunities for a detailed profiling of a very active segment of his audience [16], as pointed out in similar cases (Maly, 2020; Mahnič, 2014). In the 2019 edition, users were invited to add their Instagram and Twitter accounts to increase their chances of victory. The competition was quite simple: they had to like posts on Facebook and Instagram, or like and retweet tweets, posted by Salvini's official accounts as much as they could and as quickly as possible. Being widespread and accessible by phones and browsers, social media as platforms for the contest granted juiciness and ease of access — *i.e.*, typical traits of casual games (Gekker, 2012). Moreover, the VinciSalvini! rules did not include penalties and allowed users to manage their time and effort by focusing only on liking and spreading the leader's messages, thus integrating two other characteristics of casual games and politicking: high interruptibility and low price of failure (Gekker, 2019; Quevedo-Redondo, *et al.*, 2021).

The prize for daily winners was a call by Salvini himself and a post with their pictures, to be shared through the leader's official social media accounts. Analogously, weekly winners would be awarded a private meeting with Salvini in person and, had they wished, a video to be posted on Facebook, Instagram, Twitter and YouTube. In addition, all the winners received a pass for Salvini's closing rally in Milan on 18 May 2019. The VinciSalvini! rewards allow us to better understand the aims and motivations of users/voters in casual politicking. First, there is no specific issue or theme at stake. The issue is the leaders themselves, and the aim is to appreciate and spread their messages. Through this mechanics, the narcissistic and ludic impulse stimulated by gamification through social media further reinforce personalization and leaderization processes, because of the individual relationship between leader and citizens (Calise and Musella, 2019). Second, we can better understand users' motivations behind the game rewards. Indeed, following McGonigal (2011), extrinsic motivations relate to the prizes, such as getting one's own photo shared by Matteo Salvini's official accounts, or having a meeting with the leader. Intrinsic motivations, instead, can range from the mere pleasure of game mechanics, to being involved in something bigger, as framed by the leader himself in the launch trailer: "This video will have everyone against it: big newspapers, big intellectuals, big professors, analysts, sociologists, but we use the Internet as long as they keep it free, and we win online. Help us spread our idea of Italy, Europe and the future." [17]

We think that these motivations and type of rewards activated another element of casual games, that is sociability (Gekker, 2019; Quevedo-Redondo, *et al.*, 2021), although in this case users did not collaborate but competed. It seems reasonable to hypothesize that this peculiar mix of online and off-line rewards was also aimed to the creation of molecular opinion leaders (Katz and Lazarsfeld, 1955), which were encouraged by the leader himself to spread his message broadly.

Therefore, considering both the leader's ability to engage on social media (Bracciale, *et al.*, 2021) and that the main aim of VinciSalvini! was to exploit the labour of the widest possible audience to gain visibility, and possibly set the public agenda (Bossetta, 2019; Maly, 2020), our first research question is:

RQ1: Was Matteo Salvini's gamification strategy successful and able to increase the engagement of his users?

As an example of casual games and politicking (Gekker, 2019; Quevedo-Redondo, *et al.*, 2021), VinciSalvini! is clearly aimed to widen audience participation beyond party militants or usually active users. However, as pointed out in several studies (Bracciale, *et al.*, 2018; Graham and Wright, 2014; Larsson, 2017), participation in online environment is strongly skewed, that is only a little portion of users actively engage with content production and diffusion. Consequently, it seems appropriate to investigate the characteristics and activities of users engaged by Salvini's gamification strategy, especially the most active ones. Accordingly, we formulate our second research question:

RQ2: Do most active users show different characteristics and behaviour from others? Are they usually active users or gamified voters?

Social bots and engagement

Gamification is not the only communicative strategy that aim to increase online engagement and visibility on social media. For instance, in the run-up to the elections we can reasonably expect the activation of social bots and other forms of suspect agents to boost the spread of content on social media platforms (Bessi and Ferrara, 2016; Bastos and Mercea, 2019). The relevance of this phenomenon led Keller and Klinger (2019) to point out the importance of checking for social bot activities in studies about political communication. This seems even more relevant for an election campaign contest that was specifically designed to trigger users' involvement and participation.

Social bots are computer programs that can control social media accounts: they can post content or interact with other users, trying to mimic legitimate ones and possibly alter their behaviour (Ferrara, *et al.*, 2016). Moreover, social bots are well known agents of manipulation, and they are associated with the broader phenomenon of disinformation — usually intended as false or misleading information intentionally spread to deceive readers (Woolley and Howard, 2018; Chu, *et al.*, 2010). In addition to the risk of misinformation and other malicious practices (Gorwa and Guilbeault, 2020), the adoption of automated accounts generates an increasing volume of inauthentic online communication, which in turn affects the quality of the public debate (Keller and Klinger, 2019). Their activity can alter popularity cues of "boosted" actors, and the public perception of certain political stances or points of view (Keller and Klinger, 2019), which are then reflected and amplified within the hybrid media system.

Recent literature has also shown the heterogeneity of agents involved in the production and spread of disinformation, like sockpuppets, trolls or cyber troops, paid click-workers or human users who voluntary offer their accounts to be partially automated (Gorwa and Guilbeault, 2020). The latter type of agents offers a great advantage compared to click-workers and automated accounts: they show enough human-like behaviour to evade bot detection algorithms. Thus, it seems appropriate to adopt a mixed approach, considering both human and algorithmic efforts in detection tasks.

Therefore, to evaluate the effectiveness of the "Vinci Salvini!" contest, and to clarify whether Salvini's campaign was supported by legitimate and gamified users or social bots, we checked for the presence of automated accounts:

RQ3: Was Matteo Salvini's gamified communication strategy supported by automated accounts?

Research design

Data collection

Data was collected using the standard Twitter streaming API in the month before the election day (26 April — 1 June 2019; election day: 26 May). In total we gathered 463,886 retweeted tweets posted by Salvini's official account (@matteosalvinimi), related to 30,853 unique users. To carry out the bot detection step of our research, we examined his five most retweeted tweets and collected the respective retweeters' timelines, using the standard REST API.

Methodology

To verify if the "VinciSalvini!" contest had an impact on received retweets (RQ1), we built a negative binomial regression model, following other scholars who analysed social media engagement (Vergeer and Hermans, 2013). We included two covariates: the number of tweets posted by Salvini, and a dichotomous variable (yes/no) to identify the days of the contest. To single out the most active users (RQ2), for each account we compared its total number of Salvini's retweeted tweets in the monitoring period with its total number of statuses, that is all the actions performed since account creation. Thus, we identified 722 Salvini's super retweeters, as the users whose timelines are composed for more than 50 percent of Salvini's retweeted tweets, made in the monitoring period. First, we examined their metadata: statuses count, distribution of followers and friends, sources and account creation date. Then we examined their temporal patterns of retweeting activity in two ways. First, we compared the retweets distribution of super retweeters against other users. Secondly, we employed scatterplot visualizations in which the timestamp of each retweet is plotted against the timestamp of the corresponding original tweet, thereby differentiating super retweeters from other users.

To check for the operation of social bots (*RQ3*), we leveraged an established detection technique, Social Fingerprinting (Cresci, *et al.*, 2017), and we analysed the retweeters of the five most retweeted tweets. The technique is based on the digital DNA approach, that is the encoding of any action performed by a social media account through strings of characters. Intuitively, users that share long behavioural patterns (Longest Common Substring — LCS) are much more likely to be similar, and to aim at common goals. Humans tend to behave heterogeneously; therefore, high behavioural similarity is a proxy for automation and a red flag for malicious activity. Through Social Fingerprinting we identified 471 suspect accounts that retweeted the five most engaging Salvini's tweets and shared a LCS score equal or greater than 1000. Two trained coders manually labelled them as legitimate (human) or automated users. The same analysis was performed on Salvini's super retweeters (722 users). The Krippendorff's α coefficient for the variable "humans or not" was highly satisfying ($\alpha > 0.87$), according to the conventions established in the field (Hayes and Krippendorff, 2007).

Results and discussion

The number of Salvini's retweeted tweets was significantly large even before the launch of "Vinci Salvini!" (5 May 2019), but the retweets volume became much higher in the following weeks (Figure 1).

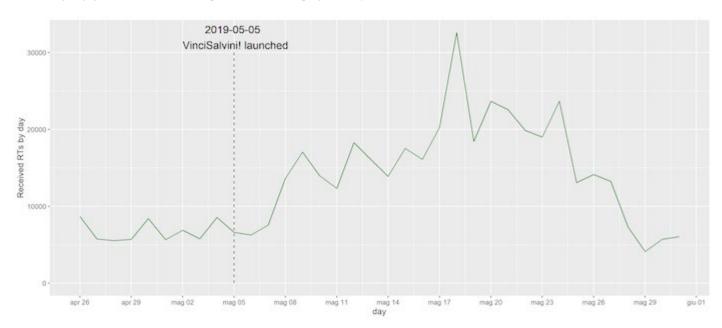


Figure 1: Daily numbers of Matteo Salvini's retweeted tweets (26 April — 1 June 2019). Note: Larger version of Figure 1 available <u>here</u>.

The negative binomial regression model, including the number of tweets by the leader and a binary variable representing the days of the contest, shows that both coefficients are significant and positive (Table 1). The IRR of "VinciSalvini!" ($e^{\beta} = 1.58$) shows a stronger impact on received retweets, compared with the number of daily tweets posted by the leader ($e^{\beta} = 1.01$). This means that the contest generates a 58 percent increase of retweets, compared to other periods, while one additional tweet posted by Salvini increases retweets only by one percent.

Therefore, our answer to *RQ1* is positive: the "VinciSalvini!" contest affected online engagement on Twitter, confirming studies that highlighted a positive relation between gamification and the increase in participation (Jackson, 2018; Hassan and Hamari, 2019).

Table 1: Regression model on Matteo Salvini's retweeted tweets.Note: *** 0.001; ** 0.01; * 0.05; `.' 0.1.						
Dependent variable:						
retweets						
0.124)						
0.002)						
0.110)						
14						

theta	11.122*** (2.586)
Akaike Inf. Crit.	695.689

As mentioned above, we identified 722 Salvini's super retweeters (2.4 percent of the total) as the users whose timelines (all statuses since the account creation) are composed for more than 50 percent of Salvini's retweeted tweets. Thus, we compared strongly engaged users and their characteristics to others (*RQ2*). Our analysis showed that super retweeters also share other peculiarities, which single them out from other users. As we can see in Table 2, they have a very limited number of followers (six followers, until the third quartile) and friends (third quartile=33). Additionally, they are generally less active on Twitter (number of statuses). Such characteristics do not seem to match with the typical features associated with social bots, such as a high number of statuses, followers and friends (Chu, *et al.*, 2010; Bastos and Mercea, 2019; Majó-Vázquez, *et al.*, 2021).

Table 2: Characteristics of the super retweeters and other users.								
Super retweeters								
Metric	Min.	1st.Qu.	Median	Mean	3rd.Qu.	Max.		
n. statuses	1	2	6	197	188.2	3232		
n. followers	0	0	2	6.4	6	272		
n. friends	04	12	37.9	33	1211			
n. likes	0	2	30.5	323.2	336.2	15232		
Other users								
Metric	Min.	1st.Qu.	Median	Mean	3rd.Qu.	Max.		
n. statuses	3	1085	5499	22791.5	19996	1978314		
n. followers	0	54	223	1528.7	778.5	2247246		
n. friends	0	119	359	1097.9	1023	205660		
n. likes	0	983.5	5044	18336.8	18226.5	1113585		

Another revealing detail is the account creation time interval: 37 percent of the super retweeters (269) appeared after 5 May 2019, which consolidates the hypothesis that their online presence is essentially connected with the contest. On the contrary, ordinary users generally show a much more sparse and casual distribution of their creation timestamps. These results, together with the peculiar characteristics of the super retweeters accounts (Table 2), recall several aspects of casual politicking (Gekker, 2019; Quevedo-Redondo, *et al.*, 2021), such as: involvement based on individual's availability and resources, and the effectiveness of extrinsic motivations (rewards) to participate in political processes, which in our case motivated citizens to create a new account on Twitter to support their leader.

To measure the effects of the super retweeters' activity and to compare it with other users during the election campaign, we analysed the temporal series of all Salvini's retweeters. First, we found that the super retweeters (Figure 2, area in red) started their activity just after the launch of "VinciSalvini!" (5 May) and strongly reduced it just before the election day (26 May). They further show that Salvini's gamification strategy has been particularly effective, increasing the contenders' engagement and, in turn, the visibility of his tweets (RO1). In fact, as emerged in other studies (Zhang, et al., 2016), visibility and content virality on Twitter are strongly related to the commitment of ordinary users, who can reach niche audiences in a direct and trustworthy way. Indeed, this subset of just 722 users (2.4 percent) generated 27 percent of Salvini's retweeted tweets during the last month of the election campaign and almost half of it in the three weeks before the election day. Therefore, the gamification strategy seems to have activated a core network of users who, albeit not traditional supporters, strongly contributed to the visibility of the leader through their labour, as noted in other cases (Maly, 2020; Mahnič, 2014). Furthermore, differently from other studies (Larsson, 2017) but accordingly to the TRT [Television-Internet-Territory] strategy applied by Salvini, the most relevant peak in Twitter activities was related to the off-line final event of the campaign (a public gathering in Milan) instead of a media event (Figure 2). This seems to confirm the efficacy of linking online and off-line contexts, an increasingly important strategy in current election campaigns (Lilleker and Jackson, 2017). If we bear in mind that one of the contest rewards was the backstage access to the rally, it seems even more reasonable to hypothesise an off-line impact of Salvini's gamification strategy.

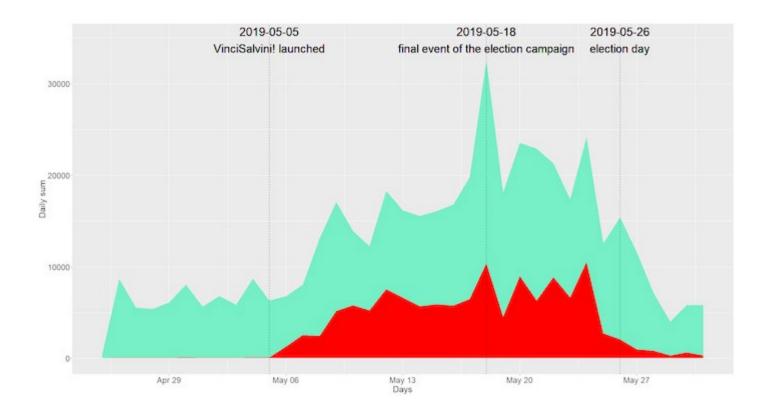


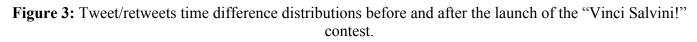
Figure 2: Super retweeters' activity (26 April — 1 June 2019). Note: Larger version of Figure 2 available <u>here</u>.

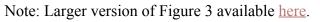
To clarify if super retweeters had different behaviours from others and were mainly activated by the contest (RQ2), we plotted the distribution of time differences (in seconds) between the original tweet and its retweeters by two distinct groups of users, super retweeters and other retweeters, both before and after the

start of the "Vinci Salvini!" contest [18].

Figure 3 clearly shows that before the start of the contest there are no significant differences between the super (in red) and other retweeters' behaviour. In fact, in both groups half of the users retweeted Salvini's tweets at least after 3.3 hours (12,164 sec). Conversely, after the start of the contest, we notice a significant retweet time compression in both groups, but mainly among the super retweeters. The median of the time difference distribution is 3,798s (1.05 hour) for them, while it is 7,579s (2.10 hours) for the other users. Interestingly, gamification seems to have induced people not particularly familiar with the platform to spend their time and efforts to win the contest. This was probably facilitated by the platform affordances, that are very close to the logic of games (Lampe, 2015), especially casual games in which points can be scored through easy actions and without significant penalties (Gekker, 2019).







We consider this behaviour change a likely product of the contest because, as mentioned above, contenders had to retweet as quickly as possible to increase their chances of victory. This part of our analysis confirms that gamified users (the super retweeters subset) differentiated their behaviour from others (RQ2), strongly reducing their response time to the leader's content. Along with this anomalous behaviour, we observed the presence of many outliers in both distributions, a clear sign that many accounts were retweeting tweets posted long before.

To investigate their patterns of retweeting activity more in detail, we employed a scatterplot visualization (RetweetTweet, or RTT) in which the retweets' timestamps (x axis) are plotted against the original tweet (y axis), following the approach of Mazza, *et al.* (2019).

The RTT plot of the activity before 5 May 2019 (Figure 4, left panel) shows a quite common pattern: points almost on the diagonal itself represent quick retweets, while horizontal traces indicate the delay between the original tweet and its retweets timestamps. Super retweeters (in red) are almost invisible, which means that

their activity is very limited before the launch of "Vinci Salvini!". After the start of contest (Figure 4, right panel), we can notice thick dashed lines, or "waterfalls", which identify patterns of suspicious behaviour [19]. In fact, they represent a systematic retweeting activity in reverse chronological order (Mazza, *et al.*, 2019). In other words, each vertical dashed line indicates that some users decided to systematically retweet Matteo Salvini's tweets, scrolling his timeline from the most recent to the oldest one. This behaviour is predominantly associated with super retweeters, showing another difference between gamified users and others (*RQ2*). Indeed, these results confirm the association between VinciSalvini! and casual politicking: users participated to the contest (and the online election campaign) in a flexible way and according to their availability (Gekker, 2019; Quevedo-Redondo, *et al.*, 2021), generating waterfalls of retweets just by scrolling Salvini's timeline when they had the time to participate.

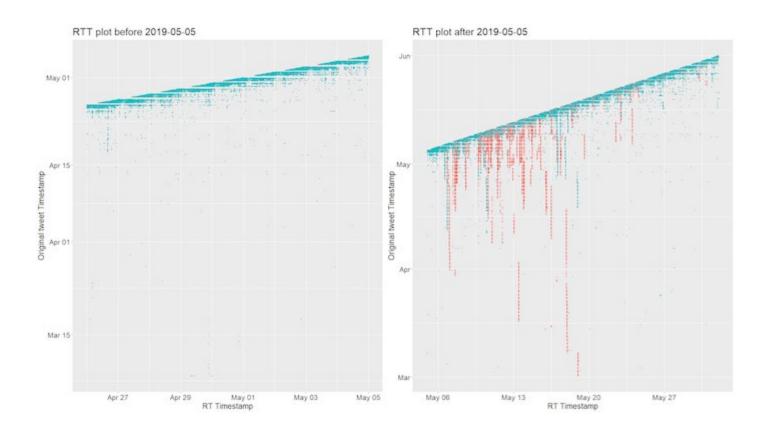


Figure 4: RetweetTweet (RTT) plots before and after the launch of the "Vinci Salvini!" contest. Note: Larger version of Figure 4 available <u>here</u>.

These results further clarify how gamified users behave differently (RQ2), as super retweeters shared also content generated by Matteo Salvini before the election campaign. However, gamification affected the online debate in a broader sense, through the diffusion in the Twittersphere of previously created content, which was retweeted again in the attempt to win the contest.

Accordingly, our answer to the second research question is that VinciSalvini! induced a specific group of users, not so familiar with Twitter considering their activities and metadata (<u>Table 2</u>), to create an account, or reactivate a dormant one, with the main aim of retweeting Matteo Salvini's tweets. In addition, the contest changed their behaviour in several ways: first, not so active users became super retweeters, generating one third of the leader's retweets; second, they became faster than other users in retweeting the leader's tweets; third, they started scrolling Salvini's temporally distant tweets to increase their chance to

win.

Considering this anomalous behaviour, we decided to perform a manual inspection [20] to verify if the super retweers were human or not. Our analysis confirmed that they differ from automated accounts. Therefore, we labelled such accounts, simultaneously showing a bot-like behaviour (intense and exclusive retweeting activity) and distinctive human features (complex replies, irony, personal picture, detailed bio, etc.), as *devotees*. According to the Oxford English Dictionary, devotion is "love, loyalty, or enthusiasm for a person or activity". The Collins Dictionary adds "commitment" to this definition. Enthusiasm and commitment to a cause emerged as the characteristics of the accounts we identified as devoted users. We consider the devotees as human-controlled accounts for four main reasons, often reported in the literature on bot detection (Chu, et al., 2010; Bastos and Mercea, 2019; Majó-Vázquez, et al., 2021). First, they have few followers and friends: an inconsistency for social bots, which generally aim at spreading specific content. Second, many of them manifest a limited longevity, which also seems inconsistent with the goals of automated accounts. Third, sometimes their replies can be qualitatively complex, while bots can hardly reproduce irony. Fourth, although some of them did not personalize their profiles, others changed the automatically assigned screen names with personal ones or they just added a profile picture, sometimes taken with Matteo Salvini himself. In addition, we noticed that most of the retweets (125,687 in total) had been posted through Android (42.3 percent) and iPhone apps (42.7 percent), which seems to indicate that the majority of the devotees retweeted Salvini's tweets via mobile phones [21]. This is an additional reason that led us to consider these accounts human-controlled. It also confirmed the ease of access (mobile phone), typical of casual games, that also characterise casual politicking: not so committed people (at least on Twitter) contributed, mainly using their phones, to the election campaign working hard but flexibly for their leader visibility. At the same time, their behaviour seems to differ from recent and comparable cases, in which human accounts were semi-automated and included in a "voluntary botnet" through a software, which could be identified examining the tweet source [22]. Our results are quite surprising, but also in line with another study (Majó-Vázquez, et al., 2021) that highlights how computational propaganda is often supported and conducted by human accounts adopting a quasi-bot behaviour. Indeed, although the activity of these accounts is resembling hybrid agents or cyborgs (Chu, et al., 2010; Gorwa and Guilbeault, 2020), we consider them as human users: mostly motivated by the chance to get in touch with the leader (game rewards), they altered in several but "authentic" ways the online debate. Moreover, considering that most of their statuses were Salvinis retweet, it seems difficult to associate them with malicious practices, or the dissemination of misleading information that often characterise the activity of social bots (Woolley and Howard, 2018; Chu, et al., 2010).

We completed our analysis checking for the operation of social bots and botnets, thereby clarifying whether Salvini's gamification strategy was supported by automated accounts, or by the intense retweeting activity of legitimate users (RQ3).

We focused on the first five retweeted tweets [23] because it is reasonable to expect that, if automated accounts operated at all, they would influence the most visible content (Keller and Klinger, 2019), that is the most retweeted tweets. To detect potential botnets boosting Salvini's gamified communication strategy, we leveraged the *social fingerprinting* technique (Cresci, *et al.*, 2017). The digital DNA algorithm coded into strings of characters (A=tweet, C= reply, T=retweet) the last 3,200 tweets from the retweeters of Salvini's five most retweeted tweets. We then compared these strings with each other, to identify clusters of users sharing long sequences of actions (tweets, retweets and replies) exactly in the same order, because such patterns often denote the presence of groups of automated accounts (Cresci, *et al.*, 2017).

Thus, we identified 471 accounts who shared an identical sequence of more than 1,000 actions (almost all of them being retweets). However, from our one-by-one manual inspection, these intensively retweeting accounts seemed to be legitimate. Due to the bot-like activities of so many apparently human-controlled accounts, we do not exclude the presence of isolated social bots. In other words, the suspect users that we identified might have generated a sort of noise, in which one could hardly notice unequivocal traces of automated behaviour (Gorwa and Guilbeault, 2020). Nonetheless, our answer to the third research question — (RQ3). Was Matteo Salvini's gamified communication strategy supported by automated accounts?) — is

negative.

Conclusions

Our monitoring of Matteo Salvini's Twitter account during the last European elections campaign shows that the visibility of his message was increased by a social media contest, and by a small but committed group of gamified users: the devotees. They can be distinguished from another type of peculiar users, the "superparticipants" (Graham and Wright, 2014). In fact, the devotees' activity is restricted (only retweets) and selective (only Matteo Salvini's official account). They also differ from the subset of "super-retweeters", identified in the 2018 Italian general election campaign (Bracciale, *et al.*, 2018), for their metadata statistics (on average the devotees have fewer followers and friends) and account characteristics (the devotees' accounts show a shorter lifespan; they tend to produce a smaller amount of original content, as tweets and replies). In other words, the devotees mainly appear as an instance of gamified super-retweeters, rather than ordinary political supporters or users. Therefore, the "VinciSalvini!" contest succeeded in activating users through casual politicking (Gekker, 2019; Quevedo-Redondo, *et al.*, 2021), driven by the chance to meet their leader, receive a phone call, or get their photos shared on his social media accounts and with his six million friends — as announced by the leader in the launch trailer.

Our analysis shows that the "VinciSalvini!" was conceived as a casual game, exploiting several social media affordances to pursue different goals. First, the appeal to less committed citizens and possibly younger generations, offering an easy and interruptible mode of participation, with the promise of some reward (Mahnič, 2014; Gekker, 2019; Quevedo-Redondo, *et al.*, 2021). Indeed, Matteo Salvini's staff provided extrinsic (rewards) and intrinsic motivations, related both to the mere pleasure of the game and to the feeling of being part of something bigger (McGonigal, 2011), although not necessarily arising from ideological commitment.

Second, the contest was a way to crowdsource part of the campaign effort to ordinary citizens, not party activists, through a game (McGonigal, 2011; Mahnič, 2014). This encouraged not particularly engaged users to join politically active ones, sharing the content produced by their leader (Masser and Mory, 2018). It is worth noticing that crowdsourcing without expenses is a very valuable aspect in social media campaigning — especially in Italy [24], as it helps producing "organic" viral content (Maly, 2020) in addition to sponsored messages.

Third, it offered the opportunity to enrich the supporters' database, both through their registration on the contest Web site and the analysis of their actions, used for daily and weekly rankings. Indeed, users datafication is increasingly used for micro-targeting in political campaigns (Maly, 2020), although frequently deemed as a controversial practice.

As for the impact of gamification on the 2019 European elections campaign in Italy, we can assert it was threefold. First, the social media contest affected users' behaviours, encouraging them to create new (or use already existing) accounts, to retweet Salvini's tweets as much and as fast as possible. This might have introduced new contenders in the small group of the content producers on social media. As pointed out in other studies (Bracciale, *et al.*, 2018; Graham and Wright, 2014; Larsson, 2017), online participation is very skewed, but gamification can rebalance and widen it. Second, gamified users adopted a quasi-automated behaviour, increasing Salvini's visibility on Twitter, despite their limited number of followers (Zhang, *et al.*, 2016; Majó-Vázquez, *et al.*, 2021). Indeed, gamification proved to be a useful strategy to boost Salvinis contents, not through automated but legitimate users, however difficult it may be to identify them unequivocally as human. Third, in the attempt to increase their chances of victory, they retweeted even Salvini's tweets posted before the launch of the contest, thereby affecting the chronological order of content flow on Twitter. This, along with the impressive time reduction in retweeting, highlights some critical aspects of gamification, or at least of the "VinciSalvini!" rules. Indeed, retweeting as much and as quickly

as possible seems an activity quite disconnected from the actual content expressed in political messages. Thus, if the contest widened participation, this may have happened at the expense of rational approval. As underlined by Calise and Musella (2019), all these processes can lead to a mass distraction in which selfaffirmation becomes more important than a rational debate on public issues.

We also hypothesize, in accordance with other scholars (Bimber, 2017; Vaccari, *et al.*, 2015), that the huge online engagement generated by Salvini's digital campaign inspired the contenders to become off-line standard-bearers. For instance, many of them were using profile pictures in which they were beside Matteo Salvini himself. Exemplifying the well-known two-step flow of communication, they might have spread Salvini's message acting as molecular opinion leaders (Katz and Lazarsfeld, 1955), and might have persuaded other citizens to vote for his party, in line with the threefold campaign strategy (Television-Internet-Territory). This is a plausible hypothesis, given the enthusiasm generated by the competition, which manifested itself in different forms of engagement, and in the pride of those users showing off their selfies with Matteo Salvini. In this sense, the leader of the League acted as a "celebrity politician" (Street, 2004), who offered his fans access to his persona or social media channels.

Previous works show a positive association of online political participation with other forms of off-line engagement (Gil de Zúñiga, *et al.*, 2012). More recently, a meta-analysis of studies carried out in the last two decades in more than fifty countries highlights the existence of a positive correlation between online and off-line participation (Boulianne, 2020). Our case, with a peak of activity on Twitter reached during an off-line event (18 May 2019, Figure 2), seems to further confirm this relationship.

In conclusion, Matteo Salvini's social media contest led "casual politicking users" to behave online just like (or even more actively than) conventional supporters, in a strategy that perfectly fits with the network media logic (Klinger and Svenson, 2015). Through their new or dormant accounts, the devotees greatly contributed to the visibility and persistence of the messages of their political leader, exploiting the algorithmic logics of content selection.

Limitations and future work

Our study can contribute to the analysis of new forms of political action on Twitter and other social media platforms. We have shown how spontaneous action, activated by a social media contest, can take a quasi-automated nature, and boost a political leader's visibility in an election campaign. Due to the novelty of the phenomenon, further analysis is required to prove that equivalent suspicious accounts are, like the devotees, completely human-controlled and not coordinated, rather than human-controlled and coordinated for malicious purposes or partially automated. Further studies will also be needed to evaluate the generalizability of this phenomenon to other portions of the Twittersphere, both within and outside Europe.

About the authors

Roberta Bracciale (Ph.D.) is an Associate Professor of Media Sociology at the University of Pisa (Italy), Department of Political Science, where she is also the director of the MediaLaB | Big Data in Social and Political Research Lab. Her research interests include the social impact of digital media, political communication, memefication of politics, and computational methods in political communication. Direct comments to: roberta [dot] bracciale [at] unipi [dot] it

Francesco Grisolia (Ph.D.) is a postdoctoral research fellow at Scuola Superiore Sant'Anna (Pisa, Italy), the BioRobotics Institute. His research interests include online misinformation and information disorders. E-mail: francesco [dot] grisolia [at] santannapisa [dot] it

Antonio Martella (Ph.D.) is postdoctoral research fellow at the Department of Sociology and Social Research of the University of Trento. His research interests focus on populism, leaders, and political communication on social media analysed through big data and statistical methodologies. E-mail: antonio [dot] martella [at] unitn [dot] it

Maurizio Tesconi (Ph.D.) is a researcher in computer science and leads the Cyber Intelligence Lab at the Institute of Informatics and Telematics of CNR (Pisa, Italy). His research interests include artificial intelligence, big data, Web mining, social network analysis and visual analytics within the context of open source intelligence.

E-mail: maurizio [dot] tesconi [at] iit [dot] cnr [dot] it

Notes

- 1. Gillespie, 2010, p. 347.
- 2. https://blog.hootsuite.com/twitter-statistics/.
- 3. See <u>https://rethinkmedia.org/blog/how-does-twitter-decide-what-trending</u>.
- 4. Masser and Mory, 2018, p. 59.
- 5. Seaborn and Fels, 2015, p. 17.
- 6. Gekker, 2019, p. 403.
- <u>7.</u> Ibid.
- 8. Maly, 2020, p.447.
- 9. https://www.politico.com/blogs/politico44/2012/07/obama-campaign-launches-mobile-app-130576.

 $\underline{10.\ https://www.nbcnews.com/news/world/need-vp-theres-app-romney-make-announcement-phone-flna918356.}$

- 11. https://www.theverge.com/2015/11/11/9711364/ted-cruz-campaign-app-gamification.
- 12. https://qz.com/741374/hillary-clinton-is-taking-a-page-from-kim-kardashians-mobile-app-playbook/.
- 13. https://www.buzzfeednews.com/article/albertonardelli/five-star-movement-voter-app-facebook.
- 14. https://harun.it/agenda-monti.

<u>15.</u> The original rules are no longer accessible (www.vincisalvini.it/files/regolamento.pdf), but some information can be retrieved here: <u>https://medium.com/dfrlab/electionwatch-salvinis-likes-contest-d029a6312ad6</u>.

- 16. https://www.youtrend.it/2018/10/17/in-conversation-with-the-spin-doctor-luca-morisi-interview/.
- <u>17. https://www.youtube.com/watch?v=OuWimbUC9Eo</u>.
- 18. We removed the outliers from the boxplot to better explore the core of the distribution.
- 19. We removed from the graph the original tweet timestamps before 1 March 2019 to improve its

readability.

<u>20.</u> Krippendorff's $\alpha > 0.84$. Examples of devotees' accounts are reported in Figure A2 in the <u>Appendix</u>.

21. For more details on the retweet sources see Figure A1 in the <u>Appendix</u>.

22. https://medium.com/dfrlab/electionwatch-italys-self-made-bots-200e2e268d0e.

23. For more details on the five most retweeted tweets see Figure A3 in the Appendix.

24. Party financing in Italy was ultimately abolished in 2017; see

https://www.balcanicaucaso.org/eng/Projects2/ESVEI/News-Esvei/Money-to-politics-the-challenge-of-transparency-195755

References

Marco T. Bastos and Dan Mercea, 2019. "The Brexit botnet and user-generated hyperpartisan news," *Social Science Computer Review*, volume 37, number 1, pp. 38–54. doi: <u>https://doi.org/10.1177/0894439317734157</u>, accessed 14 May 2022.

Alessandro Bessi and Emilio Ferrara, 2016. "Social bots distort the 2016 U.S. Presidential election online discussion," *First Monday*, volume 21, number 11, at <u>https://firstmonday.org/article/view/7090/5653</u>, accessed 14 May 2022. doi: <u>http://dx.doi.org/10.5210/fm.v21i11.7090</u>, accessed 14 May 2022.

Bruce Bimber, 2017. "Three prompts for collective action in the context of digital media," *Political Communication*, volume 34, number 1, pp. 6–20. doi: <u>https://doi.org/10.1080/10584609.2016.1223772</u>, accessed 14 May 2022.

Michael Bossetta, 2019. "Political campaigning games: Digital campaigning with computer games in European national elections," *International Journal of Communication*, volume 13, pp. 3,422–3,443, and at <u>https://ijoc.org/index.php/ijoc/article/view/10477/2729</u>, accessed 14 May 2022.

Shelley Boulianne, 2020. "Twenty years of digital media effects on civic and political participation," *Communication Research*, volume 47, number 7, pp. 947–966. doi: <u>https://doi.org/10.1177/0093650218808186</u>, accessed 14 May 2022.

Roberta Bracciale and Cristopher Cepernich, 2018. "Hybrid 2018 campaigning: The social media habits of Italian political leaders and parties," *Italian Political Science*, volume 13, number 1, pp. 36–50, and at https://italianpoliticalscience.com/index.php/ips/article/view/31/28, accessed 14 May 2022.

Roberta Bracciale, Massimiliano Andretta and Antonio Martella, 2021. "Does populism go viral? How Italian leaders engage citizens through social media," *Information, Communication & Society*, volume 24, number 10, pp. 1,477–1,494. doi: https://doi.org/10.1080/1369118X.2021.1874472, accessed 14 May 2022.

Roberta Bracciale, Antonio Martella and Chiara Visentin, 2018. "From super-participants to super-echoed: Participation in the 2018 Italian electoral Twittersphere," *Partecipazione e Conflitto*, volume 11, number 2, pp. 361–393, and at

doi: http://siba-ese.unisalento.it/index.php/paco/article/view/19547, accessed 14 May 2022.

Kees Brants and Katrin Voltmer (editors), 2011. *Political communication in postmodern democracy: Challenging the primacy of politics*. London: Palgrave Macmillan.

doi: https://doi.org/10.1057/9780230294783, accessed 14 May 2022.

Axel Bruns and Timothy Highfield, 2012. "Blogs, Twitter, and breaking news: The produsage of citizen journalism," In: Rebecca Ann Lind (editor). *Produsing theory in a digital world: The intersection of audiences and production in contemporary theory*. New York: Peter Lang, pp. 15–32.

Mauro Calise and Fortunato Musella, 2019. Il Principe digitale. Roma-Bari: Laterza.

Cristopher Cepernich and Roberta Bracciale, 2019. "Digital hyperleaders: Communication strategies on social networks at the 2019 European elections," *Italian Political Science*, volume 14, number 2, pp. 93113, and at <u>https://www.italianpoliticalscience.com/index.php/ips/article/view/106/85</u>, accessed 14 May 2022.

Andrea Ceron, Luigi Curini, Stefano M. Iacus and Giuseppe Porro, 2014. "Every tweet counts? How sentiment analysis of social media can improve our knowledge of citizens' political preferences with an application to Italy and France," *New Media & Society*, volume 16, number 2, pp. 340–358. doi: <u>https://doi.org/10.1177/1461444813480466</u>, accessed 14 May 2022.

Zi Chu, Steven Gianvecchio, Haining Wang and Sushil Jajodia, 2010. "Who is tweeting on Twitter: Human, bot, or cyborg?" *ACSAC '10: Proceedings of the 26th Annual Computer Security Applications Conference*, pp. 21–30. doi: https://doi.org/10.1145/1920261.1920265, accessed 14 May 2022.

Stefano Cresci, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi and Maurizio Tesconi, 2017. "Social fingerprinting: Detection of spambot groups through DNA-inspired behavioral modeling," *IEEE Transactions on Dependable and Secure Computing*, volume 15, number 4, pp. 561–576. doi: <u>https://doi.org/10.1109/TDSC.2017.2681672</u>, accessed 14 May 2022.

Sebastian Deterding, Miguel Sicart, Lennart Nacke, Kenton O'Hara and Dan Dixon, 2011. "Gamification using game-design elements in non-gaming contexts," *CHI EA '11: CHI '11 Extended Abstracts on Human Factors in Computing Systems*, pp. 2,425–2,428. doi: https://doi.org/10.1145/1979742.1979575, accessed 14 May 2022.

Giovanni Diamanti and Lorenzo Pregliasco, 2019. Fenomeno Salvini: Chi è, come comunica. Roma: Castelvecchi.

Sven Engesser, Nicole Ernst, Frank Esser and Florin Büchel, 2017. "Populism and social media: How politicians spread a fragmented ideology," *Information, Communication & Society*, volume 20, number 8, pp. 1,109–1,126.

doi: https://doi.org/10.1080/1369118X.2016.1207697, accessed 14 May 2022.

Clara Fernández-Vara, 2014. *Introduction to game analysis*. New York: Routledge. doi: <u>https://doi.org/10.4324/9780203794777</u>, accessed 14 May 2022.

Emilio Ferrara, Onur Varol, Clayton Davis, Filippo Menczer and Alessandro Flammini, 2016. "The rise of social bots," *Communications of the ACM*, volume 59, number 7, pp. 96–104. doi: <u>https://doi.org/10.1145/2818717</u>, accessed 14 May 2022.

Alex Gekker, 2019. "Playing with power: Casual politicking as a new frame for political analysis," In: René Glas, Sybille Lammes, Michiel Lange, Joost Raessens and Imar Vries (editors). *The playful citizen: Civic engagement in a mediatized culture*. Amsterdam: Amsterdam University Press, pp. 387–419. doi: https://doi.org/10.1515/9789048535200-023, accessed 14 May 2022.

Alex Gekker, 2012. "Gamocracy: Political communication in the age of play," Master's thesis, Utrecht University, at <u>https://studenttheses.uu.nl/handle/20.500.12932/10313</u>, accessed 14 May 2022.

Homero Gil de Zúñiga, Nakwon Jung and Sebastián Valenzuela, 2012. "Social media use for news and individuals' social capital, civic engagement and political participation," *Journal of Computer-Mediated Communication*, volume 17, number 3, pp. 319–336. doi: https://doi.org/10.1111/j.1083-6101.2012.01574.x, accessed 14 May 2022.

Tarleton Gillespie, 2010. "The politics of 'platforms'," *New Media & Society*, volume 12, number 3, pp. 347–364. doi: https://doi.org/10.1177/1461444809342738, accessed 14 May 2022.

Robert Gorwa and Douglas Guilbeault, 2020. "Unpacking the social media bot: A typology to guide research and policy," *Policy & Internet*, volume 12, number 2, pp. 225–248. doi: <u>https://doi.org/10.1002/poi3.184</u>, accessed 14 May 2022.

Todd Graham and Scott Wright, 2014. "Discursive equality and everyday talk online: The impact of 'superparticipants'," *Journal of Computer-Mediated Communication*, volume 19, number 3, pp. 625–642. doi: <u>https://doi.org/10.1111/jcc4.12016</u>, accessed 14 May 2022.

Juho Hamari, Jonna Koivisto and Tuomas Pakkanen, 2014. "Do persuasive technologies persuade? — A review of empirical studies," In: Anna Spagnolli, Luca Chittaro and Luciano Gamberini (editors). *Persuasive technology — Persuasive, motivating, empowering videogames*. Cham, Switzerland: Springer, pp. 118–136.

doi: <u>https://doi.org/10.1007/978-3-319-07127-5_11</u>, accessed 14 May 2022.

Lobna Hassan and Juho Hamari, 2019. "Gamification of e-participation: A literature review," *Proceedings of the 52nd Hawaii International Conference on System Sciences*, pp. 3,077–3,086. doi: <u>https://doi.org/10.24251/HICSS.2019.372</u>, accessed 14 May 2022.

Andrew F. Hayes and Klaus Krippendorff, 2007. "Answering the call for a standard reliability measure for coding data," *Communication Methods and Measures*, volume 1, number 1, pp. 77–89. doi: <u>https://doi.org/10.1080/19312450709336664</u>, accessed 14 May 2022.

Nigel Jackson, 2018. "Information, issues, and supporters: The application of online persuasion in the 2015 General Election," *Journal of Public Affairs*, volume 18, number 4, e1724. doi: <u>https://doi.org/10.1002/pa.1724</u>, accessed 14 May 2022.

Patrick Jagoda, 2013. "Gamification and other forms of play," *boundary 2*, volume 40, number 2, pp. 113–144.

doi: https://doi.org/10.1215/01903659-2151821, accessed 14 May 2022.

Jason J. Jones, Robert M. Bond, Eytan Bakshy, Dean Eckles and James H. Fowler, 2017. "Social influence and political mobilization: Further evidence from a randomized experiment in the 2012 U.S. presidential election," *PLoS ONE*, volume 12, number 4, e0173851. doi: <u>https://doi.org/10.1371/journal.pone.0173851</u>, accessed 14 May 2022.

Andreas Jungherr, 2016. "Twitter use in election campaigns: A systematic literature review," *Journal of Information Technology & Politics*, volume 13, number 1, pp. 72–91. doi: <u>https://doi.org/10.1080/19331681.2015.1132401</u>, accessed 14 May 2022.

Jesper Juul, 2010. A casual revolution: Reinventing video games and their players. Cambridge, Mass.: MIT Press.

Elihu Katz and Paul Felix Lazarsfeld, 1955. *Personal influence: The part played by people in the flow of communications*. Glencoe, Ill.: Free Press.

Tobias R. Keller and Ulrike Klinger, 2019. "Social bots in election campaigns: Theoretical, empirical, and

methodological implications," *Political Communication*, volume 36, number 1, pp. 171–189 doi: <u>https://doi.org/10.1080/10584609.2018.1526238</u>, accessed 14 May 2022.

Ulrike Klinger and Jakob Svensson, 2015. "The emergence of network media logic in political communication: A theoretical approach," *New Media & Society*, volume 17, number 8, pp. 1,241–1,257. doi: <u>https://doi.org/10.1177/1461444814522952</u>, accessed 14 May 2022.

Cliff Lampe, 2015. "Gamification and social media," In: Steffen P. Walz and Sebastian Deterding (editors). *The gameful world: Approaches, issues, applications*. Cambridge, Mass.: MIT Press, pp. 463–480. doi: <u>https://doi.org/10.7551/mitpress/9788.003.0034</u>, accessed 14 May 2022.

Anders Olof Larsson, 2017. "Top users and long tails: Twitter and Instagram use during the 2015 Norwegian elections," *Social Media* + *Society* (15 June). doi: <u>https://doi.org/10.1177/2056305117713776</u>, accessed 14 May 2022.

Darren G. Lilleker and Daniel Jackson, 2017. "The social media campaign: Mobilisation and persuasion," In: Dominic Wring, Roger Mortimore and Simon Atkinson (editors). *Political communication in Britain: Polling, campaigning and media in the 2015 General Election*. Cham, Switzerland: Springer International, pp. 293–313.

doi: https://doi.org/10.1007/978-3-319-40934-4_23, accessed 14 May 2022.

Nika Mahnič, 2014. "Gamification of politics: Start a new game!" *Teorija in praksa*, volume 5, number 1, pp. 143–161, and at <u>http://dk.fdv.uni-lj.si/db/pdfs/TiP2014_1_Mahnic.pdf</u>, accessed 14 May 2022.

Silvia Majó-Vázquez, Mariluz Congosto, Tom Nicholls and Rasmus Kleis Nielsen, 2021. "The role of suspended accounts in political discussion on social media: Analysis of the 2017 French, UK and German elections," *Social Media* + *Society* (4 July). doi: https://doi.org/10.1177/20563051211027202, accessed 14 May 2022.

doi: <u>https://doi.org/10.11///2056305121102/202</u>, accessed 14 May 2022.

Ico Maly, 2020. "Algorithmic populism and the datafication and gamification of the people by Flemish Interest in Belgium," *Trabalhos em Lingustica Aplicada*, volume 59, number 1, pp. 444–468. doi: <u>http://dx.doi.org/10.1590/01031813685881620200409</u>, accessed 14 May 2022.

Kai Masser and Linda Mory, 2018. *The gamification of citizens' participation in policymaking*. Cham, Switzerland: Palgrave Pivot. doi: <u>https://doi.org/10.1007/978-3-319-78571-4</u>, accessed 14 May 2022.

Michele Mazza, Stefano Cresci, Marco Avvenuti, Walter Quattrociocchi and Maurizio Tesconi, 2019. "Rtbust: Exploiting temporal patterns for botnet detection on Twitter," *WebSci '19: Proceedings of the 10th ACM Conference on Web Science*, pp. 183–192. doi: <u>https://doi.org/10.1145/3292522.3326015</u>, accessed 14 May 2022.

Jane McGonigal, 2011. Reality is broken: Why games make us better and how they can change the world.

New York: Penguin Books.

Raquel Quevedo-Redondo, Nuria Navarro-Sierra, Salome Berrocal-Gonzalo and Salvador Gómez-García, 2021. "Political leaders in the APP ecosystem," *Social Sciences*, volume 10, number 8, 307. doi: <u>https://doi.org/10.3390/socsci10080307</u>, accessed 14 May 2022.

Michael Sailer, Jan Ulrich Hense, Sarah Katharina Mayr and Heinz Mandl, 2017. "How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction," *Computers in Human Behavior*, volume 69, pp. 371–380. doi: <u>https://doi.org/10.1016/j.chb.2016.12.033</u>, accessed 14 May 2022.

Katie Seaborn and Deborah I. Fels, 2015. "Gamification in theory and action: A survey," International

Journal of Human-Computer Studies, volume 74, pp. 14–31. doi: <u>https://doi.org/10.1016/j.ijhcs.2014.09.006</u>, accessed 14 May 2022.

Gianluca Sgueo, 2018. Games, powers & democracies. Milano: Bocconi University Press.

John Street, 2004. "Celebrity politicians: Popular culture and political representation," *British Journal of Politics and International Relations*, volume 6, number 4, pp. 435–452. doi: https://doi.org/10.1111/j.1467-856X.2004.00149.x, accessed 14 May 2022.

Cristian Vaccari, Augusto Valeriani, Pablo Barberá, Rich Bonneau, John T. Jost, Jonathan Nagler and Joshua A. Tucker, 2015. "Political expression and action on social media: Exploring the relationship between lower- and higher-threshold political activities among Twitter users in Italy," *Journal of Computer-Mediated Communication*, volume 20, number 2, pp. 221–239. doi: https://doi.org/10.1111/jcc4.12108, accessed 14 May 2022.

Maurice Vergeer and Liesbeth Hermans, 2013. "Campaigning on Twitter: Microblogging and online social networking as campaign tools in the 2010 general elections in the Netherlands," *Journal of Computer-Mediated Communication*, volume 18, number 4, pp. 399–419. doi: <u>https://doi.org/10.1111/jcc4.12023</u>, accessed 14 May 2022.

Samuel Woolley and Philip N. Howard (editors), 2018. *Computational propaganda: Political parties, politicians, and political manipulation on social media*. Oxford: Oxford University Press. doi: <u>https://doi.org/10.1093/oso/9780190931407.001.0001</u>, accessed 14 May 2022.

Leihan Zhang, Jichang Zhao and Ke Xu, 2016. "Who creates trends in online social media: The crowd or opinion leaders?" *Journal of Computer-Mediated Communication*, volume 21, number 1, pp. 116. doi: https://doi.org/10.1111/jcc4.12145, accessed 14 May 2022.

Appendix

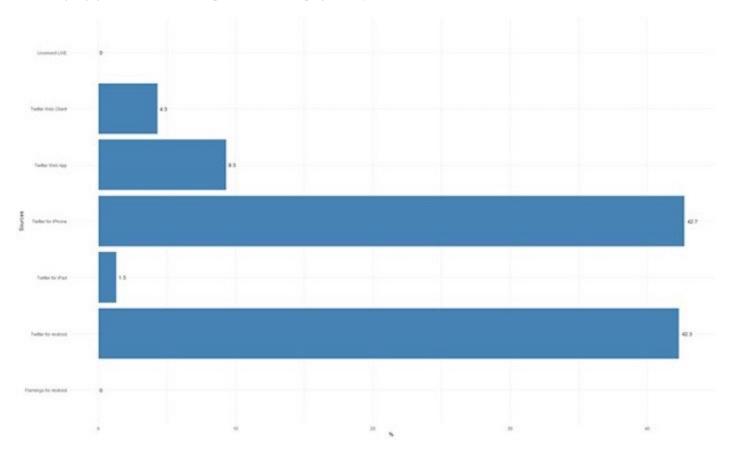
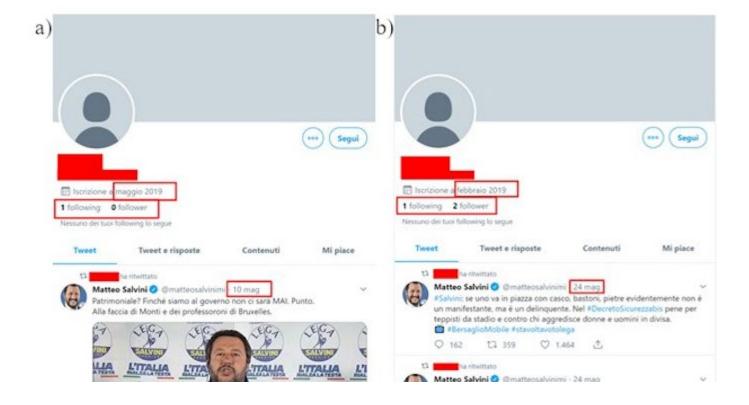


Figure A1: Source analysis for retweets posted by devotees (n = 125,687). Note: For the sake of privacy, screen names and personal details of devotees are anonymised.



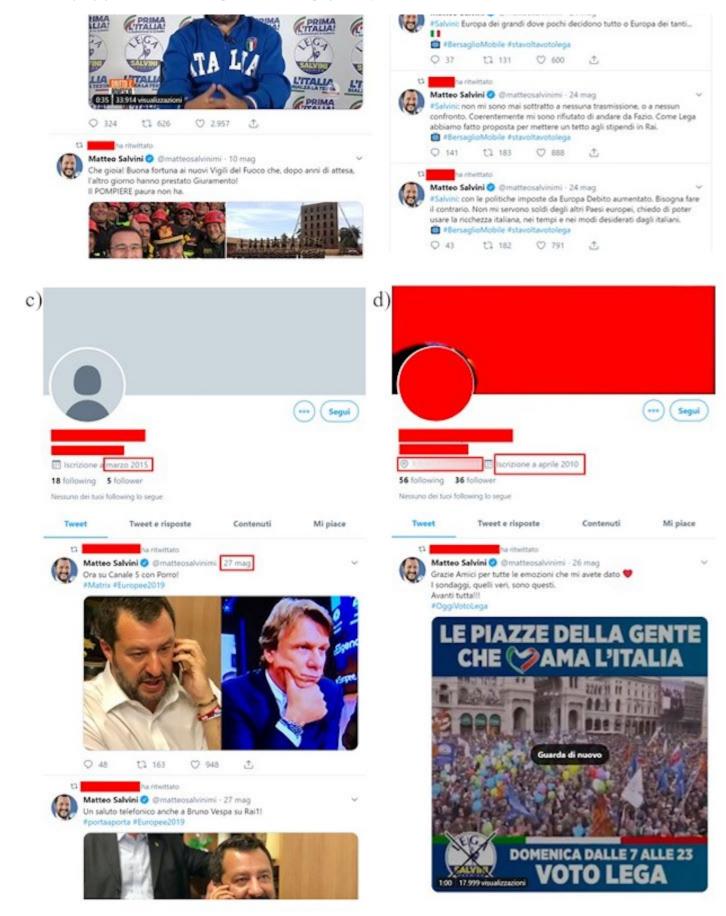


Figure A2: Some examples of devoted users' accounts (screenshots taken on 29 August 2019).

The five most retweeted tweets:

- 1. https://twitter.com/matteosalvinimi/status/1132759347472338945 (5683 RT)
- 2. https://twitter.com/matteosalvinimi/status/1130058883291111424 (3153 RT)
- 3. https://twitter.com/matteosalvinimi/status/1132196056261890049 (2560 RT)
- 4. https://twitter.com/matteosalvinimi/status/1132979870328340481 (2180 RT)
- 5. https://twitter.com/matteosalvinimi/status/1126544528607981569 (2136 RT)

These five tweets do not show similar characteristics, both in terms of form and content. Three tweets include videos with different content: one video allegedly showing an irregular migrant attacking a ticket inspector on a train; one video message by Salvini expressing gratitude to his voters; a video on the risks of immigration in Europe from the Web. The other two tweets contain photos: Matteo Salvini thanking his voters, and a picture from the final rally of his election campaign. Except for the video from the Web posted on 9 May, all tweets were posted in the last week of the election campaign (19–26 May 2019).

Editorial history

Received 5 September 2021; revised 28 February 2022; accepted 10 April 2022



This paper is licensed under a <u>Creative Commons Attribution-NonCommercial-NoDerivatives 4.0</u> International License.

Vinci Salvini! Boosting engagement in the 2019 European elections campaign in Italy by Roberta Bracciale, Francesco Grisolia, Antonio Martella, and Maurizio Tesconi. *First Monday*, volume 27, number 6. doi: https://dx.doi.org/10.5210/fm.v27i6.12287