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## **THE TRIGGER EFFECT: COGNITIVE BIASES AND FAKE NEWS**

During the last two decades, the internet has become a cheap and widely accessible technology. Several intellectuals have welcomed such a change as a breakthrough for humanity (most notably, Lévy, 1994; Lévy, 2002; Jenkins, 2006) because it has deeply revolutionized many aspects of our social and private life, e.g. the ways we shop or the ways we interact with others. In the same ways, several public leaders (most notably, Grillo, 2007; Grillo, 2009; Grillo, 2010) claim that the internet has revolutionized and is revolutionizing the political narrative of many countries because it has given politicians and other influential public leaders powerful means to interact with their followers publically and directly, e.g. Facebook or Twitter accounts.

Nevertheless, while widespread access to the internet is believed to enhance democratic processes (Lévy, 1994; Lévy, 2002; Jenkins, 2006; Grillo, 2007; Grillo, 2009; Grillo, 2010), this paper presents some cases studies, which show instead that unrestrained accessibility to the internet might instead pose a serious threat to democracy. For the gathered evidence suggests online users internalize online content in an emotional way rather than in rational way.

*The Background Problem: Email Marketing Campaigns and Call-to-Action Requests*

In order to have a grasp of the general problem addressed by this research study, it could be beneficial to note that nowadays more and more firms involved in B2B (business-to-business) business activities choose to integrate marketing automation software (MAS) to their

existing business processes. More specifically, MAS automates firms' promotion activities reducing costs and timing of promotional campaigns. This is because, instead of reaching out to existing or potential customers with different offers, firms' sales representatives can do so automatically as MAS substitutes all the key words of email templates (e.g. salutation titles or customers' names and surnames) alone. Other examples of automated promotional emails are the emails we receive from our favorite e-shops every day.

Within the scope of this paper, the key issue to be addressed concerns how the content of automated emails is structured. In this respect, all the main blogs powered up by key MAS providers (e.g. Hubspot or Marketo) suggest effective content is short and contains plenty of call-to-action requests (e.g. *click here* or *if you're interested in my offer, please book an appointment via this link or book your copy here etc.*). Besides, these blogs unanimously suggest automated emails are much more effective if their content includes an appealing email subject and a preview message (i.e. a short message to be visualized above the email subject once a push notification is received on smartphones or tablets). This is because very appealing (and yet very spammy) email subjects such as *Discover how to increase your online sales by 50% in 2 weeks* augment the open-rate and the conversion-rate of automated emails, while effective preview messages such as *I need to have a short conversation with you. Please reserve a slot through link provided in the email below* also push open rates up and reduce the chances that the email is discarded by the targeted receiver.

Now, while these strategies are widespread business practices in B2B sales, the abovementioned strategy is philosophically interesting because it leads to a troublesome anthropological question, namely: why would a businessman engage in business talks with unknown individuals? In other words, is it a wise or an unwise decision to schedule a sales presentation with an unknown individual who claims to have a business proposal?

The scope of this paper falls beyond answering these questions. Yet one important aspect emerges: although businessmen receive many sales emails every day, businessmen consider offers attractive if and only if an offer fulfils a given business need. That is, businessmen opt for offers of products or services, which solve a given business problem faced by their business.

Within the scope of this paper, it is worth noting that businessmen make subsequent decisions (e.g. try out what is offered) upon limited amount of information, i.e. sales emails or sales presentations. Interestingly, the evidence presented by this paper suggests analogous processes lead populists' followers to take voting decisions within the general purposes of populists' political and communication strategy online. Indeed, as shown below, the attention of populists' followers is caught by the online content, which fits their overall views and offers simple (apparent) explanations to very complicated problems.

### *The Concept of Direct Democracy*

As mentioned earlier, during the 1990s and the early 2000s, several thinkers and public leaders have suggested the internet is a key element to enhance democratic processes. For the internet redesigns the way people and the establishment communicate with one another.

Most notably, Lévy (1994) proposes that the internet fosters new ways of social aggregation because it allows to overtake geographical distances and social disparities. In particular, Lévy (1994) claims that the internet is a non-physical place where a collective intelligence emerges. The latter concept subtends to the idea that the internet is where different people can potentially pool competencies and pursue meaningful goals together. This is because, according to Lévy (1994), online communities allow people to share opinions with each other in order to achieve goals together in an enhanced way, which requires democratic confrontation and intellectual resources. This process, according to Lévy (1994), leads people to postulate solutions to problems together. On this basis, Lévy (2002) argues that online communities can lay down the basis of a new participative democracy. Lévy (2002) calls it cyber democracy (i.e. the idea that online communities can promote political self-determination locally, regionally and internationally).

On the other hand, Jenkins (2006) shows that there is evidence in favor of the arguments of Lévy (1994). Specifically, Jenkins (2006) reports the case of the fans of the reality show *Survivor* who, in the early 2000s, pooled their knowledge and competencies into online communities of *Survivor*'s fans and successfully found out who would be

*Survivor's* winner before the show ended. Besides, Jenkins (2006) argues that the digital era is featured by two main social phenomena: first, the constant interaction between traditional media and online media, i.e. between broadcasters and audience; second, the steady growth of independent online media that provide information via online channels. Either ways, the endpoint of both social processes is to democratize media so that everyone can become a broadcaster of information or contribute to the creation of content in traditional media.

Interestingly, the rapid growth of the Italian political movement *Movimento 5 Stelle* (Five Stars Movement) somehow embodies the auspices of Lévy (1994; 2002) and the arguments of Jenkins (2006). Indeed, Beppe Grillo, the founding father of *Movimento 5 Stelle* (M5S), argues that the internet can enable at least three new ways of doing politics: first, the internet can enable people to have a word on difficult issues, e.g. referendum-like questions, via online voting; second, the internet can enable people to build political communities where people discuss political topics and formulate political proposals, which can be directly forwarded to politicians; third, governments can enhance transparency by broadcasting political negotiations in streaming and by interacting with citizens' questions during the parliamentary voting on new reforms (see Grillo, 2007; Grillo, 2009; Grillo, 2010). These processes are at the core of what Grillo (2007; 2009; 2010) calls *democrazia diretta* (i.e. direct democracy). This is the idea that the internet allows everyone to participate in political processes so that everyone's opinion is accounted for when an important decision is to be taken. Furthermore, Grillo (2007; 2009; 2010) argues that the internet reshapes the communication of information in such a way that anyone can become a broadcaster of information using a Facebook page, a YouTube channel or anything similar. In other words, according to Grillo (2007; 2009; 2010), everyone can become an independent broadcaster of reliable information.

### *Criticism of Direct Democracy*

The ideas presented by Lévy (1994; 2002), Jenkins (2006) and Grillo (2007; 2009; 2010) are somehow fascinating. Nonetheless, bare facts show that internet can be an enhancer of democratic processes as well as one of democracy's worst enemies. In fact, while it holds is

undoubtedly true that internet may ease the process of aggregation of people into groups which pursue shared meaningful purposes, bald evidence from daily news suggests the thesis of Lévy (1994; 2002), Jenkins (2006) and Grillo (2007; 2009; 2010) might be too simplistic for at least three reasons.

Firstly, people's life nowadays lies somehow suspended between the real and the virtual world. Yet, while at the early stages of internet one's real and one's virtual were not intertwined, today what happens online does have a consequence on what people believe and on how people behave in the real world.

Secondly, the internet fosters ostentation and narcissism (as a consequence of the first point). For example, some Russian women admitted of having rented a private jet parked in a hangar for a few hours so that they could take pictures of themselves and show off on Instagram. In the same way, nowadays many people take semi-professional pictures of themselves on vacations not to have great memories from their holidays, but only with the purpose of showing off with their friends on social networks. Both examples subtend to the fact that how one is perceived by others online might have consequences on how one is perceived by others in the real world.

Third, while it holds undoubtedly true that the internet changed the way people interact with each other, it is worth noting that, as a consequence of the first and second point, the members of digital societies are often clustered into several groups of like-minded people, which normally reject anything or anyone else than the group approves of. Moreover, the widespread presence of fake news in the internet fosters agonistic behaviour mainly because fake news lead people to formulate wrong beliefs and prejudices about others, e.g. immigrants. Therefore, the internet seems to foster aggregative behaviour so that like-minded people stick together because they seek social acceptance out of personal interest.

Thus, in the light of the three above-mentioned contingencies, is it then correct to argue that the internet fosters the progressive emergence of collective intelligence? Moreover, are the above trends threats to or enhancer of democracy?

In this respect, Pagliaro (2017) makes two crucial observations: first, Pagliaro (2017) argues that the wide access to the internet gave many internet users the illusion that their opinion about any topic is

relevant only because they can openly state whatever they think online via their social media pages or blogs; second, Pagliaro (2017) observes that internet users often tend to believe that the internet contains information that the establishment wants to conceal. According to Pagliaro (2017), the latter belief is the behavioural driver of the rapid diffusion of fake news.

Along this line of reasoning, Burioni (2017) argues that it is exactly the illusion of complete unbounded freedom that leads many internet users to believe that whatever piece of information found online contains truthful information. This shared belief, according to Burioni (2017), explains why the heavy presence of conspiracist websites fuels the aggregation into conspiracist online communities (flat earth society, no-vax etc.), which gather high numbers of followers. Moreover, Burioni finds that these communities are featured by two peculiar beliefs: the belief that the establishment is lying to them about many things, e.g. UFO or vaccines; and the belief that multinational companies are run by conspiracists who act against the interest of normal people. Eventually, Burioni (2017) finds that the most worrisome aspect of conspiracist communities is that contradicting their members with rational arguments leads them to strengthen their beliefs. Hence, Burioni (2017) concludes that, while internet is an overall very useful technology for human development, the internet has a dangerous downside, namely: it allows people to cluster into polarized groups, which deny or avoid contradictory opinions.

In this regard, Tett (2015) shows that the same mechanism is often the main driver of organizational failure in firms. For failure is often caused by the fact that different teams within the same organization are often clustered into polarized groups, which Tett (2015) calls *silos*. The latter are a metaphor which represent, first, the tendency of teams to behave like closed clans and, second, the fact that that teams seldom share their ideas or projects with other teams within the same organization. Tett (2015) finds that true organizational success is driven by organizations' capacity to tear silos apart and enhance cooperation amongst different departments or teams. On this basis, Tett (2015) argues that the problem of *silos* applies to the digital society as well because the internet foster disaggregation rather than aggregation of people with different opinions. According to Tett (2015), this is because, this is because online users are very often fragmented into *silos* of people

who are unable to communicate with each other democratically and effectively.

The online communities described by Tett (2015) and Burioni (2017) are herein defined *online silos*. An example of an *online silo* is provided below.

### *Cognitive Biases and Fake News*

The existence of *online silos* is a powerful propeller for populists. Indeed, the *online silos* represent populists' ideal pool of voters. This is mainly because populists' online strategies are usually based upon two main political moves: inciting people against undefined enemy (e.g. immigrants or banks) via hateful and aggressive slogans; and feeding followers with fake news so that they are provided with the kind of content they expect to see.

In this respect, it is important to highlight that populists' social media strategies very often build upon the same strategies for B2B email marketing mentioned above. Indeed, populists' posts on social networks are usually very self-promoting, e.g. *we are the only defenders of our people's interest*, and contain several call-to-action requests, e.g. *if you are outraged by what I have just shared with you, then like this post and share it with your contacts*.

At the same time, populists insist on sharing fake news with their followers because fake news is a structure in a dual peculiar way: first, it is broadcasted by some independent online media; second, it often includes slogans reported in the provided link itself, e.g. *There is evidence: vaccines cause autism*. Therefore, independently of the reliability of the source, populists' followers end up believing in and re-sharing fake news with others because the slogan contained in the provided link fits their overall views and, thus, is believed as likely to be true. Moreover, the populist propaganda frames fake news as something that the traditional media do not want to share with people because it affects the interests of the establishment.

Most importantly, while one might dismiss the case of populism as a cultural or social process of our world, it is worth remarking that the mechanism that fuels such cultural or social processes is grounded upon the thorny problem of cognitive biases (i.e. on deviations from rational judgement). To see how, it is beneficial to come back to the analogy with

business processes, in particular with customer impulsive behaviour (i.e. with customer impulsive buying decisions).

In this regard, McFadden (2013) explains that consumers' decisions under uncertainty are often biased by two main kinds of heuristic, which is itself biased by motivated reasoning: first, consumers base their decisions upon the fact that memory selectively remembers rather successes than failures; second, consumers choose in accordance with what others choose. That is why, for example, when visiting a new restaurant, people either choose something that recalls what they usually eat or opt for what other people choose. Such heuristic obviously does not grant long-term success because it induces consumers to follow customary buying behaviour, which eventually leads consumers to overlook better purchase opportunities.

Most interestingly, when one shops online, the heuristics described by McFadden (2013) activate in a much stronger way. In fact, as observed by Keen (2007), successful online marketing strategies trigger emotional arousals driven by memory-related heuristics. That is, according to Keen (2007), successful online marketing strategies find a match between online content and users' feelings about some given product or service. This explains why click-baiting campaigns are the preferable strategy to implement promotional campaigns on social media.

The recent scandal of Cambridge Analytica provides a perfect example of such mechanism. In fact, the British agency noticed that when internet users are overloaded with information, internet users search content that accommodates their preferences the most. Thus, Cambridge Analytica noticed that users' preference are ideal predictors of what kind of content users might be interested to see.

As reported by newspapers, the trick discovered by Cambridge Analytica gave President Trump a significant advantage in online campaigns during the last American presidential elections. Yet, one may wonder, why does such mechanism activate in such a way that it affects social processes? The answer to this question comes from Behavioral Economics.

Kahneman & Lovallo (1993) explain what when agents are to make an important decision, agents are very often unable to process all the information available to them at the time the decision is issued. For this reason, agents opt for what looks the most convenient option within

the context of their understanding of a given situation. That is why agents end up overlooking opportunities.

Furthermore, Kahneman & Lovallo (2003) note that when top executives explore the possibility to implement new business projects, they frequently fall victim of similar blunders. This is the case when executives roll out some business project that is proposed to them without properly evaluating all the possible threats to that project.

In the first case (Kahneman & Lovallo, 1993), agents fall victims of the so-called *narrow framing bias*, whereas, in the second case (Kahneman & Lovallo, 2003) agents fall victim of some sort of heuristic known as *anchoring*. The latter is best explained by cases when subsequent decisions are made by relying too heavily upon a limited initial piece of information.

On the other hand, Levari et al. (2018) demonstrate empirically that such blunders have a much wider impact on human decision-making because the frequency of a given event accustoms people to expect that event to occur again by enforcing heuristics. In particular, Levari et al. (2018) run an experiment where some subjects are provided with some facial images and then asked to identify the threatening faces amongst those images. The experiment is run in subsequent trials where the number of threatening faces diminishes as the experiment progresses. Levari et al. (2018) find that subjects have no troubles in identifying the threatening faces as far as threatening faces pop up frequently. Yet, when the threatening faces pop up less frequently in the experiment, many subjects tend to assign the threatening attribute to those faces that were initially considered neutral by the subjects themselves.

Within the purpose of this paper, it is worth noting that the biases identified by Kahneman & Lovallo (1993; 2003) and the findings of Levari et al. (2018) might have a strong explanatory power in understanding why fake news become viral on social networks. This might be so for at least five founding reasons: first, the members of *online silos* are heavy internet users and are constantly bombarded with all kinds of information; second, the members of *online silos* tend to search for conspiracy explanations in many trending events; third, the members of *online silos* tend to frame news, facts and political events within the context of their views; fourth, the members of *online silos* usually tend to discuss facts and political events only with people who hold their very same views; fifth, the members of *online silos* usually tend to base their

overall judgements only on the news provided by online independent media. Therefore, within populists' online strategies, aggressive slogans and fake news happen to general emotional reactions on the behalf of populists' followers. In other words, populists' political narrative triggers emotional reactions towards their political agenda rather than rational understanding of their political proposals. This causes their followers to base their future judgements and voting decisions upon wrong information and upon limited understanding of political problems.

### *Evidence*

The evidence presented below was gathered between August and September 2017 (i.e. six months before Italy's last political elections in 2018) and contains some social media threads from a Facebook Group (FG) populated by about 40,000 Facebook users, most of whom are supporters of M5S. The targeted FG is a sort of fan club of Mr. Luigi Di Maio and Mr. Alessandro Di Battista, Movimento Cinque Stelle's top political leaders.

The choice of such a target is not usual. In fact, FG represents a good example of an *online silo*. This is because FG was created by its members, is populated by like-minded people, contains fairly high amounts of fake news and aggressive political slogans and, also, because the admins of FG usually ban or silence those users who express any sort of criticism towards M5S or any sort of opinion that contradicts what the pro-M5S members of FG think overall.

### *Preliminary Observations*

The case studies presented below were obtained following a qualitative methodology and were inspired by some preliminary field observations. The latter involved observing the interactions between the users of FG and the trolls presented in FG.

The main finding from the preliminary observations was that trolls posted fake news into FG with the sole intent of letting the member of FG believe in and re-share absurd news. Incredibly, if anyone tried to disprove what trolls post in FG with rational arguments, then they were

either banned by admins or covered with awful insults by other members of FG.

The initial observations revealed that two topics mainly caught the attention of the members of FG: first, any news about the alleged conspiracy of pharmaceutical companies against people's health; second, any news regarding the former president of the Italian Parliament, Mrs. Laura Boldrini, due to her pro-immigration political beliefs.

In the first case, the members of FG seemed to share the view that any sort of natural remedy is better than vaccines or standard medications because the pharmaceutical business makes money off people's health with medications that trigger diseases. In the second case, the members of FG seemed to believe that in any sort of fabrication about Mrs. Laura Boldrini, the former president of the Italian parliament and a former prominent member of Italy's Partito Democratico (PD). With respect to the second point, it is important to note that the supporters of M5S accuse Mrs. Boldrini's former party to financially benefit from immigration due to some scandals, which took place between 2015 and 2017. Accordingly, the supporters of M5S developed a strong political hatred towards Mrs. Boldrini due to her pro-immigration views.

However, the important finding from the preliminary observations was that the members of FG responded to trolls' call-to-action requests in the same way as potential or existing customers respond to call-to-action requests in business emails. In particular, two main interesting facts were acknowledged:

- 1) When a post is edited with capital letters and includes specific keys words (such as immigrants, PD or Boldrini), it usually receives great attention by the audience;
- 2) When a post refers to some unverified source, but contains call-to-action requests such as *like it and share it with your contacts before it gets censored*, then that post receives great attention and gains high number of shares and likes.

It is worth noting that 1) and 2) fit the overall political strategy of M5S. For its founding father, Beppe Grillo, has always used aggressive communication strategies, which include shouting direct insults against people and addressing people with negative stereotypes. Moreover, Beppe Grillo has often stressed the existence of some sort of censorship

that represses people who criticize or fight against the establishment in the same way as Grillo does.

On the other hand, M5S channels all Italians' disappointment towards traditional parties after Silvio Berlusconi's last government was de facto dismissed upon request of the European Union in November 2011. Within this context, the communication strategy of M5S focuses on accusing the politicians belonging to the traditional parties of being responsible for and having benefitted financially from the harsh consequences of the sovereign debt economic crisis, which hit Europe between 2011 and 2013. Accordingly, M5S found its ideal pool voters amongst low-skilled labourers, poorly educated people and young people who suffer the consequences of Italy's high unemployment rate. That is why the political agenda of M5S included several vote-getter promises: introduction of universal basic income for everyone, quitting the Eurozone, nationalization of banks, reduction of privileges, higher taxation for rich people, more jobs for everyone by increasing public spending, removal of vaccine obligation etc. Unsurprisingly, as the owner of the logo of M5S is the Milan based online marketing agency Casaleggio Associati, during the last electoral campaign, M5S implemented its online vote-getter electoral campaigns by means of the marketing techniques mentioned above. On this basis, it is reasonable to argue that the followers of M5S internalize the slogans of M5S emotionally rather than rationally.

### *The Case Studies*

During the preliminary observations, it was noticed that when a post is written in capital letters with several key-words and includes call-to-action requests such as *share it before it gets censored*, the number of shares is usually greater than the number of likes. This is addressed as *the trigger effect*, which defines a full emotional response to click-bait content.

In order to accomplish the research goal of this paper, some online content was surveyed on online independent media and troll websites containing fake news. After the research for content was over, three pieces of fake news in the Italian language were selected and posted into FG. The posts were removed as soon as the research was over and the sought effects were observed.

### *Research hypothesis*

As there was no way to survey the demographics of the people who responded to our posts, it was assumed that agents would not be biased and would be able to distinguish fake news from truthful news independently of their educational level or general dispositions. Hence, it was postulated that if the *narrow framing* and *anchoring* biases activate, then agents would not be able to distinguish fake news from truthful news. In particular, it was postulated that if the *narrow framing* and *anchoring* biases activate, then the trigger effect obtains. Thus, if the latter obtains, then the number of shares is to be greater than the number of likes.

### *Case study 1*

The first case study includes a link to a website of recipes for cuisine (its name has been omitted to avoid copyrights conflicts). The link (figure 1) speaks of *the natural remedies for tooth pain your dentist does not mention to you* and is framed under slogan in capital letters: *++Incredible++ there are hundreds of thousands of natural methods to cure your teeth at home. But, of course, the regime's media do not say anything about it just to defend the dentists' lobby. Share it before it gets censored!!!* As expected, the number of likes (59) is smaller than the number of shares (80). Besides, the post is followed by 5 comments saying that it must be true because Big Pharma earns huge amounts of money with the medicines against tooth pain.

### *Case study 2*

The second case study includes a link to a troll website containing fake news. The name of the website is itself thought provoking as *devi informarti* means *you have to inform yourself*. The link (figure 2) to the website says *PD's Romany Mayor: "Italians do not want to integrate. Here I want only gypsies."* The content is itself absurd because there exists no Romany mayor belonging to the Democratic Party (PD). Furthermore, the linked article speaks of a legendary Romany mayor who rules some small town in the Italian region Veneto. Nevertheless, the posts that

precedes the link says: *++unbelievable++ it happens in Abruzzo [another region of Italy] !!! This is what PD does. This mayor is a closed friend of [Matteo] Renzi [PD's political leader] and of [Laura] Boldrini !!! Share it before it gets censored !!!* As expected, the number of likes (138) is smaller than the number of shares (191).

Furthermore, more than half of comments in the threads that follow the post contains hateful insults against Mrs. Boldrini, Mr. Matteo Renzi and against Romany people.

Interestingly, the users who opened the link stated that the post is misleading in the comment threads and did not like or re-share the post.

### *Case Study 3*

The third case study is even more absurd than the previous two. Indeed, the fake news provider is the satirical website Lercio (filthy), which is the parody of the Italian newspaper Leggo (I read). This time the link (figure 3) says *“Boldrini: I love drought. It makes my African friends feel like at home.”* and it is introduced by a short post that says: *++unbelievable++ this woman wishes evil to Italy and to the Italian farmers !!! Share it massively !!!*

While there was an initial lack of confidence about the outcomes due to the great popularity of Lercio in Italy, it was surprising to observe that, as expected, the number of likes (140) is smaller than the number of shares (157). Besides, most of the comments cover Mrs. Laura Boldrini with awful insults, while, like for *Case Study 2*, only those who noticed that the news provider is Lercio stated it openly and did not share or like the post.

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Figure 1 - Case Study 1



Figure 2 - Case Study 2



Figure 3 - Case Study 3

### *Concluding remarks*

While being limited by its methodology, the case studies presented above provide some insights on how fake news can become viral online. Furthermore, the above case studies show that biased judgement leads to hasty mass reactions to online content. In fact, the users who reacted to the posts do not seem to care too much about the real content of the fake news presented in the case studies. The behavioural driver of this finding might be that prejudice and custom limit rational evaluation of fake news. This is because, being constantly bombarded with similar content, the users of FG might just end up believing that the content like the above is truthful. This reaction is strengthened by framing posts in such a way that the establishment is responsible for the problems of the people reading those posts.

The same problem applies to people's perception of immigration. Indeed, as news broadcasters daily report the misdoings of some immigrants, people become accustomed to think that immigrants are mostly criminals in the same way as they become accustomed to think that any member of the establishment is dishonest. In this sense, the

activation of the mechanism described by Levari et al. (2018) is evident in presence of fake news that triggers the activation of the narrowing framing bias and the anchoring heuristic.

Eventually, the above case studies provide powerful counterexamples against the theories provided by Lévy (1994; 2002), Jenkins (2006) and Grillo (2007; 2009; 2010) because the above case studies show that *online silos* might foster behaviours with negative externalities, e.g. one's decision not to vaccinate their kids. Thus, while technology is certainly improving our lives, it is preferable that its defects are corrected. In the same way, as democratic regimes are featured by independent judicial systems that sanction irresponsible behavior, it is desirable that irresponsible online activities and irresponsible online political propaganda are sanctioned.

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## ABSTRACT

### **The Trigger Effect: Cognitive Biases and Fake News**

This research study focuses on the problem of populist propaganda online. In particular, this research study provides three case studies gathered in a Facebook Group of the Italian populist movement Movimento 5 Stelle.

On the one hand, the three case studies provide three powerful counterexamples to the thesis that online media are purposeful aggregator of people. In fact, this research study finds that online media are the perfect environment for populism to thrive. For online media seem to foster the aggregation of people into groups whose main common denominator is the total refusal of anything that opposes the groups' views. On this basis, this paper provides evidence that online media may impoverish democratic confrontation.

On the other hand, this paper finds that the one of the causes of the rapid rise of populist movements in Western countries might also be related to the problem of cognitive biases. Indeed, the case studies presented in the paper posit the existence of something that is addressed as the trigger effect, i.e. agents' tendency to react impulsively to any kind of content that fits agent's views about current events. Specifically, this research study finds that the activation of the trigger effect might be a direct consequence of the activation of the narrow framing bias and of the anchoring heuristic in presence of fake news.

**KEYWORDS:** populism; online media; cognitive bias; impulsive behavior; political discourse; social media.