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FGV DAPP

DIRETORIA
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PÚBLICAS



POLICY PAPER 1

SOCIAL NETWORKS AND

ELECTIONS

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#observa2018

Digital Democracy Room



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Rio de Janeiro

FGV DAPP

2018

1. Executive summary

- The Digital Democracy Room monitors the public debate on social networks and identifies misinformation, threats and illegitimate practices in the political process;
- This initiative publishes daily and weekly analysis, policy papers and reports containing lessons learned and recommendation of actions to be implemented in Brazil and in other countries;
- In Brazil, the network society age experienced the highest expression of the transition from the public sphere into the networked public sphere in the rallies of 2013. The rallies of June 2013 showed for the first time that the Internet has become a continuum of the traditional public sphere;
- Thus, it is important to analyze the social networks as influencers of the political debate to understand the actual stage of democracies;
- FGV DAPP plays an important role in the endeavor of understanding the relation between the public opinion formation and the social networks in the Brazilian elections of 2018.
- The analysis produced by FGV DAPP in the months before the first round of the 2018 elections showed a very polarized scenario. They focused on the presidential candidates, themes and events that impact the most the electoral process;
- We found a growth of interactions of bots in the debate about the presidential candidates as the first round approached;
- This article illustrates those topics presenting four analyses of the candidacies on Twitter, Facebook, Youtube and Instagram, respectively.

2. Introduction

In August 2017, the publication of the study Bots, social networks and politics in Brazil (RUEDIGER, 2017), which diagnosed the presence of bots on Twitter in key moments of the Brazilian politics, had a widespread repercussion, with more than 260 mentions in the media.

Due to the impact of the publication, FGV DAPP was invited to participate – with government and intelligence agencies – of the Internet and Electoral Advisory Board of the Brazilian Superior Electoral Court (TSE - Tribunal Superior Eleitoral), created in December 2017, to discuss the potential impact of fake news and bots during the 2018 Brazilian elections.

With a considerable social inequality and profound distrust in the politics and State institutions, Brazil have been facing one of the most polarized elections in its history. It may aggravate the political and economic crisis and/or lead to important social and political transformations. Brazil, as the largest Latin American economy, has an important leadership role among developing countries and the Global South.

The role of the Internet and social networks in the electoral process in Brazil will have great focus internationally. Due to this election, Brazil has the potential to become a showcase to the world, after the risks identified during the elections in the UK, USA, France and Germany, among other countries. Brazil has more than 116 million Internet users¹, with the 3rd place among countries with the largest number of Facebook users² and the 6th among Twitter users³ in the world. The potential of effective actions of the government, the civil society and social network platforms to fight against misinformation, manipulation and illegitimate interferences in the web may have consequences in other democracies.

¹ "Acesso à internet e à televisão e posse de telefone móvel celular para uso pessoal : 2015" / IBGE, Coordenação de Trabalho e Rendimento. – Rio de Janeiro : IBGE, 2016.

² <https://www.statista.com/statistics/268136/top-15-countries-based-on-number-of-facebook-users/>

³ <https://www.statista.com/statistics/242606/number-of-active-twitter-users-in-selected-countries/>

In the project launch event in Rio de Janeiro, Brazil, in July 25, the partners of the Digital Democracy Room were presented. The partners are Digital Forensic Research Lab (DFRLab) and Adrienne Arsht Latin America Center, both from the Atlantic Council; the National democratic Institute (NDI); the Omidyar Network; the Design 4 Democracy Coalition; the Visualization and Data Analytics Research Center (ViDA), from the NYU; the Digital Ethics Lab, of the Oxford University; the Technology and Equity Institute (IT&E); the Escola de Direito de São Paulo of Getulio Vargas Foundation; the Comunitas; the Movement Against Electoral Corruption (MCCE); the fast-checking agency Lupa; the newspaper Estado de São Paulo; the radio CBN; the news web portal Nexo Jornal; and the RustCon.

The Digital Democracy Room also has a group of Digital Democracy Observers that keep track of the analysis generated. The researchers Pablo Boczkowski (Department of Communication Studies/Northwestern University), Eugenia Mitchelstein (Centro de Estudios sobre Medios Y Sociedad en Argentina/Universidad San Andrés), José Maurício Domingues (Instituto de Estudos Sociais e Políticos/Universidade do Estado do Rio de Janeiro), Eugenio Bucci (Escola de Comunicações e Arte/USP), Luciano Floridi (Oxford Internet Institute/Oxford University), Marisa von Bullow (Universidade de Brasília) and Regina Esteves (Comunitas) are members of this group.

FGV DAPP has implemented an incisive communication strategy by a hot site and an app (#observa2018), in addition to digital channels, and the press and institutional communication team to spread the analysis in the web. **In short, The Digital Democracy Room monitors the public debate on social networks and identifies misinformation,** threats and illegitimate practices in the political process by publishing daily and weekly analysis, policy papers and reports containing information acquired and recommendation of actions to be implemented in Brazil and other countries.

3. Background information

Brazil has recently experienced big social and political transformations due to the emergence of new political groups, setbacks in social rights, and a revival of political disputes in the civil society. All this has happened amidst the consolidation of the Internet and social media as places for mediation of public debate, which directly impacts on the informational dimension of democratic regimes. In this context, disinformation, hate speech and radical polarization have been central vectors in the process of social and political climate intensification due to the action of botnets, cyborgs and other illegitimate actions in social networks.

New innovation and communication technologies have led to a new picture in which “technology is a necessary but not sufficient condition to bring forth a new way of social organization based on the networks” (CASTELLS, 2005, p.17). We know that technology does not shape society. Instead, society determines the technology usage according to its needs. However, technology, by means of the networks, enables a new format of social organization.

Thus, the social networks analysis brings a new possibility to understand the relations between State and society. For a long time, this type of analysis had been limited to observing the private life, while power was largely in the hands of big and vertical organizations, such as the State, churches and corporations with goals defined by central authorities (in the classic dilemma between structure and agency in Social Sciences). Digital technology networks have become the “backbone of network society” (CASTELLS, 2005, p.18). Therefore, this new perspective understands social networks as a continuum of the traditional public sphere (HABERMAS, 1984), a transition to the networked public sphere (BENKLER, 2006).

In this context, several studies have aimed to understand the new relations between State and society by means of social network analysis. The Sociology and Political science literatures have sought to understand this new phenomenon and the role of new technology in shaping public opinion. Thus, this article aims to reflect on the new organization of contemporary societies, based on the main analysis of the political debate carried out by FGV DAPP in the months before the first round of the 2018 Brazilian elections.

The traditional public sphere of the post-World War II period was marked by mass media communication – radio and television – and became known as abstract public sphere (HABERMAS, 2003). Mostly the emergence of the Internet led the transition from the traditional public sphere to the networked public sphere (BENKLER, 2006). The networked public sphere structure allowed citizens not only to receive but also to produce content (DINIZ; RIBEIRO, 2012).

In Brazil, the consolidation of the public sphere starts in the years following the 1970s. From this moment on, actors, such as parties, labor unions and social movements, emerged and were structured, building a legitimate space for public debate. Starting in the mid-2000s, the establishment of the traditional public sphere, as defined by Jurgen Habermas⁴, found in Brazil innovative institutional arrangements concerning social participation. However, at the same time, they were limited in incorporating the transformations caused by the digital era (RUEDIGER; et al., 2014, p. 206).

Brazil has only experienced the democratization of Information and Communication Technology (ICT) at the end of the first decade of the 21st century. The transition from the traditional public sphere to the networked public sphere took place at that moment (BENKLER, 2006). The concept of networked public sphere, defined by Yochai Benkler, is characterized by the use of new technologies in everyday life (DINIZ; RIBEIRO, 2012, p.102).

⁴ For Habermas (2003) the political public sphere seeks to mediate through public opinion the state and the needs of society.

In this way, new ICTs enabled individuals to act individually or cooperatively to produce or exchange information and knowledge. According to Benkler (2006), this new scenario allows individuals to increase the number of collaborative actions among individuals, which expands the capacity of democratic participation. The increase in the number of collaborative actions dialogs with the concept of collective subjectivity (DOMINGUES, 1995; 1998), which aims to solve the dilemma between structure and agency in Sociology. The concept seeks to decentralize both the individual and the collective by focusing on the interactions between individuals and different forms of collectivities (RUEDIGER, 2018).

It tries to promote the idea the social fabric is constituted of a multidimensional network in which each individual and each collectivity influences each other (DOMINGUES, 2002). Thus, the new period marked by the advancements of ICT has brought the relations between individuals and collective organization even closer, especially if we consider that the social networks enable the interaction among people that do not know each other personally (CALIL; RUEDIGER, 2018).

In Brazil, the informationalism and the network society era (CASTELLS, 2000) saw in the 2013 rallies the highest expression of the transition from the public sphere to the networked public sphere (RUEDIGER et al, 2014, p.206). The rallies of June 2013 showed for the first time that the Internet has become a continuum of the traditional public sphere.

The advent of new technologies and, consequently, of the virtual sphere represented a change in the status quo of the democratic system in Western societies (RUIZ, 2017). Two currents of thought emerge from this moment. The first one is the techno-progressive vision, based on the idea that new technologies improve social systems and, consequently, reduce inequalities (CARRICO, 2006), coining the concept digital democracy, or e-democracy. The second one points out the emergence of new technologies as tools to promote inequality, as well as potential controllers of the population and places of disinformation (HINDMAN, 2009).

The concept of digital democracy, proposed by the representatives of the techno-progressive vision, would materialize in the Internet its premise of massification of ICTs. The Internet would enable the switch from a hierarchical society to a network society, in which citizens could actively participate in the content creation. The techno-progressive view has as milestones two types of movements that took place in the 2000s (RUIZ, 2017): (a) the social movements, such as Los Indignados (2011) and Occupy Wall Street (2011), and (b) the revolutionary movements, such as Arab Spring (2010).

Thus, mobilizations of the first decade of the 21st century seemed to confirm the techno-progressive vision and those who advocated the concept of digital democracy. The consolidation of the network society is verified, as stated by Manuel Castells⁵. In the Brazilian case, the June events became the expansion of the public sphere because they started a new way of pressuring the State, so that the networks and the streets converged into “the publicizing of demands and of a new public agenda in the country” (RUEDIGER; et al., 2014, p. 208).

On the other hand, the concept of digital exclusion should also be analyzed, as it is the opposite of digital democracy. Those who propose this concept state that digital tools are not accessible to vulnerable populations. Therefore, they would have an anti-democratic effect (RUIZ, 2017). Other groups also reflect on whether cyberspace would only reflect the traditional patterns of society or would be a model incompatible with the contemporary democratic system.

According to critics, the Internet architecture is far from open and horizontal. The Internet follows trends determined by statistic variables, which create power relations that may result in an uneven distribution⁶ of information. This pattern of behavior would be reproduced on the Internet: few popular websites, such as Yahoo!,

⁵ Network Society, the first volume of the trilogy "The Information Age: Economy, Society and Culture", maps a scenario mediated by new information and communication technologies and how these interfere in social structures.

⁶ The Pareto principle (1897) states that 80% of events come from 20% of causes. Thus, 20% of the population controls 80% of the wealth and this uneven distribution would be reproduced on the internet.

AOL and Google, would control most of the circulation of information, while personal pages would have a minimum reach. (RUIZ, 2017).

The debate promoted by both currents of thought permeated the 1990s and the early 2000s. As of 2010, new elements started giving new meaning to the role of social networks. According to Ruiz (2017), on-line platforms have become a source of information overload, wherewith subjects can believe in any content, starting the post-truth⁷ nd infoxication scenario⁸.

No Brasil, a maior e principal demonstraçã de mobilizaçã advinda da esfera virtual foram as manifestações de junho de 2013. Diversos grupos sociais tomaram as ruas para demonstrar sua insatisfaçã com a conjuntura política do momento: junho de 2013 marcou a “retomada da mobilizaçã social como forma de pressã sobre os governos – que o Brasil não via há duas décadas” (RUEDIGER; et al., 2014, p.207).

In Brazil, the rallies of June 2013 were the main and biggest example of mobilizations of the virtual sphere. Different social groups took to the streets to express their dissatisfaction with the political conjuncture of that moment: June 2013 marked the “resumption of social mobilization as a form of pressure on governments – which Brazil had not seen for two decades” (RUEDIGER et al., 2014, p. 207).

Considering this panorama, it becomes important to analyze the social networks as influencers of the political debate. Consequently, understanding the social networks as a continuum of the traditional public sphere is crucial to understand the stage in which liberal democracies are.

It is worth mentioning recent cases of referendums and national elections that illustrate the new political configuration in the world with the consolidation of new ICT: the influence of hackers in the electoral debates in Latin America, the Brexit, and

⁷Used for the first time in 1992 by the Serbian-American playwright Steve Tesich. In this work we refer to the term nicknamed by Adam Curtis in the BBC documentary Hyper-Normalization.

⁸ Term developed by Alvin Tofler in 1970 and that was recovered to the contemporary age. The expression refers to the saturation of information towards citizens, most of them of little relevance or even misleading.

presidential elections in the USA. Those episodes had great participation and influence of the social networks in the electoral and consultation processes.

The Brexit referendum, on June 23 2016, called by the former British prime minister David Cameron, negotiated Britain's exit from the European Union. Pro-Brexit groups strengthened their arguments on the negative impact of immigration, particularly on the Syrian refugee crisis. The group that pleaded for staying in the EU, on the other hand, counted on important characters, as the former prime minister himself. The referendum had a surprising result: UK votes to leave EU⁹.

There is an extensive literature on Brexit: analysis of the behavior of bots, observations of emotions (HURLIMANN, 2016) and also new methods of forecasting elections (CELLI et al., 2016). Those approaches suggest a correlation between social networks, mainly Twitter, and the referendum result (RUIZ, 2017).

On one hand, traditional electoral **polls** often forecasted that UK would vote for not leaving the EU. On the other hand, polls that used the Natural Language Processing (NLP) Method in social networks had forecastings more consistent with what in fact happened at the polls, i.e., UK voted for exiting the EU. NLP methods used on those polls were based on hashtags, keywords and mentions on the social networks (RUIZ, 2017).

Howard and Kollanki's study (2016) analyzed the use of bots in the debated on the Brexit. Bots acted to amplify messages for both sides, but there were more hashtags associated with the exit from the EU. The authors also found that less than 1% of the sample was responsible for almost one third of the publications and that bots were used to produce information¹⁰.

⁹ See FGV DAPP's analysis

<http://dapp.fgv.br/brexit-analise-politica-da-votacao-do-brexit-pelas-redes-sociais/>;
<http://dapp.fgv.br/proporcao-de-imigrantes-no-territorio-influenciou-voto-pelo-brexit/>;

¹⁰ See FGV DAPP's

<https://www.nexojournal.com.br/ensaio/2018/Rob%C3%B4s-e-desinforma%C3%A7%C3%A3o-nas-redes-o-que-j%C3%A1-se-sabe-nas-eleij%C3%A7%C3%B5es-2018>) and Atlantic Council's (<https://observa2018.com.br/posts/electionwatch-informacao-inveridica-supera-conteudo-factual-em-debate-sobre-corrupcao/>) publications on disinformation during 2018 Elections.

Other recent case of influence of social media on the formation of public opinion is the manipulation of the elections in Latin America. Bloomberg Businessweek magazine published an article about the hacker Andrés Sepúlveda's scheme. The article explains the manipulation methods he used, which included fake news and also spying and disinformation. Sepúlveda and his staff produced information in order to influence public opinion and to guarantee the victory of those who hired his services (RILAY; WILLIS, 2016). They worked during presidential elections in Nicaragua, Panama, Honduras, El Salvador, Colombia, Mexico, Costa Rica, Guatemala and Venezuela.

2016 United States presidential elections are key to understand the new ways of acting of social networks concerning fake news that had international repercussions. That is the case of the alleged influence of Russian hackers on the US polls: acting with the Internet Research Agency, the hackers would have produced fake content and pro-Trump ads, which reached millions of Americans via Facebook and Twitter.

The Pizzagate conspiracy theory is one of those contents spread during the US electoral campaign. It falsely accused the pizzeria owner and James Alefantis, one of the fund raisers of the Democratic party, of pedophilia (DELMAZO; VALENTE, 2018). The sale of guns to the terrorist organization The Islamic State by the candidate Hillary Clinton, anti-Trump protestants paid by the Democratic Party, and Pope Francis's support to Donald Trump are some of the rumors spread during the US presidential campaign.

According to Delmazo and Valente (2018), studies on the influence of fake news on the US elections showed that one in four people was exposed to false rumors. However, those fake news are only 2.6% out of the total of news published, and 60% of those news reached voters with a more conservative bias, which are 10% of the voters. Although fake news was not numerically significant concerning the entire corpus of news about elections, they influenced the political system and emphasized political polarizations. Spreading fabricated fake news is not a new phenomenon.

However, social networks and their technological advances led disinformation to a level never seen before (DELMAZO; VALENTE, 2018).

In Brazil, FGV DAPP study “Bots, social networks and politics in Brazil” shows that social bots – softwares that artificially produce content and establish interactions with humans – are increasingly acting maliciously. They seek to create forged discussions and influence on debates. Thus, they create misinformation that may influence on the path of public policies or even political and democratic processes.

The study has found methods that can be used to identify the presence of bots in social networks, such as the variety of actions when connected to the network, user characteristics, feelings expressed in posts, among other.

FGV DAPP analyzed five study cases based on metadata – i.e., information about the data itself – from Twitter: we collected 1.925 generators that were responsible for 7.8 million tweets on the social network. We analyzed the 2014 Brazilian elections, the 2015 impeachment, 2016 São Paulo municipal elections, the general strike on April 28 2017, the Brazilian Senate’s voting on Labor Reform on June 11 2017. As seen in other countries, Twitter seems to be the network that can best measure citizens’ feelings and political opinion.

The study reveals that the emergence of automated accounts enabled manipulations strategies through rumors and defamations. In addition to bots, we identified cyborgs, which are partially automated accounts controlled by humans. Based on those cases, the study concluded that the content automatically generated on Twitter influenced debates in order to benefit certain political actors.

In 2018, FGV DAPP started the second edition of its research on bots, social networks and politics in Brazil. The methodology went through a refinement and an analysis of other case studies. We used three methods in six databases: BotOrNot, correlations and DAPP methodology. The methodological improvement of the second edition aimed to consolidate the first edition, as well as providing more resources to identify bots (RUEDIGER, 2018a). This improvement is crucial to

monitor the presence of bots in the debates on social networks, mainly in polarized political contexts.

According to Barberá and Rivero (2014), Twitter is one of the most important study object to understand the public opinion and contemporary elections. During elections, Twitter becomes an excellent database, from which one can measure public opinion about political parties and candidates (SKORIC et al. 2012).

FGV DAPP plays an important role in order to understand the relation between the public opinion formation and the social networks in the 2018 Brazilian elections. Assuming that social networks are platforms in which citizens trust to express their feelings, the change of mood of the subjects may help clarifying the connection between affective experiences and the formation of public opinion (LANSDALL-WELFARE et al., 2016).

In the UK, for example, “new technologies and new techniques based on social networks provide more accurate data to understand the formation of political opinions” (RUIZ, 2017, p. 25). Besides monitoring feelings, the analysis of #observa2018 monitors the impact of fake news and disinformation spread on the network.

4. Analysis of the network monitoring - 1st round of the 2018 Elections

The analysis produced by FGV DAPP in the months before the first round of the 2018 elections, based on DAPP methodology to detect bots¹¹, show a very polarized scenario. They were focused on the presidential candidates in social networks, as well as in themes and events that impact the most the electoral process. We found a growth of interactions of bots in the debate about the presidential candidates as the first round approached.

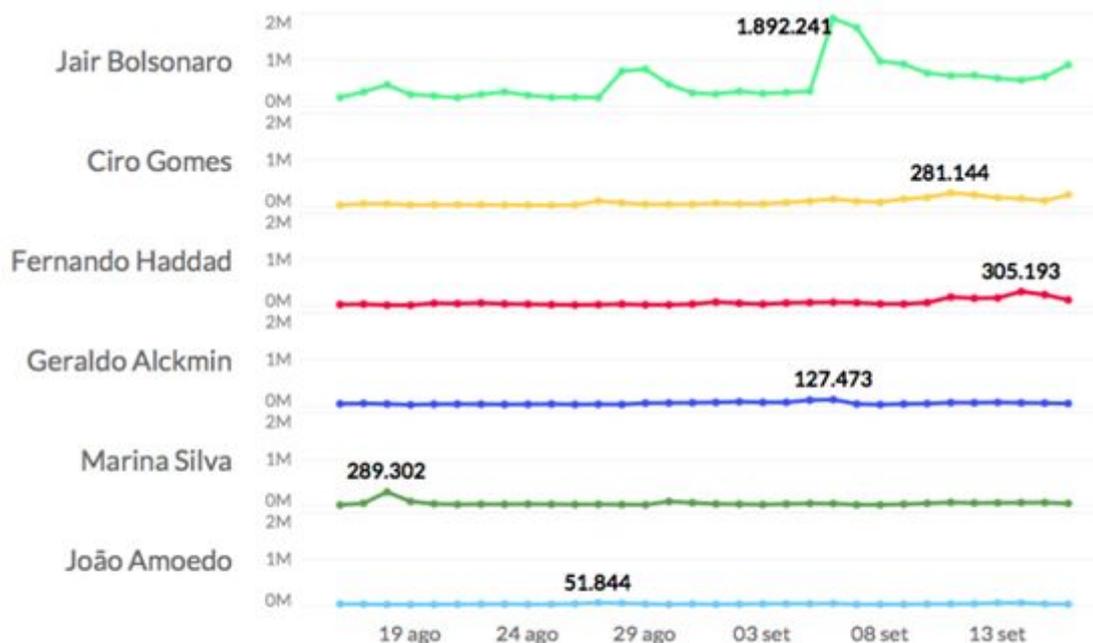
4.1. Presidential candidates in the networks: Twitter

We collected 22,572,583 posts related to the debate about the five best-placed presidential candidates in the first month of the official presidential campaign, from August 16 to September 16, i.e. Jair Bolsonaro, Ciro Gomes, Geraldo Alckmin, Marina Silva and Fernando Haddad. The data collection shows Bolsonaro was the most mentioned candidate on Twitter, both in conservative and progressive profiles, which once again, shows the polarization of the debate in the network.

The publications hit the peak on September 6, reflecting the attack the PSL candidate suffered in Juiz de Fora (Minas Gerais state). On that day, the volume of mentions to Bolsonaro reached more than 1.4 million in just four hours (4 p.m. to 20 p.m.). According to the data FGV DAPP collected, the attack on Bolsonaro was the Brazilian event that had the most immediate repercussion on Twitter since 2014 elections. It also concentrated almost entirely the political debate on the network. From 4 p.m. on September 6 to 10 a.m. September 7, FGV DAPP identified 3.2 million mentions about the attack. They addressed the medical procedures Bolsonaro had undergone, expressed sorrow, approached the hate speech and the violence in the democratic process, as well as the strong engagement on the veracity of the event, which represented most of the interactions until the night of July 7.

¹¹ See the network analysis and bot identification methodology used by the FGV DAPP in <https://observa2018.com.br/en/methodology/>

Debate about the presidential candidates on Twitter - Aug 16 to Sept 16



Source: Youtube | Elaboration: FGV DAPP

In this period, we identified the growth in themes related to public security policies, such as the debate about the effectiveness of making flexible the Disarmament Statute and the authorization of weapons to civilians, criticism of discourses in favor of violence, and comments on other politics that also suffered attacks, such as the murder of Marielle Franco.

Bolsonaro was also responsible for the second peak of engagement of the period, boosted by the question-and-answer sessions on *Jornal Nacional*, on August 28. The interaction between the journalist Renata Vasconcellos and the presidential candidate was the main subject of the debate, in which we observed the protagonism of the news anchor when she countered Bolsonaro's speech about the gender pay gap, reflecting the agenda on gender. The dispute of the hashtags for and against Bolsonaro, created after the repercussion of the hashtag #elenão (not him), also mobilizes an expressive volume of publications on Twitter. From September 12 – the day the first tweets were published – to September 24, we collected approximately

1.6 million mentions. The most frequent hashtags were #elenão (1 million), #elenunca (never him) (390 thousand) and #elesim (yes him) (283.9 thousand).

The network analysis also shows the growth of posts about Fernando Haddad, especially after September 11, when his candidacy was made official. Haddad was the presidential candidate with the strongest growth, compared to the other candidates FGV DAPP analyzed. The debate about the former mayor of Sao Paulo got wider after his participation in the question-and-answer session on Jornal Nacional on Friday, September 14. During the period analyzed, the candidate was directly related to Lula, corruption and his performance in electoral polls.

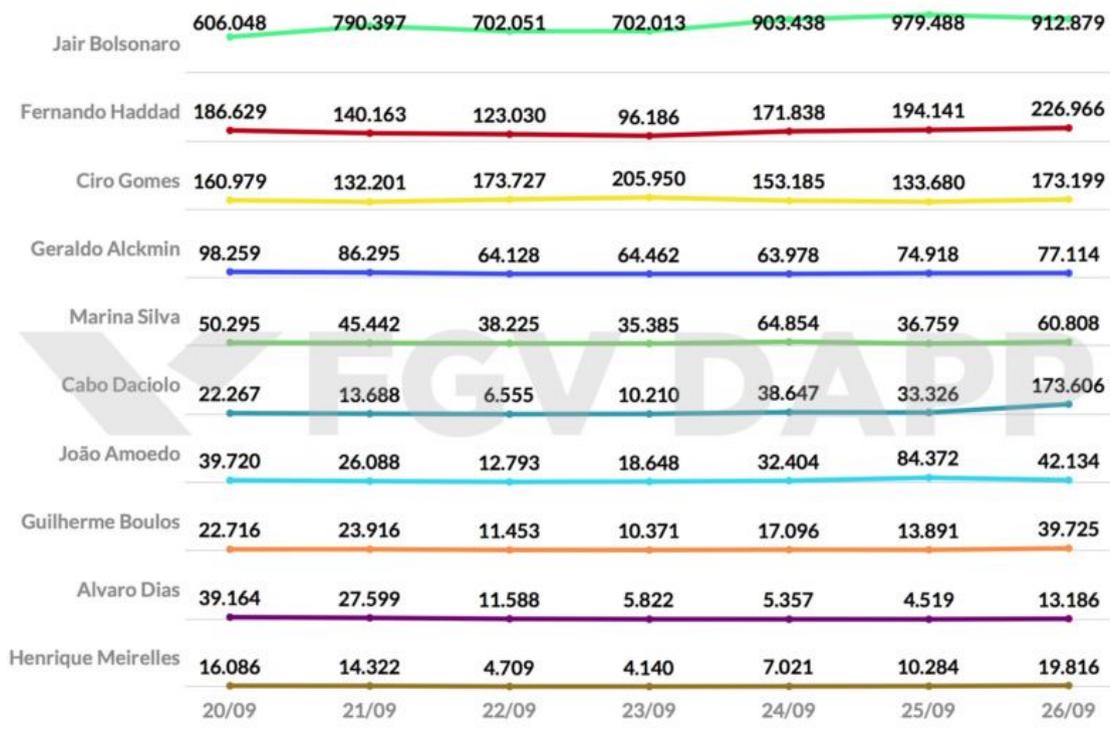
Ciro Gomes ranked second among the candidates with the highest growth trend, especially after the question-and-answer session on Jornal Nacional, on August 27, similarly to what happened in Haddad's case. In addition to the interview, users shared old videos in which Ciro appeared in his free time, highlighting characteristics of his personality. The interest in Ciro reached the peak on September 11, after BuzzFeed News published a video in which the candidate jokes that he said "Beyoncé" during an interview, not "A, B or C". Ciro also is related to topic tactical voting, considering the growth in voting intention in Bolsonaro and Haddad.

The peak of mentions about Marina was motivated by the presidential debate on Rede TV! on August 17. The confront between Marina Silva and Bolsonaro prompted mainly the gender issue in posts that made a case for Marina, who would have more authority to discuss topics related to maternity than Bolsonaro, since she is a woman. After the episode, Marina loses space in the networks. She returned to the networks on September 9, when the mentions to her are again related to Bolsonaro in publications about gender issues or that emphasize her as an alternative to the congressman. It is worth mentioning that the hashtag #elasim (yes her) had been among the Trending Topics on Twitter. Both hashtags were supported by the candidate and Manuela D'Ávila, VP candidate in the PT ticket.

The week from September 19 to 25, after the first month of official presidential campaign, we collected almost 9 million tweets about the electoral debate. The volume of mentions to the presidential candidates reached the peak of political mentions this year, when Bolsonaro was attacked. After that, no political event in special was responsible for such a high volume of mentions. Instead, it was caused by the combination of agendas, debates and issues typical of the electoral scene. That means that the progressive growth in the volume of mentions occurred because of the bigger space occupied by the political scene as a whole on the networks due to people engagement.

Evolution of mentions on Twitter - Top 10 -

Sept 20 to Sept 26

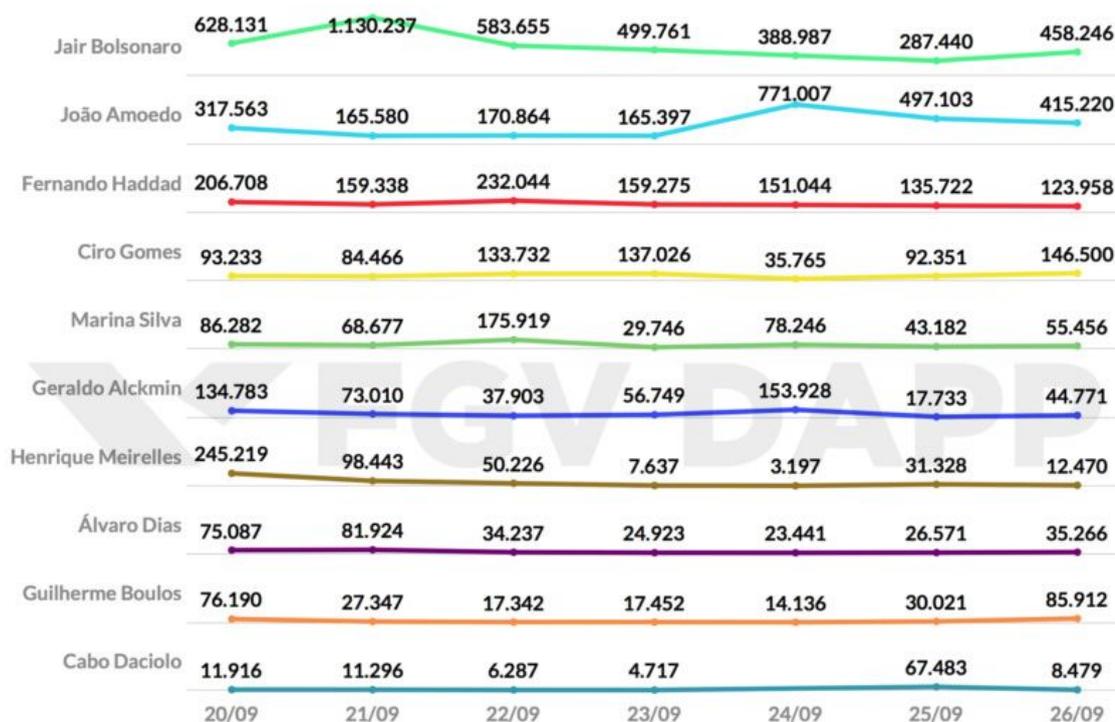


Source: Youtube | Elaboration: FGV DAPP

4.2. Presidential candidates on the networks: Facebook

During the first month of campaign, the 13 presidential candidates published more than 3.4 thousand publications on Facebook. From August 16 to September 15, Guilherme Boulos, Alvaro Dias and João Amoêdo, candidates who have little television advertising time, were the ones who published the most in the social network. Contrary to this trend, Jair Bolsonaro, who also has little time to advertise on television, were among the candidates who published the least in the social network. He holds the highest number of followers and the highest average of engagement on Facebook.

Engagement in pages of political actors, Top 10 – Sept 20 to Sept 26



Source: Facebook | Elaboration: FGV DAPP

Generally, all the presidential candidates preferred to make publications directly related to the daily activities of their campaign, mainly informing about events, marches and interviews. In the second fortnight of the campaign, the number of posts

informing about the presence of the candidates in events increased, reflecting the increase in the intensity of street campaigns.

The publications about economic proposals were the highlight among other candidates' publications. It was the most published topic among seven of the 13 candidates. Public Administration was also in evidence, especially in the first fortnight of the campaign. The posts approached the organization of the State, debates on government debt, public money management and fight against corruption. Guilherme Boulos, Alvaro Dias and João Amoêdo led the discussion on those topics.

Posts in Jair Bolsonaro page on Facebook showed the highest number of interactions and the highest growth curve. The interactions reached the peak on September 16, due to Bolsonaro's live transmission on Facebook, when he was still on the hospital. It was his first appearance after the attack on September 7. The live transmission propelled about 1.3 million interactions and 6.6 million views. Bolsonaro attracted more than 400 thousand engagements on average in each one of the five posts he published on the day he made the live transmission. It was by far the best daily performance of a presidential candidate in the period we analyzed.

The number of interactions in Haddad's page on Facebook had the same growth trend of mentions to him on Twitter in September. Thus, he ranked second on the growth curve among the candidates. Once again, the growth was propelled by the launch of his official candidacy, which was responsible for the peak of posts on September 11.

The best performance of the publications in Marina's page on Facebook reflected the confront between her and Bolsonaro on Rede TV!, which influenced on the growth of the interaction average, especially in the first week of August. After this period, the debate on Marina decreased. Ciro' and Alckmin' pages followed a similar trail: they suffered a reduction in the growth from August 19 to 26, then an increase in the first week of September and, again, a reduction in the last days of the period.

The scene in the week of September 20 to 26, after the first month of the official presidential campaign, was stable, with Bolsonaro, ahead of João Amoêdo, having a high volume of engagements.

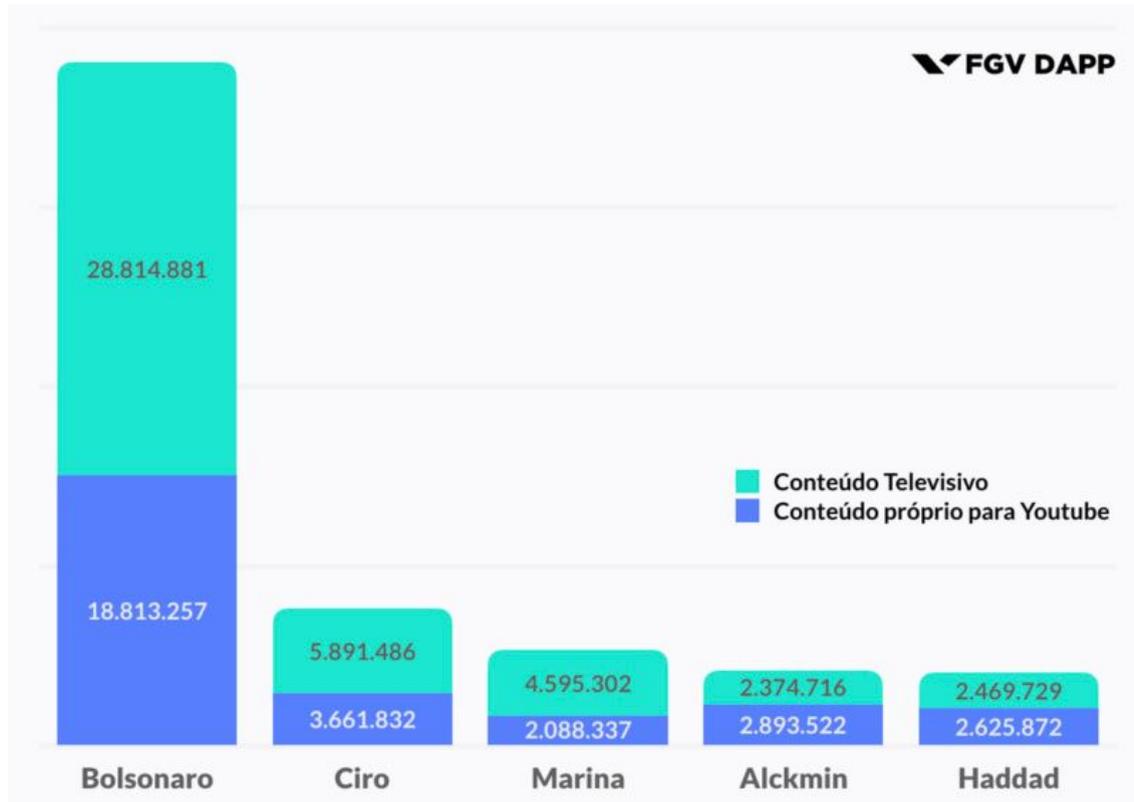
4.3. Presidential candidates on the networks: YouTube

Despite the candidate's investments to produce exclusive content to online platforms, the content produced on television, such as excerpts and comments on the question-and-answer sessions and interviews – propelled the highest number of interactions on YouTube. FGV DAPP analyzed the 20 videos with the most views in the platform from July 1st to September 10 about the five best ranked candidates in the elections polls: Jair Bolsonaro, Ciro Gomes, Geraldo Alckmin, Marina Silva and Fernando Haddad. We excluded videos that mentioned more than one candidate. Then, we observed that videos with television content summed up 59% out of the total views (around 14 million more views than the videos without television content), although they represented only 46% out of the total number of videos.

Videos with content from Jornal Nacional had 12 million views on YouTube, followed by videos with content from Roda Vida (9.1 million), and videos of the debate on TV Bandeirantes (6.7 million).

Considering the 20 first main videos of each candidate, Jair Bolsonaro had the highest number of views: more than 47.6 million, which is almost five times higher than the number of views reached by Ciro Gomes, who ranked second. More than 60% of the videos related to Bolsonaro have television content, in general, those in which he is the only candidate (such as in question-and-answer sessions, especially on Jornal Nacional and Roda Viva) had better repercussion than those with other presidential candidates, as in debates. We also found videos with criticism to Bolsonaro, especially due to a video of HBO Greg News.

Volume of views of videos about each candidate - July 1st to September 10

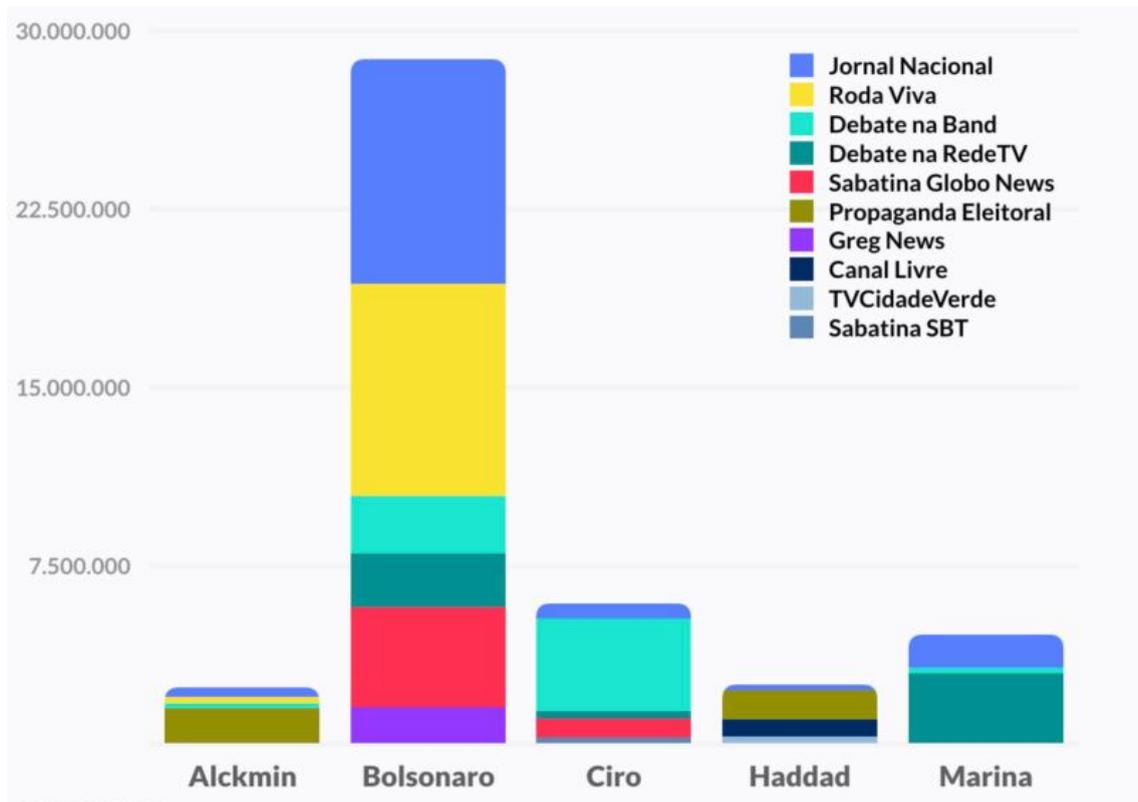


Source: Youtube | Elaboration: FGV DAPP

Videos about Ciro with more views were those with television content (61%). Most of those videos (40%) were about the debate on Band, especially the question Cabo Daciolo made to Ciro about “plano Ursal”, an alleged Union of Socialist Republics of Latin-American.

Videos with TV program content

July 1st to Sept 10



Source: Youtube | Elaboration: FGV DAPP

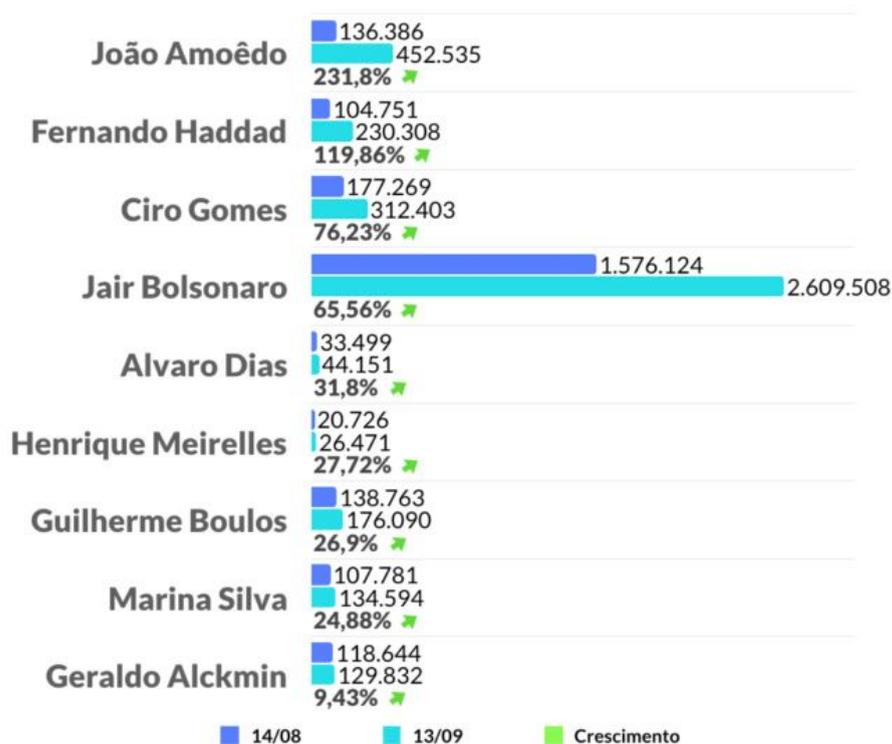
Videos about Marina Silva with more views were also those with television content (69%), especially the debate on Rede TV, in which she had a clash with Jair Bolsonaro.

Fernando Haddad and Geraldo Alckmin were the candidates that had proportionally more views of videos with content not related to television. Videos about Haddad were mainly about his campaign mobilization after former president Lula's candidacy registration impugnation. Videos about Alckmin with more views were those about his performance in electoral polls and his ticket's political alliances.

4.4. Presidential candidates in the networks: Instagram

João Amoêdo was the candidate that grew the most on Instagram in the first month of official presidential campaign, according to data collected by FGV Dapp from August 14 to September 13. The number of followers of Amoedos's profile grew 230%: from 136.3 thousand to 452.5 thousand followers. Due to growth on the network, Amoêdo ranked second in number of followers among the candidates. Bolsonaro ranks first: he garnered 2.6 million followers, which is six times more than Amoêdo's number of followers. Fernando Haddad ranked second in growth of number of followers: from 107.7 thousand to 230.3 thousand followers (almost 120% of growth). Despite this expressive growth, Haddad ranked fourth in number followers on Instagram. He was far away from the number of followers of the candidate who ranked first, who garnered, in the period analyzed, 312.4 thousand followers, representing 76.2% of growth of his network base since the we started to collect data.

Presidential candidates with the greatest growth in the number of followers on Instagram - from Aug. 14 to Sept. 13



Fonte: Instagram | Elaboração: FGV DAPP

5. Recommendations

The Democracy Digital Room monitors the public debate in the networks and identifies disinformation, threats and illegitimate interventions in the political process. Based on daily and weekly analyzes, we highlight some recommendations to be implemented in Brazil and other countries:

- It is important to analyze social networks as influencers of the contemporary political debate.
- State and Society should broaden understanding about the relation between the formation of political public opinion and the social networks based on the experiences learned from Brazilian elections of 2018;
- **The analysis from the months before the first round of the 2018 elections, focused on the presidential candidates, showed a very polarized scenario, to the detriment of debates on themes and proposals that create disinformation, which may influence on the public policies direction or event in democratic and political processes.**
- The high growth of interaction of bots in debates about the presidential candidates requires that electoral authorities and journalists covering the elections are able to deal with disinformation spread by automated profiles.
- The surprising volume of interactions of the presidential candidates on Twitter, Facebook, YouTube and Instagram points out that the platforms should be vigilant to comply with the legal framework during electoral campaigns in social networks in order to keep customer services in line with its policies and norms.

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The analyses of the Digital Democracy Room do not intend to represent an election poll; they assess the social perception in the digital environment regarding the themes of the public agenda, such as political actors and public policies. Therefore, we do not authorize the use of our analysis for political or party purposes or to endorse particular positions. Access further information regarding this work at dapp.fgv.br/observa2018/methodology.

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