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The Political Use of Twitter

by the Federal Prosecution Service in Brazil¹

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Abstract

In this study, we analyze in an unprecedented way the political use of Twitter by the Brazilian Federal Prosecution Service (MPF). For this, we handle aspects of communication theory necessary for accountability to be effective in the era of digital democracy. Our procedures included applying the software Iramuteq to analyze the content of its 37,041 (N) tweets and retweets, as well as using the software Gephi to assess the network established with other users. The findings revealed that the content was predominantly self-referenced and focused on corruption, and the variation in the density of activity coincided at specific moments with political events that culminated in the ongoing crisis in Brazil. In line with this, the network turned out to be strongly connected to supporters of the impeachment of Dilma Rousseff in 2016 and the election of Jair Bolsonaro in 2018, linked to the ideological far right. Thus, we were able to find substantive evidence that the MPF mobilized its Twitter account both politically and strategically in two domains, inextricably linked and in a kind of symbiosis: political-political and political-corporatist. In doing so, it operated most of the time in defiance of democratic accountability.

Keywords:

Politics; Democracy; Social Networks; Cyberspace; Accountability; Prosecution Service; Twitter; Iramuteq; Content Analysis; Gephi; Social Media Analysis; Car Wash.

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Overview

In the last two decades, the Brazilian Prosecution Service (Ministério Público, or in short, MP) has acquired political protagonism like never before, something that has been described as interference in the country's political and democratic dynamics (Avritzer and Marona, 2017; Arantes and Moreira, 2019; Kerche and Marona, 2020; Setzler, 2020). For example, in the so-called Operation Car Wash (Lava Jato), formally initiated by the MP to investigate embezzlement of resources from the state oil company Petrobras, it ultimately resulted in the conviction of former President Luiz Inácio Lula da Silva while he was leading opinion polls for the 2018 elections, eventually to be won by Jair Bolsonaro. Regarding this political protagonism, the literature indicates that, by deploying inquiries and litigation using anti-corruption rhetoric and by feeding back on the media repercussions of the scandals it was bringing to light, this type of interference has been highlighted as part of an even broader process, considered a factor of political-institutional change, which led the far right to power in Brazil as part of a project to erode individual rights and guarantees, as well as the Welfare State of the 1988 Constitution (Viegas, Loureiro, and Picazio, 2020), a process exacerbated during the Covid-19 pandemic and that the world is now watching in disbelief.

For the purposes of this study, over the course of the political events and corruption scandals that have ensued since 2011, social media played a prominent role as a tool to publicize investigative actions and to rally civil society against the administration of then-President Dilma Rousseff, of the Workers' Party (PT) (Pinho, 2016; Feres Junior and Sassara, 2016; Damgaard, 2018; Gomes and Medeiros, 2019; De Sa e Silva, 2020). And, as we shall demonstrate, in that same period the Federal Prosecution Service (MPF) made extensive use of Twitter to disseminate information about its anti-corruption operations, which may have had both a direct and an indirect effect on public opinion. There is nothing new in the fact that Twitter has the potential to disseminate information swiftly and that it is the social network most used by public administration and professional politicians for contact with citizens (Java et al., 2007; Honeycutt and Herring, 2009; Vergeer, Hermans and Sams, 2011; Hong, 2013; Kniess and Marques, 2021). Examining it is done also in pursuit of a political meaning for the actions of those who resort to it in times of crisis (Antonakaki et. al., 2017; Marques, et. al., 2020; Moreira, Vaz-de-Melo, and Pappa, 2020). But while the MPF's political actions in criminal investigations and judicial proceedings, along with the unfolding of the cases it has handled, are well-known, its

engagement on Twitter and the possible political implications of this activity are still largely unknown.

Aiming to fill this gap, this article addresses two questions: the first, empirical, is about the kind of content the MPF disseminated and the type of interaction it engaged in on Twitter; the second, analytical, is about the political implications of the MPF's activity on Twitter. With that in mind, we had the chance to carry out for the first time: an analysis of the content of all tweets and retweets by the MPF since it first opened its account in 2011, using the software Iramuteq; and, by using Gephi, an analysis of the interaction network with other users, in two different moments, October 2018 and April 2021, climax and decline of Operation Car Wash.

For this we handle aspects of political communication theory that are part of a broader discussion about the transformations provoked by technology in the way the State and democracy work (Castells, 1999; Norris, 2001; Coleman and Brumler, 2009; Chadwick, 2011; Schillemans, 2014; Simon et al, 2017), something that has also been addressed by research carried out in Brazil (Gomes, 2011, 2020; Pinho, 2008, 2011; Miguel and Biroli, 2010; Silva, Bragatto, and Sampaio, 2016; Sampaio et. al. 2019), but this won't be discussed in depth here. The approach to public communication of the State Powers and institutions connected to them that we intend to address here is essential for democratic accountability, which is basically achieved by means of institutional mechanisms, including digital channels. The aim of these institutional mechanisms is to ensure the accountability and constant oversight of the elected representatives and the senior public bureaucracy with decision-making authority (O'Donnell 1998; Mainwaring and Welma 2003; Abrucio and Loureiro 2004; Pelizzo and Staphenurst 2014), even more so for the Prosecution Service, as it is part of both the public administration's accountability network and the Brazilian justice system.

Among the possibilities of institutional communication is the one performed within social networks, such as Twitter, as part of the process of digital democracy. The problem is that, just like institutional communication as a whole, virtual communication can happen in a way that is contrary to accountability. Just as the use of Twitter by public institutions and professional politicians displays a high volume of activity over time, it does not always mean it promotes transparency or accountability of the political office or of the public governance; on the contrary, it sometimes turns against the public interest (Goldbeck, Grimes, and Rogers, 2010; Weber, 2017). After all, one would not expect public bureaucracy to be completely neutral, the very thing that Max Weber anticipated more than

a century ago (1975). Still, there is an expectation associated with the rational notion of the rule of law that the expenditure of public resources should abide by the law and by republican principles, and therefore public officials, such as members of the MPF, should not use the public structure and their positions to play politics, regardless of whether it is of a sheer corporatist nature or ideologically pitched against the government they are supposed to oversee.

The major findings of this study are: the type of content disseminated and the variation in the intensity of the MPF's activity on Twitter coincide with political events in which the political protagonism of the institution and its members is appreciable; the most prevalent information was self-referential and related to the fight against corruption. In line with these findings, the interaction network turned out to be connected to far-right political parties and organized civil society groups, particularly those in opposition to Dilma Rousseff's government. We thus gathered substantive evidence that the social network was strategically used to feed this network, most likely influencing public opinion against the government at specific times. Therefore, not only did the MPF engage in a kind of communication on Twitter that most of the time did not imply any accountability, but it also leveraged its Twitter account politically and strategically, and by doing so, it operated in two inextricable and symbiotic domains: political-political and political-corporatist.

The paper is divided as follows: in the next section, we objectively describe the Brazilian Prosecution Service (MP) in general, and the MPF in particular; then we discuss the methodology; next, we present the results and the main contributions that this work brings to the area under scrutiny; and finally, we draw some conclusions.

About the Brazilian Prosecution Service and the Federal Prosecution Service (MPF)

In Brazil, by constitutional provision, the Prosecution Service is organized similarly to a Government Branch (Executive, Legislative, and Judiciary), into a Prosecution Service of the Union, of which the Federal Prosecution Service (MPF) is part, and Prosecution Services of the federal states, **formally autonomous from each other and from the government** (Arantes, 2002; Kerche, 2009). Holding the monopoly on public prosecution, it is part of both the public administration's accountability network and the justice system, which further reinforces its oversight powers, as it may prompt actions by the police, over which it also exerts external control, as well as pursue its own inquiries and request final decisions from the Judiciary (Power & Taylor, 2011; Praça & Taylor, 2014; Aranha &

Filgueiras, 2016). Its members are selected for a lifetime tenure through public contest held by the institution itself, and they enjoy full operational independence, thus not being elected by the citizenry, as in other democracies (Arantes et. al., 2010). Therefore, in exerting its oversight powers, its members rely on a wide formal scope of action, which include a series of legal tools, civil and criminal, at their disposal to pursue the defense of collective rights, such as health, education, environment, and administrative probity, which also includes its attribution to fight corruption (Arantes, 2002; Arantes & Moreira, 2019).

One of the major criticisms directed at the MP concerns its autonomy and the discretionality granted to its members, in particular the insufficiency or absence of instruments of accountability for its modalities of action, while it exerts tight control over other institutions (Kerche, 2009). Formal control over the MP is limited to the act of choosing its leadership, the Prosecutor General, and the definition of its budget, two procedures that necessarily involve both the Executive and the Legislative branches of government (Arantes et. al., 2010). In fact, this has been one of the main lines of argument regarding the political repercussions of corruption cases handled by the MP that have rocked Brazil over the last two decades (Avritzer and Marona, 2017; Kerche and Marona, 2018; Viegas, Loureiro, and Picazio, 2020). Along these lines, studies have indicated, for instance, that in its extrajudicial oversight role, such a level of autonomy combined with discretionality, without any external control, end up turning the MP into a *de facto* public policy maker, all but replacing elected public officials (Sampaio and Viegas, 2019; Rodrigues, 2020).

In the specific case of the MPF, it has in recent years turned its anti-corruption activities, mainly if not entirely, against the federal government, at least until 2018, despite the fact that neither the 1988 Constitution nor other statutory provisions define what its priorities should be (Kerche and Viegas, 2020). It is worth mentioning that a recent study found that its members have the capacity to politically instrumentalize the discretionality granted to them by the legal statutes and to chart career strategies, both within and outside the public bureaucracy, as exemplified by those who, without ever quitting the role of prosecutor in the MPF, take part in the National Association of Prosecutors of the Republic (ANPR), a private entity that advocates for their corporate interests (Viegas, 2020). These could be described as “professional politician prosecutors”, since they are regularly engaged in politics, both within and outside the MPF.

After these brief considerations, the problem underlying this analysis we are pursuing is how an institution formally designed to enforce democratic accountability,

actively dealing with the major corruption scandals in the country over the last 20 years, has behaved on the social network, regarded here as a space to exercise democratic accountability in the digital age. In this case, considering the results of previous studies about this institution, which acknowledge its political protagonism in the wake of events that culminated in the current crisis in Brazil, our focus is on the MPF and its political use of Twitter, an activity that has remained largely unexplored to this day.

Methodology

We combined qualitative and quantitative research techniques and employed computational tools. Through Twitter's API (*application programming interface*), we extracted from the MPF's official profile (@MPF_PGR) a database of 37,041 (N) tweets and retweets published since the account was launched in 2011; Python programming language was used for processing the extracted data and for the analysis performed; Iramuteq was used for textual content analysis; Gephi served as a Twitter data extraction tool for the analysis of the profile's social network. In the following subsections, we shall outline the functionality of each of these tools as well as the ways we employed them in the present study.

Content analysis with Iramuteq

Iramuteq enables the simultaneous analysis of texts by calculating word frequency (Ratinaud and Marchand, 2012). It is a Free Software for textual content analysis and has been used before to analyze data extracted from Twitter (Ledouble and Marty, 2019; Longhi et al., 2019; Baptista and Gradim, 2020; Bernardes, 2020). However, the corpus inserted into it must follow a specific pattern. In our survey, after loading the Excel table with the data extracted from Twitter, containing the tweets and metadata, the table was converted into a dataframe for manipulation with Python. In the Python programming language, we used the Pandas package for database treatment (removal of special characters, punctuation, links, codes and skip lines), according to the corpus export code within the formatting pattern required by Iramuteq (Xavier, 2020). Once this was done, the script exported the "clean" texts onto a plain text file in the format required by Iramuteq (.txt). Thus, it was possible to load the text corpus in a quick and practical way.

Among Iramuteq's functionalities, we used the following tests: *word clouds*, as a starting point for the exploratory analysis of the database, using word frequency calculation; *similarity analysis*, which presents a graphic visualization of the interconnection

and content relationship between the most used words, that are then arranged in clusters; *descending hierarchical classification* (DHC), based on Reinert's method (1990), as an inductive form of lexical analysis capable of creating classes containing a subcorpus, whose texts are both close to each other and distant from the others in terms of usage and meaning (Camargo and Justo, 2016).

After a preliminary analysis of the corpus (N) with Iramuteq, we verified that the topic "corruption" amounted to a filtered base of 22,781 tweets and retweets (61.5% of the sample), which generated a new database. The filters used to screen the subject of corruption were arbitrary, defined in technical-legal terms of the MPF's routine, as provided by the literature, legislation, and jurisprudence on the subject. Starting from this new database, we proceeded to content analysis and applied the same tests in Iramuteq, also regarding only the content related to the fight against corruption.

Since the software is capable of classifying texts according to clusters that "feature vocabulary similar to each other, and vocabulary different from segments of other classes" (Camargo; Justo, 2016: 10), it was up to us to assign meaning to the classes. In this classification process, the content analysis was based on procedures of reduction and structuring. The first, reduction, preserves an essential level of content, yielding a text that is ultimately smaller and easier to work with. In structuring, aspects of the data are filtered and a cross-section of the material is produced under predefined criteria, with a focus on typologizing and defining typical textual passages ("key examples") that served as a coding guide (Mayring, 2004; Viegas and Borali, 2021).

Social network analysis with Gephi

We think social networks as a set of network members, or nodes, that are connected by one or more types of relationship, such as collaborations, friendships, business ties, Web links, citations, resource flows, information flows, exchanges of social support, or any other possible connection between particular units (Wasserman and Faust, 1994; Marin and Wellman, 2011). This survey's approach was implemented using the Gephi software, looking for macro-level explanations for the interaction between the MPF and participants of its Twitter social network. We examined the strength and nature of connections among network components, looking for patterns in ties and relationships within the network. Employed in research focused on political-ideological issues in social networks, Gephi is used primarily for Social Network Analysis (SRA) (Gaisbauer et. al., 2021). What differentiates SRA from other analytical methodologies is its focus on the

structure of the network and how the elements of that network relate to one another, and not just in terms of “multiple regressions, t-tests, canonical correlations, structural equation models and so on” (Wasserman and Faust, 1994: 21). Thus, more than extracting a database and analyzing it quantitatively, interpreting the structure of the network is also necessary.

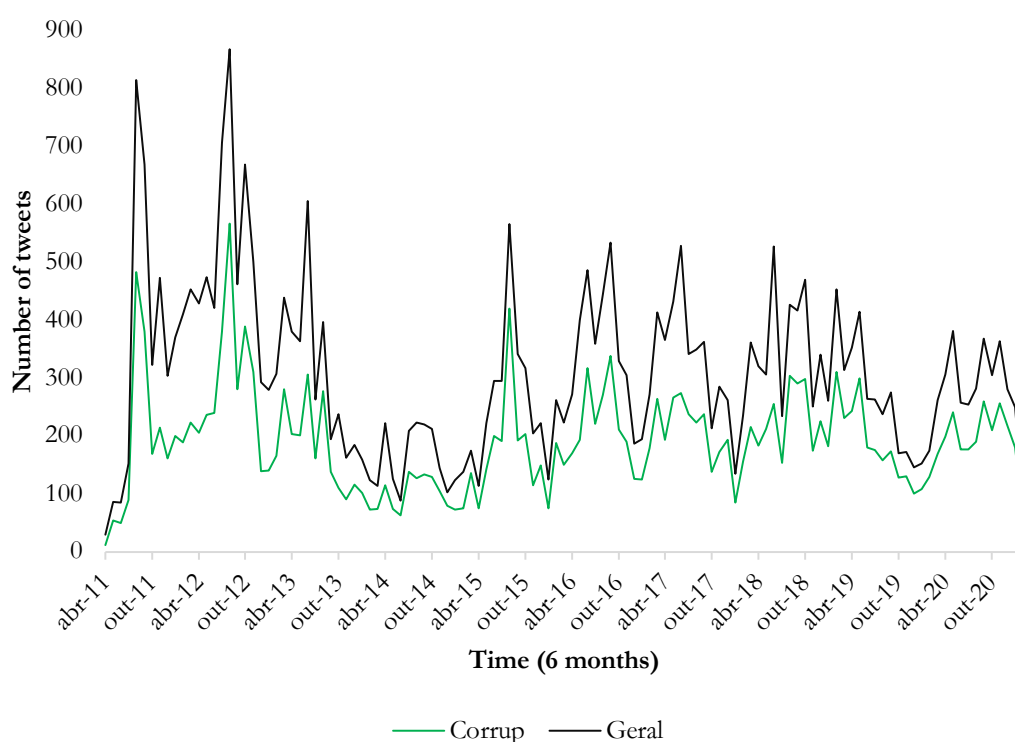
As far as the delimitation of network types is concerned, we consider that we are dealing with multiple *One-Mode Networks*, since two of them were analyzed individually, even if they are correlated in the context and final interpretation (Marin and Wellman, 2011). The integration of Gephi with the Twitter API through the *Gephi Twitter Streaming Importer* plugin was enabled, and allowed direct extraction of the database from the network formed around one or more tweets, hashtags and/or users (Yu and Muñoz-Justicia, 2020). This database is split into two: the first, extracted in October 2018, around the time of the presidential elections and at the height of Operation Car Wash, and the second, in April 2021, when Operation Car Wash was over and the Federal Supreme Court's decision to nullify the operation's lawsuits against former president Luiz Inácio Lula da Silva had already been made. Both databases contain a variety of metadata related to the type of information: for tweets, date and time, location, likes, retweets and others; for hashtags, total tweets using it during the period under scrutiny, associated hashtags, etc.; and, for users, total number of followers, total number of other users following, whether they are verified or not, etc. Starting from these databases, it was possible to perform several modalities of analysis, separately for each database, and then compare them (Yu and Muñoz-Justicia, 2020).

For each database, we used Gephi's distribution analysis with the *ForceAtlas2* algorithm (Jacomy et. al., 2014), following the recommendations for first-level analysis (Recuero, 2014; Recuero, Zago, and Soares, 2017, 2019). By filtering for elements with a “degree interval” greater than or equal to 2, i.e., with two or more associated interactions, we were able to “clean up” the visualization by eliminating possible bots, low-relevance tweets, and spam/trolls. Having done this, we defined the size and color of the nodes according to: 1) *degree*, which is the number of connections established with a given node, so that the higher this degree, the larger the size of the node, and 2) *modularity*, which is the probability of each node belonging to a given cluster, so that each cluster has a different color – in this case, we chose the colors arbitrarily to allow for easier visualization, in line with the type of profile and content found in each cluster.

Results

The MPF's Twitter profile has more than 700,000 followers and is very active on the social network since it launched its account in 2011, compared to similar institutions, such as the British Attorney General (@attorneygeneral – 30,000 followers), the U.S. Attorney General (@USAttorneys – 24,000 followers), and the Argentinian Ministerio Público Fiscal de la Nación (@FiscalesGobAr – 33,000 followers), all of which had averages of less than four tweets a day over the past year. In Brazil, the MPF tops the number of tweets and followers among all MPs. Its average, in 10 years, was 10 tweets a day. Alone, it concentrates more than half of the Twitter followers of the entire Brazilian Prosecution Service, bearing in mind that each state of the federation and the Federal District have their own Prosecution Service (27 institutions in total), each one with an average of less than six tweets a day. But the key aspect that deserves our attention is the variation in the MPF's activity over time and at specific moments (Chart 1).

Chart 1. Dispersion of MPF tweets and retweets (2011-2021)



Prepared by the authors. Source: Twitter.

Caption: Abr: April, Out: October, - Corruption, - General

We observed peaks in the first two semesters of 2011 and 2012, when the MPF reached more than 800 tweets per semester. New peaks were observed in 2013, with more

than 500 tweets, then more than 400 tweets per semester between 2015 and 2018, with a downward trend beginning in 2019 (Chart 1). These peaks coincide exactly with corruption scandals of national repercussion that have been reported since the 2010s, such as the Mensalão trial and the cases investigated by Operation Car Wash, involving members of the progressive government of the PT.

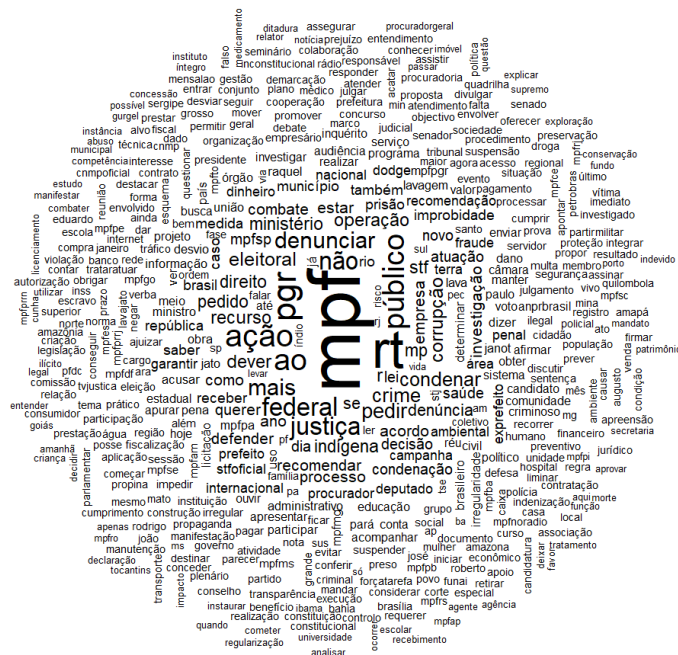
The Mensalão trial refers to Criminal Action n. 470 at the Federal Supreme Court (STF), which dominated the political news in the second half of 2012. That scandal involved the investigation and conviction of members of the federal government and individuals associated with the ruling political parties for embezzling funds and paying bribes for the approval of bills in the Legislative Branch (Biroli and Mantovani, 2014; Santos and Tanscheit, 2019). Operation Car Wash was launched in March 2014 to investigate cases of embezzlement involving Petrobras executives, individuals with ties to the PT, and financial backers of other parties in the ruling coalition. It reached its peak in 2018, when it convicted former president Lula and removed him from the October 2018 presidential election, and it formally ended in March 2021. Importantly, this operation has been pointed out as pivotal for the impeachment process of Dilma Rousseff, passed in Congress in the second half of 2016, and for the election of Jair Bolsonaro in 2018, who jumped on the bandwagon of the discourse that became predominant in public opinion about the need to moralize public administration and fight corruption (De Sa e Silva, 2020). Recently, in 2021, Lula's convictions were overturned by the Supreme Court, acknowledging the bias of the operation's judge, Sergio Moro, who, after convicting Lula, left the Judiciary and joined the Bolsonaro government in 2019.

In all these cases, the MPF was in charge of investigations and judicial proceedings, exerting its oversight over the federal administration, in line with the political protagonism highlighted by the literature. Moreover, it is also interesting to note that the dips (major drops – see Chart 1) coincide with moments of replacement of the head of the MPF, in mid-year 2013, 2015, 2017, and 2019. Additionally, we observed drops in the number of tweets in the second half of all years, which also coincides with a very sensitive moment for the MPF, since this is the period when the Union Budget Law (LOA) is voted, including its budget for the following year. Both situations, the choice of the Prosecutor General of the Republic (PGR) and the budget approval, necessarily depend on the endorsement of the Executive and Legislative branches of the federal government.

Regarding the content of the general corpus (N) submitted to analysis with Iramuteq, more than 60% of the MPF's tweets deal with the issue of corruption (green line

of Chart 1 and Figure 1, below). This aspect of the content is important because the fight against corruption is just one among several other attributions of the MPF, such as the defense of the environment, health and education (Arantes, 2002; Carvalho and Leitão, 2010). Thus, we can see that Twitter has served as a platform for the institution to convey information about investigations and judicial proceedings concerning the fight against corruption, to the detriment of other equally relevant areas. By doing so, the MPF selected what should be informed to the public as a priority, something that also corroborates previous studies that have identified a prioritization of the fight against corruption in inquiries carried out by the institution (Sampaio and Viegas, 2019; Kerche and Viegas, 2020).

Figure 1. Total Corpus Cloud (N)

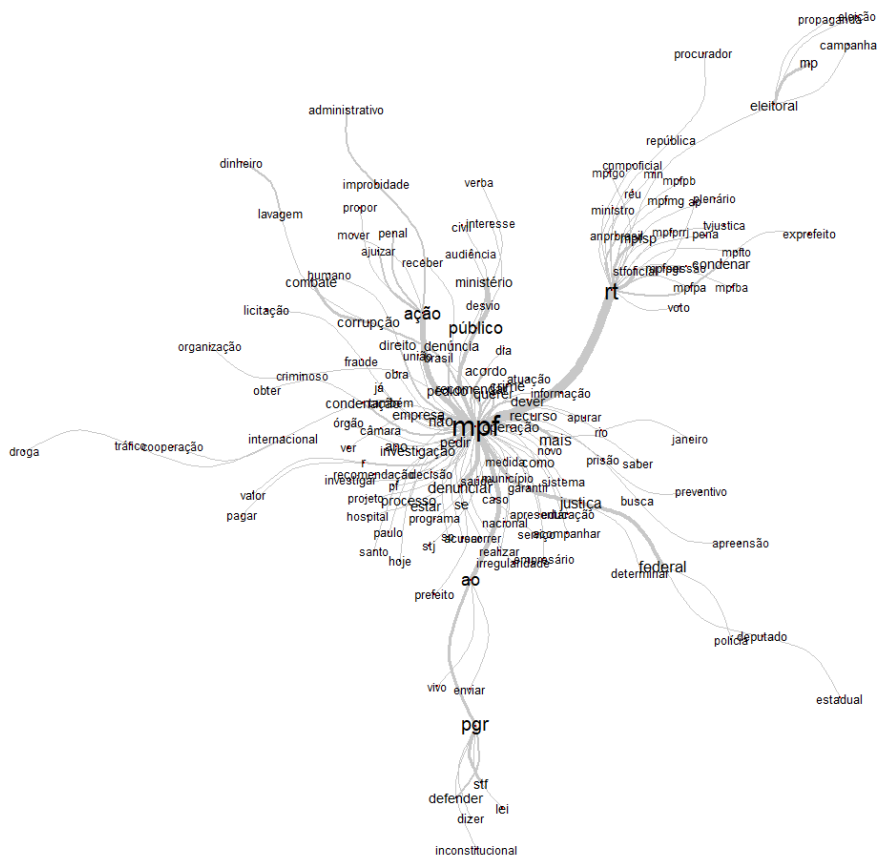


Prepared by the authors. Iramuteq Output. Source: Twitter.

In addition, we observed that much of the institutional communication produced by the MPF on Twitter is self-referenced, with the word *mpf* centralized and out of proportion to the size of the corpus (Figure 1). In general, the analysis of this type of visualization does not yield conclusions, but rather raises hypotheses and general trends of the type of content conveyed. In this case, we verified: 1) the self-referential aspect of the tweets; 2) a heavy use of the retweet resource (*rt*), establishing a possible collaboration

network with other profiles; 3) a focus on certain subjects defined by terms such as *denounce*, *electoral*, *corruption*, *condemn*, *crime*, *justice*, *federal*, *action*, *process*, *conviction*, and so on. In the following, similarity analysis shall afford a better assessment of how such issues play out in terms of sentence formulation, i.e., the “lexical paths”. In Figure 2, the size of the term represents its frequency, while its position is related to its correlation with adjacent terms, and the branches (links between terms) vary according to their intensity, forming clusters.

Figure 2. Total Corpus Similarity (N)



Prepared by the authors. Iramuteq Output. Source: Twitter.

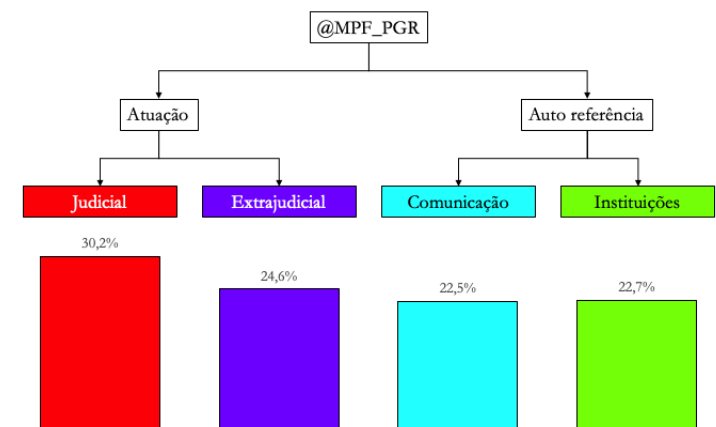
In this chart portraying the similarity analysis (Figure 2), we have a visual depiction of several previously identified dynamics, such as: 1) the term *mpf* in the central position, i.e., the other terms/issues deriving from the initial self-reference; 2) not only the heavy link (the thickest of the lines connecting terms) to the retweet feature, but also a clear view of which profiles are “retweeted” (in general, other MPF units and MPs, in addition to the

presence of the ANPR); 3) the issues that already stood out now take shape, and the paths help to better understand what they are all about, as for instance, the term *action*, with a strong connection with the origin (*mpf*) and unraveling into terms like *criminal*, *filing*, *administrative*, *sue* and *pursue*, giving meaning to the whole issue and to the elements attached to the fight against corruption, that we shall address in greater depth in the next section.

Fight against corruption

As we said before, more than 60% of the MPF's tweets deal with the theme of corruption (green line in Chart 1 and Figures 1 and 2). We applied the Descending Hierarchical Classification (DHC) test to this content and obtained two major categories: there are, on one hand, issues related to the practical performance in inquiries and lawsuits, while, on the other hand, there is a kind of self-referential communication produced by the MPF. Breaking down each of these larger segments, Iramuteq provided us with a new subdivision of word classes, which we further categorized as follows, according to the reduction and structuring procedures: judicial (red) and extrajudicial (purple) activity; communication (blue); and institutional (green).

Figure 3. Descending Hierarchical Classification (DHC)



Prepared by the authors. Iramuteq Output. Source: Twitter.

Caption (left to right, top to bottom): Activity, Self-Reference, Judicial, Extrajudicial, Communication, Institutions

Once again, the main finding is that the MPF produced a lot of self-referenced content, relying on the corruption cases it was investigating and prosecuting (Figure 3). At this point, a technical explanation of how this conclusion was reached is in order: first, Iramuteq provided us with a list containing the tweets of each class organized by Chi-

performed the text association between words, representing them on the Cartesian plane in center (C) and four quadrants: upper right (URQ), upper left (ULQ), lower right (LRQ), and lower left (LLQ). It is worth mentioning that, “due to the logic of the DHC and FCA tests, the more isolated in an edge (DHC) and the more distant in quadrants (FCA), the less the words talk about the same subject” (Viegas and Borali, 2021: 9). Regarding the LRQ, in which words in green are concentrated, we perceive the configuration of the MPF’s self-referential communication, especially that of the PGR, concerning the leadership and their selection process. Included in this quadrant are the names of former PRGs, Roberto Gurgel, Rodrigo Janot, and Raquel Dodge, and references to the confirmation hearing before the Senate, a step in the process of appointing the head of the MPF. We also notice that the content that is intertwined in LRQ and URQ deals with initiatives implemented by the MPF, but in terms of the values allegedly pursued by its members, such as defending society against corruption.

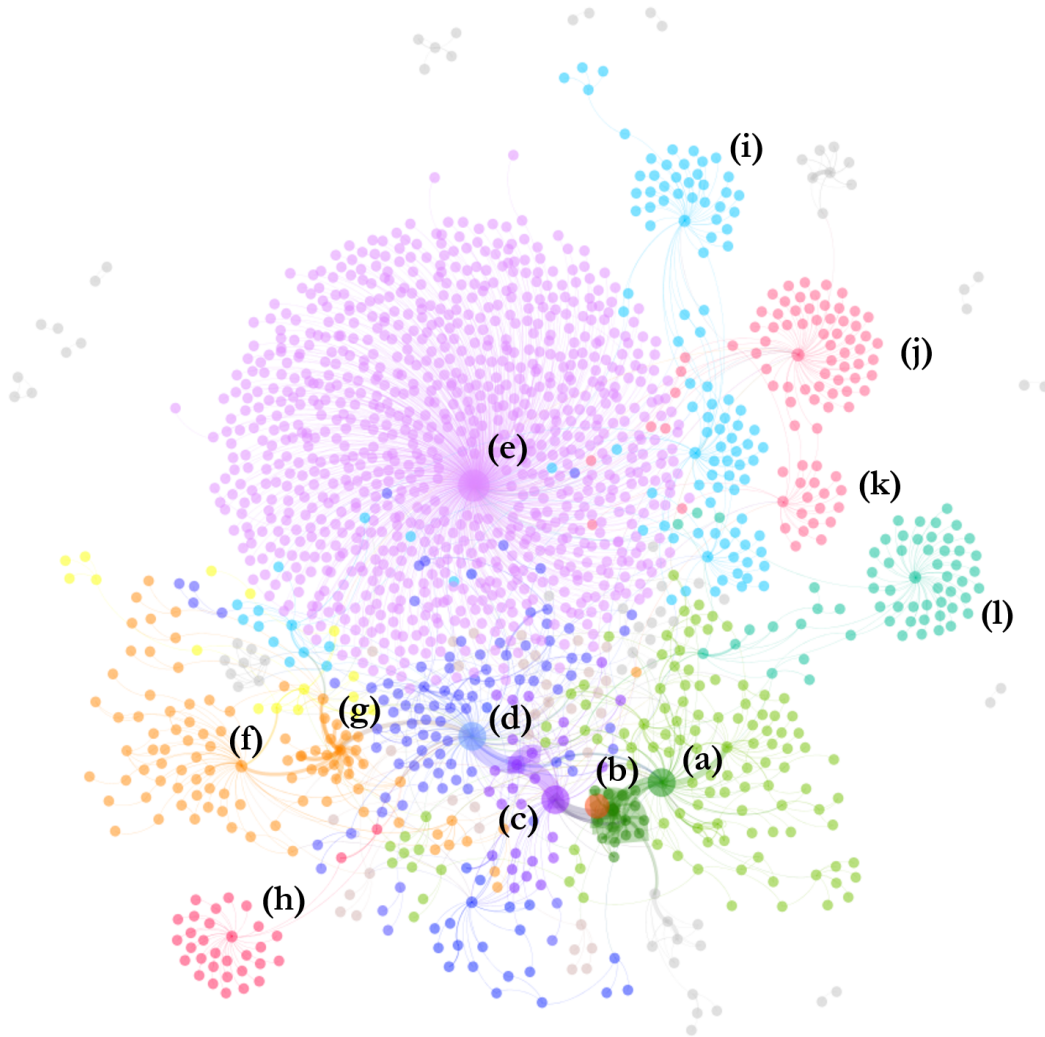
This part of the content about fighting corruption, in addition to being self-referenced, includes information the MPF released about institutional relations, not only in cases of litigation at the STF, but also concerning the National Council of the Prosecution Services (CNMP), responsible for overseeing the Brazilian Prosecution Service, and which seems to be associated with the same kind of information that reinforces the MPF’s practices. It is worth saying that the head of the MPF is also the president of the CNMP, as was the case with Roberto Gurgel, Rodrigo Janot, and Raquel Dodge. Moreover, all the content was further spread by other units of the MPF, which retweet this type of publication (Figures 1 and 2), including the ANPR, that appears once again in Graph 2, in blue, almost at the intersection between URQ and LRQ, further to the left.

As for ULQ and LLQ, both deal predominantly with the MPF’s practical action in the fight against corruption. In red (LLQ), there is a concentration of words linked to judicial action in anti-corruption cases, such as Operation Car Wash, while in purple (URQ) are those related to extrajudicial action, clearly isolated in the graph. We notice that the institution’s extrajudicial activity stands apart on the Cartesian plane of its communication, for reasons that are not entirely clear, but that probably have to do with the publicity given to this activity and to the matters concerning the inquiries carried out, which only come to light when corruption scandals are involved or when they are brought to court (Sampaio and Viegas, 2019; Kerche and Viegas, 2020). It is precisely in its extrajudicial activity that the MPF pursues civil and criminal investigations on its own and is subject to even less external control.

The MPF's network on Twitter

We have dealt so far with the results of the content analysis of the MPF's tweets and retweets. Next, Figure 3 visually displays what the network around the @MPF_PGR profile looked like in October 2018, heyday of Operation Car Wash and period of presidential election. The network contains a total of 1,691 nodes, 2,101 edges, average degree of 1.242, and modularity of 0.753. We see a strong connection between (a) @MPF_PGR and (b) @deltanmd, as well as with the profiles of (c) Jair Bolsonaro (@jairbolsonaro) and, subsequently, with the profile of (d) the STF (@stf_oficial).

Figure 3: MPF's network in October 2018



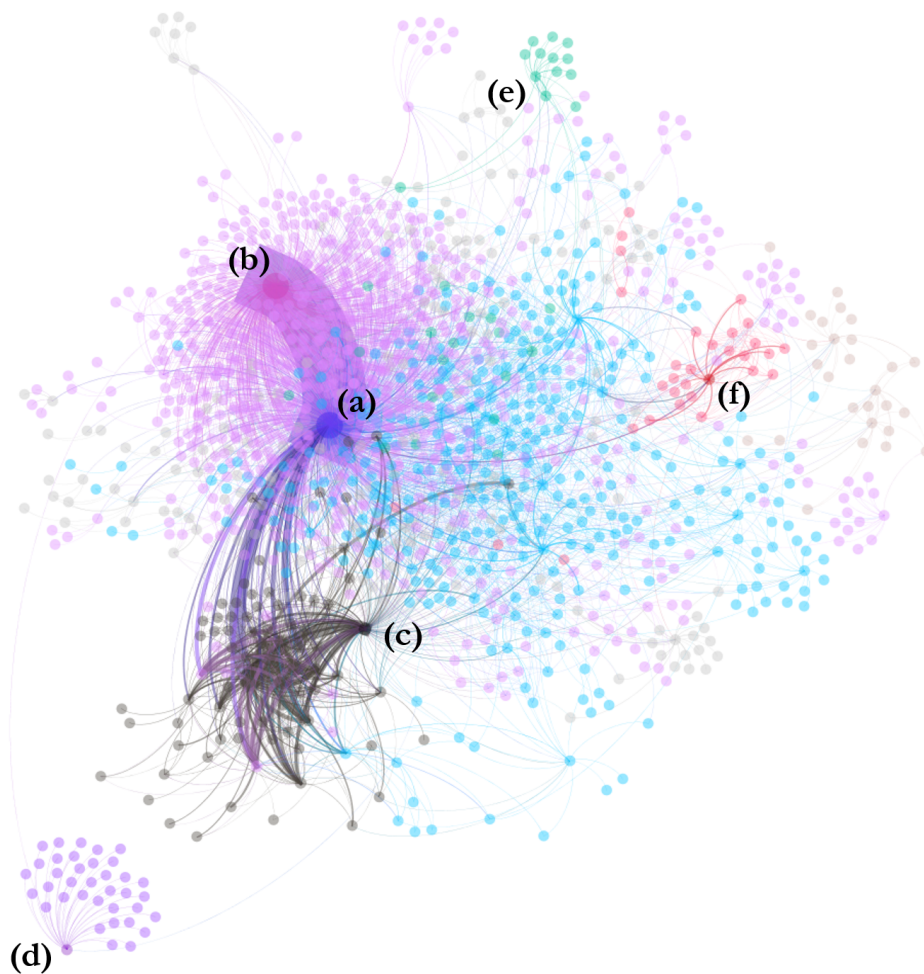
Prepared by the authors. Gephi Output. Source: Twitter.

The @deltanmd profile belongs to the MPF's prosecutor who gained notoriety for his role in coordinating Car Wash, to which he was assigned (Viegas, 2020). Two major branches are adjacent to the STF's profile: (g) @chiccoze52, connected with the profile of

(f) the Federal Senate (@senadofederal); the profile of (e) journalist Alexandre Garcia, one of the leading spokespersons of the far right, supporter of Car Wash, of Dilma's impeachment and of Bolsonaro's election. Garcia has accumulated several controversies, with bigoted, racist, and misogynistic statements, as well as an avowed denialism regarding the Covid-19 pandemic. Finally, the network also has adjacent clusters in debates that are even more polarized and detached from the central one: the profile of (h) Humberto Sérgio Costa Lima, Senator for the State of Pernambuco, leader of the PT in the Senate; personal profiles of Bolsonaroist microinfluencers (i) (j) (k), two of them banned (@henriolliveira and @allantercalivre) and another still active (@joaoalexandrem); and the profile of (l) a microinfluencer from the ideological left, still active (@rodapedopig).

Figure 4 represents the Twitter network of the profile @MPF_PGR in the month of April 2021. The network contains a total of 1,655 nodes, 4,970 edges, average degree of 3.003 and modularity of 0.576.

Figure 4: MPF's network in April 2021



Prepared by the authors. Gephi Output. Source: Twitter.

The edge connecting the nodes (a) (@MPF_PGR) and (b) (@carlazambelli38), and the intersection of their respective clusters of connections (light blue and lilac) stand out. The profile @carlazambelli38 belongs to Carla Zambelli, Federal Deputy for the State of São Paulo, from the far-right Social Liberal Party (PSL). Zambelli is a close ally of Jair Bolsonaro, she was a vocal supporter of Dilma's impeachment, and has proven to be a staunch Car Wash advocate in the House of Representatives. Judge Sergio Moro, who sentenced former president Lula in Operation Car Wash, was best man at her wedding on February 15, 2020. Immediately below, in (c) we have the Federal Police's profile (@policiafederal), with a highly connected network with the MPF. This makes sense, as the MPF has oversight over the PF and relied on it in anti-corruption operations. Further away from the central block, the other items are various types of profiles that form clusters of debates both against and in favor of themes that are central to the network analyzed. They are: (d) (@fepatriota1), profile of a Bolsonarist microinfluencer; (e) (@celiomartignago), personal profile of a Bolsonaro sympathizer; and (f) (@chiccoze52) profile of a digital influencer who is critical of the MPF.

Even though we have focused on the edges of those two networks (Figures 3 and 4), extracted at different times, we do not consider their insertion as binary, or the nodes as belonging to a mutually exclusive group set. Previous studies on Twitter highlight it as a tool for access to information (Java et al., 2007; Vergeer, Hermans, and Sams, 2011; Hong, 2013), which does have its utility for democratic accountability when used by state institutions or those with ties to them. The point is that when we look at the MPF's interaction network, we observe that, at two different moments, the connections established with institutions and actors from organized civil society are very closely aligned in terms of values and worldview with the ideological far right. When these traits are found to form a bubble, they suggest dissemination of information as an echo (Donath and Boyd, 2004; Flaxman, Goel and Rao, 2016; Cota et. al. 2019). In the case under analysis, this happened as a result of the action of the MPF's Twitter profile, which supplied the network of Car Wash/Bolsonaro supporters with information against its declared political enemy: the progressive government of the PT, members of that party, and their financial backers.

Conclusions

Based on all the findings, it is reasonable to assume that the MPF used its Twitter account politically and strategically, with an effect on the perceptions of the public opinion. In doing so, it operated most of the time against democratic accountability in the virtual space, in two inextricable and symbiotic domains: political-political and political-corporatist. Given the political and social situation the country was going through – marked by a backlash against the PT government, the number of MPF followers on Twitter, the predominant content disseminated and the timing, with peaks and dips at specific moments, its activity was able to interfere with public opinion (as for instance in the Mensalão trial, the National Congress' inquiry into Petrobras, and Operation Car Wash). At the same time, this activity turned, invariably, to self-promotion and to the defense of corporatist interests of members of the MPF. Evidently, an analysis that considers delimited temporal cleavages of these events can better advance in relation to this type of activity.

Not only its investigative or judicial actions in anti-corruption cases, as the literature claims, but also its activity on Twitter may have been meant to affect governability in the Union and illegitimately interfere in the electoral process. In Brazil, the political system cannot be operated without party coalitions (Abranches, 1988; Santos and Canello, 2015), and the MPF's preferential targets, not only in its inquiries and lawsuits, but also as the object of its communication on Twitter, are connected to the impeachment process of Dilma Rousseff in 2016 and to the 2018 elections. The strategic component is clear in all these situations, but also for instance, at other times, when its activity decreased, coincidentally at times when the institution needed the endorsement of the Executive and the Legislative for the appointment of its head (PGR) and the approval of its budget (LOA).

Furthermore, we observed that the content was further spread by other units of the MPF, retweeting this type of publication, including the ANPR, which defends the corporatist interests of MPF members. This symbiosis between the actions of a public institution (MPF) and a private entity (ANPR) has been verified before and is related to the political dynamics that underlies the operation of the public bureaucracy (MPF) (Viegas, 2020). In this case, it is probably related to an institutional project of political communication aimed at legitimizing the actions of the MPF, and thereby defending corporatist interests in view of other institutions and the wider society, which in the analyzed period resulted in an alignment with the ideological far right.

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