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Digital participation of left-wing activists in Brazil: Cultural events as a cement to mobilization and networked protest

Julien Figeac

CNRS Researcher
Laboratoire Interdisciplinaire Solidarités, Sociétés, Territoires (LISST)
Université de Toulouse II
julien.figeac@univ-tlse2.fr

Nathalie Paton

Researcher
Centre d'Étude des Mouvements Sociaux (CEMS)
EHESS, Paris
nathalie.paton@univ-toulouse.fr

Angelina Peralva

Professor
Laboratoire Interdisciplinaire Solidarités, Sociétés, Territoires (LISST)
Université de Toulouse II
peralva@univ-tlse2.fr

Arthur Coelho Bezerra

Researcher
Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT)
Universidade Federal do Rio de Janeiro
arthurbezerra@ibict.br

Héloïse Prévost

Associate Professor
Centre d'Étude et de Recherche Travail, Organisation, Pouvoir (CERTOP)
Université de Toulouse II
heloise.prevost@univ-tlse2.fr

Pierre, Ratinaud

Associate Professor
Laboratoire d'Études et de Recherches Appliquées en Sciences Sociales (LERASS)
Université de Toulouse II
ratinaud@univ-tlse2.fr

Tristan Salord

Research Assistant
Institut de Recherche en Informatique de Toulouse (IRIT)
Université de Toulouse III
tristan.salord@irit.fr

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Abstract

This research explores how Brazilian activist groups participate in Facebook to coordinate their social struggles, based on a lexical analysis of publications on 529 pages, published between 2013 and 2017. These groups set up two main repertoires of action by mobilizing Facebook as an arena for challenging political action and a tool for coordinating their mobilizations.

This research shows more specifically that artistic expression and the agenda of cultural events are central to these digital action repositories. Publications and conversations related to culture punctuate the ordinary exchange of information between activists, especially during the lulls of social struggles. They structure activist networks on a medium-term basis and contribute to the coordination of social movements by creating the conditions for occasional gatherings, transversal to different types of activism and to various social struggles.

Keywords. Social movements, activism, political participation, repositories of action, social media.

How do the Internet and social media renew modes of civic engagement and the manners in which political participation is expressed by ordinary citizens? In the field of Internet studies, this question fuels controversy as access to this technology, and the numerous innovations that exploit its resources, are progressively democratized. Those who uphold the so-called “revolution” theory emphasize how this technology has been able to revitalize liberal democracies (Shane, 2004) by supporting citizens to experiment with more horizontal modes of social organization (Castells, 2012). From this perspective, the use of social media seems to have a real effect on behavior, encouraging political commitment (Boulianne, 2015; Skoric et al. 2016; Koc-Michalska, Lilleker and Vedel, 2016). During the Arab Springs, for example, social media formed a new resource for collective action by allowing activists to share information, create a network among protestors and communicate with foreign media outlets (Eltantawy and Wiest, 2011). These studies highlight the positive effects of the Internet and social media on democracy. Other areas of research show that, on the contrary, the Internet generates a perverse effect by reducing the political horizons of individuals. Some scholars highlight how social media changed the global economy by developing a “platform capitalism” (Srnieck, 2017). By leading citizens to share personal content and private data, these platforms also allow Silicon Valley companies to extract and analyze data pertaining to the behaviors and opinions of their users on a large scale. They tend to favor a “capitalism of surveillance” that challenges democratic norms (Zuboff, 2015) and demonstrate how ICT are not tools of democratization designed to revitalize liberal democracies.

Yet, no matter which side of the controversy is considered, whether researchers showcase the positive effects of social media on democracy or insist on the limitations of platform capitalism, it is difficult to argue with the fact that social media has changed the way politics are being done nowadays. Furthermore, internet studies capturing political participation tend to focus on a limited time in space, when social uproar is at its strongest, thus capturing a very specific type of social reality. The observation of political participation is rarely taken into account in a longitudinal perspective, missing how online engagement is nursed on a day-to-day basis and supported through more mundane media activities by a core group of supporters. Without disregarding periods of social struggles, it is important to offer longitudinal perspectives to better apprehend how matters unfold far from the spotlights of news events and strong social protest.

The study offers to do so by enquiring the role of social media in the context of Brazil, a democracy recently marked by political agitation. For the past dozen years, there has been a surge in social conflicts: protests to denounce the impact of building hydroelectric dams on the native indigenous lands as well as the negative effects on the environment; violence linked to gender; strikes to protest teachers’ low pay; an uproar against the costs of the FIFA World Cup; national marches against corruption; demonstrations related to the destitution of the former Brazilian President, Dilma Rousseff (Telles, 2017). In this tidal wave of civil unrest, June 2013 constitutes a turning point: a large-scale protest erupted on the back of the series of demonstrations that had occurred over the previous years before (Solano et al., 2014). These protests had largely gone unnoticed, benefiting from little visibility, even though some of the struggles had been co-opted by the successive PT (i.e. *Partido dos Trabalhadores*, Workers’ Party) governments. Major stakeholders from the field and the Brazilian welfare state were then invited to co-produce social policies (Leite Lopes et Heredia, 2014). But suddenly, in June 2013, a wave of major protests emerged on the far left-wing of the PT, making previous

co-operations obsolete (Peralva et al., 2017). In the months and years that followed, major right-wing protests hit the streets and progressively led to the destitution of Dilma Rousseff, who had been re-elected in 2014.

While this series of mobilizations can be framed as social unrest, they are also an indicator of citizens' will to contribute to policy and can thus be apprehended as a sign of vitality for citizen participation. As such, the Brazilian political scene represents an ideal setting to observe the changes in digital participation in the context of a democratic regime. More importantly, this continuum in social protest over the years establishes a singular political context propice to the study of digital democracy in a longitudinal perspective, even more so now that social media has come to play an important role in the organization and coordination of citizens' demonstration (Cardoso, Lapa and Di Fatima, 2016). Reflecting observations conducted over the course of several years, this article intends to seize the opportunity to dive into the ups and downs of political engagement, from times where the agenda is saturated, to times where there is little to no reason to gather or communicate given the lack of a political agenda.

To be exact, we shall see how Brazilian activist networks have used Facebook since the key year of 2013. We have decided to focus on media activists who label themselves as left-wing or assimilate to this affiliation. Given that the initial spark in the social conflicts of 2013 were primarily labelled as left-wing at the time of their occurrence, and as such, placed main changes within the spectrum of this political obedience, we followed these types of people and groups. History would later show us the importance of the rise of the right-wing, but studying a network of left-wing activist groups in the context of political turmoil in Brazil will nonetheless allow us to capture the renewal of media practices and online political citizen participation, given their initial upsurges, and later pushback to the increase of far right.

The evolution of media participation will be investigated by means of a lexical analysis of publications on 529 Facebook pages, published between 2013 and 2017. This material allows us to explore how Brazilian left-wing groups participate in this platform to take a stand in public debates, push their political agendas, voice their opposition to government policies or coordinate their actions. It will help showcase the ways in which a wide social network of left-wing activists turn to Facebook over the span of several years to fuel opposition in the public debate, build counter-hegemonic positions to face opponents in public debates and exchange to organize mobilization in the streets, all the while, using this same platform to inwardly generate digital sociability and ensure the longevity of the group over time with simple social events and gatherings.

The presentation of the results of this study is divided into two sections. The first part presents an analysis of the main topics of discussion used by militant groups. We show how citizens appropriate Facebook over a long period of time, thus highlighting how participation provides means to organize collective actions and supports exchanges of information and ideas. In this section, we shall study the main digital repertoires of action mobilized by activist groups to engage in democracy. Two repertoires will be presented, one pertaining to challenging the government's political action, one providing support to the coordination of militant action on the ground. The second section will further analyze the action repertoire pertaining to the coordination of mobilizations. This part shows that, while online coordination of mobilization can target the organization of protests in the street or other

vindictive actions, it also encapsulates the organization of cultural and artistic events. These cultural events, whether media (music, films, photographs, etc.) or artistic (Carnaval, concerts, exhibits, film projections, etc.), represent a means of action for Brazilian activist networks to uphold their social ties. The article then goes on to demonstrate how the publication of these types of events structures networks and upholds sociability over the years, by stimulating participation between periods of time when social struggles occur, encouraging offline encounters and a sense of togetherness, knowing that these long-term social relations, fuel media participation just as much as they allow social movements to resist the test of time.

Observation of actions of repertoire through lexical analysis to study media engagement

Many studies have shown how digital resources and social media websites have diversified activists' modes of action by allowing grassroots organizations, or random citizens for instance, to take action or coordinate protests more efficiently (Castells, 2012; Earl and Kimport, 2011). Where mobilizations were traditionally conducted by institutions - such as unions or political parties - governed by formal and hierarchical rules of procedure, digital tools have renewed collective action rationales by providing means to take political action into one's own hands (Norris, 2002). To better explain this bottom-up development in political engagement, Chadwick suggests using Tilly's notion of "action repertoire" (Tilly, 2013) but extends on it and renames it in order to include the transformations of the media landscape. He speaks of "digital network repertoires" (Chadwick, 2007).

The notion of actions of repertoire initially referred to routines and practices conveyed amongst activists; for example, learning to organize public marches and petitions, holding official meetings, using sitting-ins in sign of protest are actions of repertoire (Tilly, 2013). Digital network repertoires encompass this initial understanding but broaden the scope by insisting on the politicized uses of social media; for example, the publication of politically-oriented tweets or the filming of police violence with a Smartphone can be considered as "digital network repertoires". This latter notion also insists on the fact that nowadays, civic action is increasingly convergent, combining online and offline activities, and supposes distributed trust across horizontally linked citizens, given that citizens favor collective discussions through horizontal and decentralized networks over claims from a single authoritative information source (Chadwick, 2007:285). We shall use the notion of digital network repertoire to illustrate how the Internet and social media can diversify collective action by allowing, for example, individuals to easily share their points of view and to chat in decentralized forums (Meraz and Papacharissi, 2013).

One of the main repertoires of action online is the use of the Internet to express discontent and share personal opinions. Studies of the lexical content of tweets published on Twitter during the Movement of the *Indignant* in Spain and Greece, followed by the *Occupy Wall Street* movement in the United States, show that the Internet was primarily used for protest purposes by local supporters (Theocharis et al., 2015). Several repertoires were spotted, such as using Twitter for political communication, motivating people to take action, and organizing the actual series of actions of the social movements on the ground. Yet, the study underlines the fact that the conversational and expressive functions of the web dominate all the other modes of actions. Accessing the public debate via the web indeed allows one to take part in a forum for discussion amongst citizens at an unprecedented scale.

Pursuing the appropriation rationales of these big tech media platforms by distinguishing the action repertoires used by political activists is essential to identify to what extent social media enhance the coordination of social movements or whether they simply play a role in the exchange of ideas and information (Theocharis et al., 2015). We shall extend this research perspective by analyzing the messages published by Brazilian left-wing digital networks of activists on their Facebook pages in order to identify the types of repertoires mobilized and to determine the extent to which these messages represent simple conversations or whether they consist rather in a call for demonstration and protest. To do so, we will consider the place occupied by conversation, exchanges of information, the organization of events, coordination between users or calls for action. As we move forward, this article will touch upon the singularity of the Brazilian “civic culture” (Dahlgren, 2009) and illustrate how digital contributions renew the forms of civic engagement in this lively and collective culture of protest and demonstration, especially since the events of 2013.

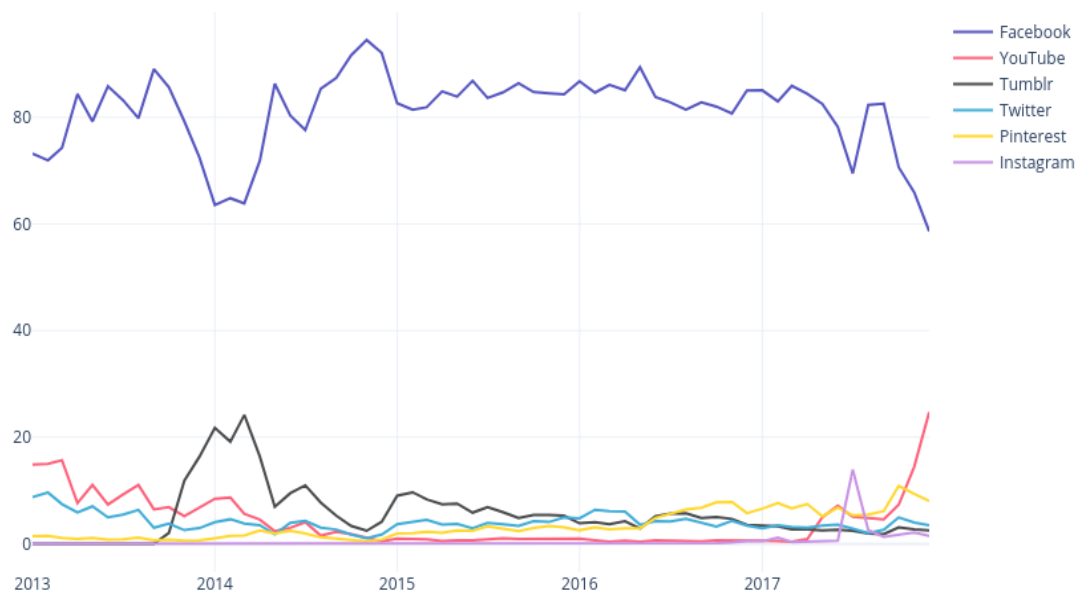
The study of repertoires of action has been previously conducted on the basis of the analysis of online conversations, as is the case with the article from Theocharis mentioned above. There may be different manners to investigate repertoires of actions, but we resort to lexical analysis as well. This approach can provide an understanding of users’ intentions and modes of action.

Method: Presentation of the corpus and description of the approach

To identify the corpus to study, we carried out 18 interviews in the Spring of 2017, with activists highly involved in the social protests of 2013, implicated in the coordination of their social and political organizations. The organizations were mainly located in São Paulo or Rio de Janeiro. During the interviews with these left-wing activists, we asked interviewees to recount the innovative ways in which their organization used Internet services and the roles that social media played in their political engagement. We also asked them to retrace the past years to portray the Brazilian political scene on a larger scale and provide a portrait of the main political events in which they took part. If the interviewees evoked very different action repertoires in relation to their media uses, yet they all strongly insisted on the centrality of Facebook in their daily political practices. They used Facebook as a portal to the world to encounter others and interact at the scale of the world wide web; they used the platform as a window to showcase their social and political activities as well as promote their projects and overall goals. They also noted that, the events in 2013 formed a landmark year in the structuration of social movements in Brazil in which Facebook was presented as a major player in the political engagement at that time as well as within the following years (Peralva et al., 2017). These interviews invited us to study the uses of Facebook in-depth and thus better understand how Facebook was being used by Brazilian activists to fuel their debates, exchange information, coordinate action or simply converse.

This orientation is more relevant considering that Facebook is a central platform to the Brazilian media landscape. This can be confirmed by the polls below. As Figure 1 shows, this social media website is by far the one that is the most used in Brazil, especially for those engaged in social movements and political struggles, since 2017 and the following years.

Figure 1. Facebook in the Brazilian social media landscape¹



If these reasons alone suffice to justify the recourse to study new forms of political participation on Facebook, it could also be stated that academic work mostly targets how Twitter is used. This micro-blogging platform favors, however, very specific types of repertoires of action due to the brevity of messages published there (280 characters maximum). Moreover, there is still a lack of evidence regarding the ways in which activist groups participate in online arenas throughout time, over the course of several years.

To better identify how left-wing Brazilian activists were using Facebook to political ends in relation to specific repertoires of action and political events, we decided to collect the data from the pages of the organizations we interviewed. By using the Netvizz software (Reider, 2013), data was collected from January 2013 - year that the interviewees mention as central - to December 2017 - date at which the study was launched.

During the interviews conducted in the Spring of 2017, we also requested that the interviewees cite the names of the organizations and/or groups they considered the most important activist movements. We suggested they list those whose convictions they shared and who played an important role in their political realm. At this stage, we were able to identify a network of 101 activist groups whose political engagement overlapped. On the basis of this sample of 101 groups, we next moved onto Facebook and identified a network of Facebook pages that were the most "liked" by the whole sample, i.e. those interviewed and those mentioned by interviewees. We integrated into our corpus any Facebook page that had received reciprocal likes and were liked by at least 5 groups of the sample; in other words, at least 5 of 101 groups from the original sample liked a page and this page liked back at least 5 of the 101 groups. By operating in this manner, we only considered groups that were well-inserted into an overall network of activism. This left us with a total sample of 529 Facebook pages of Brazilian activist groups. If the political obedience of pages was not a criterion for selection, nonetheless, all the pages selected were labelled by users themselves as having left-wing tendencies.

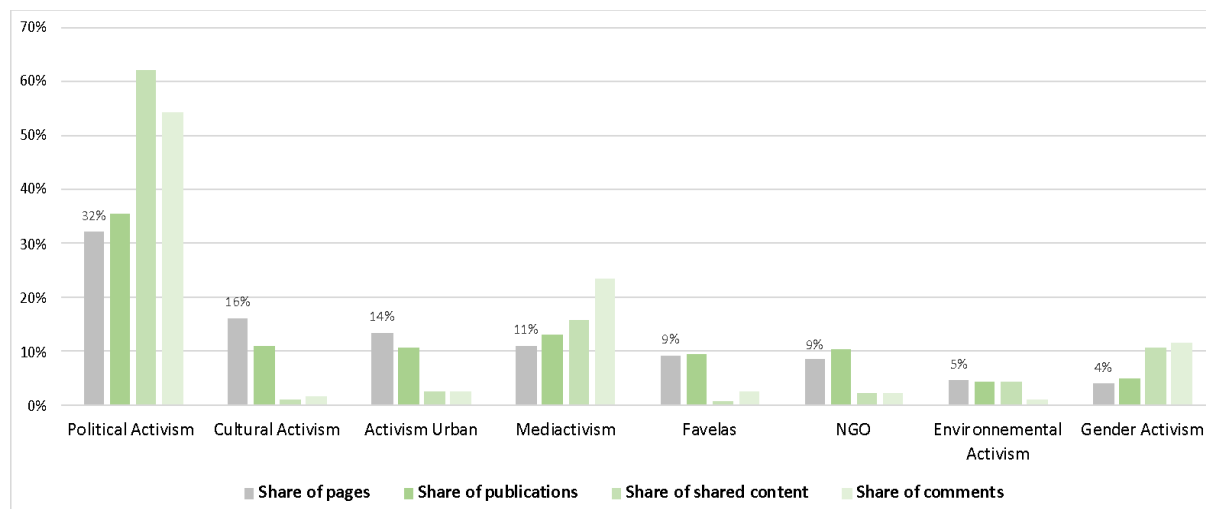
¹ Data taken from StatCounter Global Stats, cf. <http://gs.statcounter.com/social-media-stats/all/brazil/#monthly-201301-201904>

Provided the perimeter of this corpus, we believe we can develop a representative analysis of the messages published by Brazilian militant networks, and thus highlight the dominant repertoires of action carried out in the digital arena from 2013 to 2017, as well as illustrate the role of these forms of participation for the participants themselves.

Different domains of action in the field of political practices and citizen participation

To properly consider the type of activism under study in this article, we broke down the field of political practices into different domains of action. By means of how pages labelled their own practices, several kinds of political practices were identified amongst the 529 Facebook pages selected to compose the sample. As Figure 2 shows, Facebook mainly harbors “political” activist groups. We will distinguish them from other tendencies, such as urban activists or feminist activists that, while they overlap, represent niches of engagement, given that these latter groups develop more targeted and specific actions centered around a “cause” of sorts instead of commenting largely on political matters of all sorts.

Figure 2. Proportion and volume of activity of pages based on the different types of political groups within the corpus



To be precise, our corpus regroups 8 types of organizations:

- political activism embracing the full scale of public debates, tackling or embracing major ideological paradigms (such as capitalism, anarchism, and so on), dipping into general politics, without a pre-distinct favoring for a given “cause” as almost all of the other domains here below do;
- cultural activism, also understood as “artivism”, related to cultural events or artistic activities of different sorts;
- collectives federated around urban issues, such as urban planning, the cost of public transportation, etc.;
- media activists who produce alternative news and conduct citizen journalism online;
- organizations structured around advocacy for favelas’ representation in public debates and progress for the people from those neighborhoods;
- stakeholders structured around ecological and environmental causes and movements;
- feminist groups fighting for the recognition of women’s rights and equality;
- NGOs as recognised political stakeholders but also professional practitioners.

Figure 2 also shows the range of different uses of Facebook carried out by the sample as well as the proportions in which each type of use appears in the database, depending on whether:

- the publications are published by Facebook page administrators (n = 847,728);
- the publications are shared by users, whether the administrators of the page or mere followers who share content on the page (n = 123,135,375);
- the publications are comments on a post published by users, i.e. administrators and random users alike (n = 13,722,657).

Focusing on lexical content generated by administrators to identify repertoires of action

Publications shared by the administrators can entail sharing a picture, a video (of a gathering, speech, etc.) or an article published by an external source (online press website, an activist website, an NGO, a public institution, etc.). As picture 1 below illustrates, administrators write introductions to these types of contents. These captions are meant to lead visitors to consult the publication further. They provide contextual elements to facilitate the understanding of a picture, a video or a press article.

Picture 1. Example of a message posted on a Facebook page, including a timestamp, a text, a hyperlink, key words (hashtags), a video, as well as the number of positive opinions (likes) and shared contents.



In this article, we shall limit our analysis to the lexical content of publications made by the activist group administrators. Since they cover a wide range of subjects, we did a computer-assisted analysis with IRaMuTeQ² software to statistically identify the most common discourse categories and the diverse lexical realms. We explain this below.

Going back to figure 2, we can see that the pages from “political” organizations, just as the number of their publications, are over-represented in our corpus. However, the use of IRaMuTeQ will allow us to eliminate the differences in volume without impacting the quality

² Cf. <http://www.iramuteq.org/>

of our analyses. To be more precise, lexical analysis *via* IRaMuTeQ does not simply showcase what is discussed most but offers an overview of the variety of topics in respect to the volume of conversations.

Method of analysis of the lexical content

The collected content of publications shared between 2013 and 2017 by Brazilian activist groups on their Facebook pages is analyzed using the open-source software, IRaMuTeQ; this software allows us to identify the main themes of a corpus (Smyrnaio and Ratinaud, 2017). It is based on a hierarchical top-down classification that can be described as a succession of bi-partitions based on a factorial analysis of correspondences.

The first step in this analysis is to clean up the corpus by completing a preliminary lexical treatment: the textual content is lemmatized to reduce the lexical variability. The classification process consists in cutting lines of this matrix in half to make a cluster of the publications that tend to contain the same words. This stage entails a factorial analysis of correspondences, the first factor of which is used to determine groups of publications that maximize the internal homogeneity of the groups and the heterogeneity of the two different groups. Once all the lexical categories are obtained, the researcher can proceed to the analysis of the cluster, by describing the theme at hand according to the vocabulary that characterizes it. This lexical cluster is composed of words that are significantly over-represented in the category when compared to the whole set of other categories (based on a Chi²). The “lexical worlds” which emerge present the various themes addressed in the corpus.

The analysis that we are going to present now will detail the contents of these different thematic categories in order to account for the main themes of debate that punctuated exchanges.

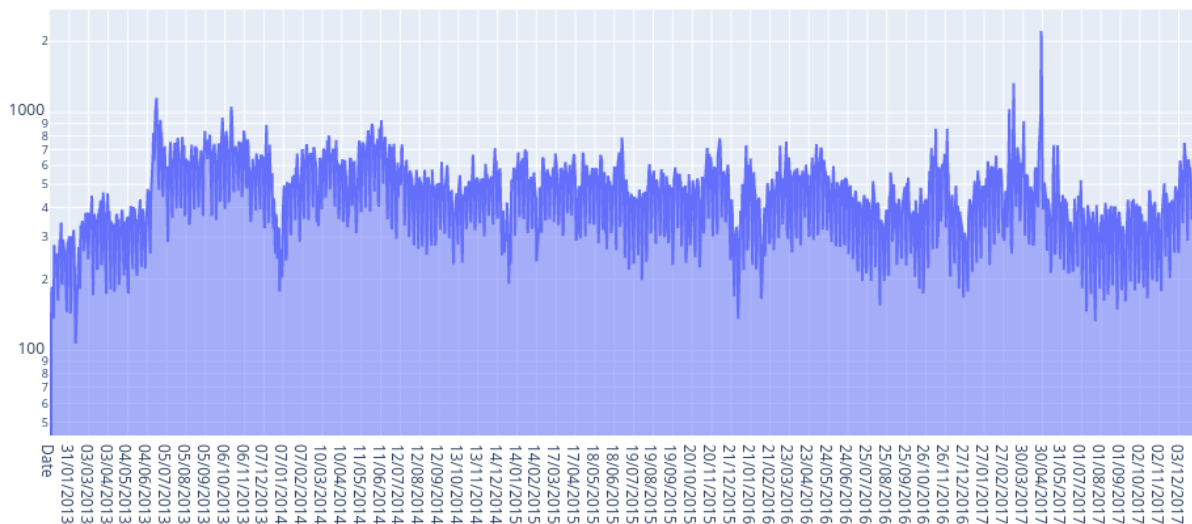
Findings from the lexical analysis

From the main themes discussed on Facebook to repertoires of action

Rise of Facebook over the years

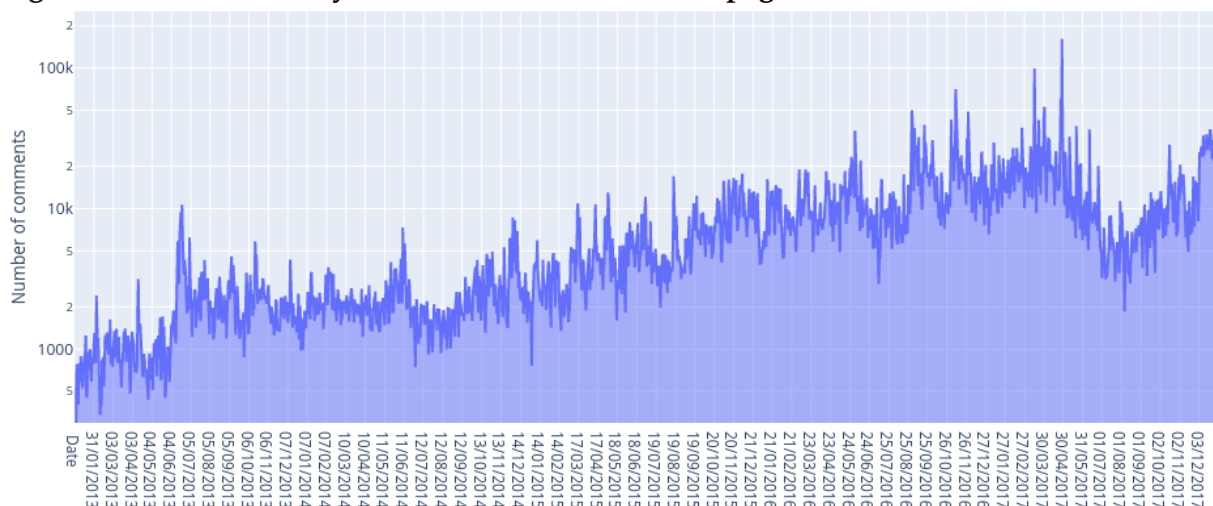
The 529 Facebook pages of the activist groups in our corpus display a significant number of messages ($n = 847,728$) published over the course of four years. Administrators generated about 450,29 daily messages, i.e. about 0.85 publications per day and per page. Some of them do not publish posts every day. During school holidays, for example, we can note a decrease in activity (cf. Figure 3). That being said, the volume of publication is fairly constant, especially from the end of 2013 to the end of the study.

Figure 3. Number of daily publications on the Facebook pages



Despite the fact that Facebook page administrators have published the same number of daily publications between 2013 and 2017 (0.85 per day; cf. Figure 2), there are more and more comments over time. In 2013, the users of these 529 pages published between 1,000 and 3,000 comments per day, while at the end of 2017 this number had risen to ranges between 13,000 and 80,000 daily comments. The volume of comments published by visitors indeed appears to significantly increase over the years studied, particularly between 2016 and 2017 (cf. Figure 4). It thus appears that this content has led an ever-increasing number of users to react, fuelling even larger collective conversations year after year. It thus appears that Facebook has established itself over the years in Brazil as a source of information and a space for political participation for left-wing supporters.

Figure 4. Number of daily comments on the Facebook pages



Methodological orientations, main themes and presentation of the two key repertoires of action

To better grasp how the activists' groups use the social media platform and develop specific repertoires of action, we will now consider the computer-assisted analysis via IRaMuTeQ

software, and thus statistically identify the most common topics, broached by administrators of these pages, likely to indicate patterns of use.

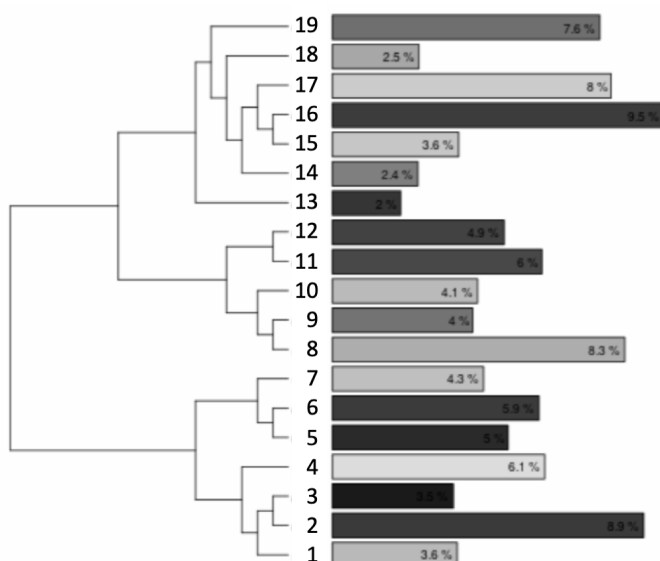
The results are presented below in a dendrogram that segments the online conversations into classes of discourse, underlining the main themes of conversation of the corpus (cf. Figure 5). It also provides information on the size of each class of speech (i.e. percentages and size of the boxes above the branches of words) and the over-represented lexicon in each class of speech (i.e. the more a word is situated at the top of a branch, the more it is over-represented in a cluster).

We selected a classification of 19 themes to generate the dendrogram that appears below. These 19 categories are separated into two parts (cf. Figure 5). This segmentation into two parts, done by the IRaMuTeQ software, is essential because it isolates the two main lexical worlds based on which we will be pursuing our analysis. In the following pages, we will indeed see that each one of these two segments represents a repertoire of action.

From the top part of the graph to the better half of it, the first part of the arborescence of the dendrogram distinguishes categories C8 to C19. This first segment regroups most of the corpus (62.7%). Provided the centrality of lexicons relating to protests against governmental action (cf. Part 1.1), these categories materialize a way in which activists use Facebook, i.e. *Facebook is apprehended as a media arena by means of which people protest*.

The second part of the dendrogram, from the middle of the graph to the final cluster (cf. Figure 5), then constitutes the second segment, regrouping categories C1 to C7. This second section represents 37.3% of the corpus. These categories reveal the role of *Facebook as a repository to coordinate protest* and organize militant activities (cf. Part 1.2).

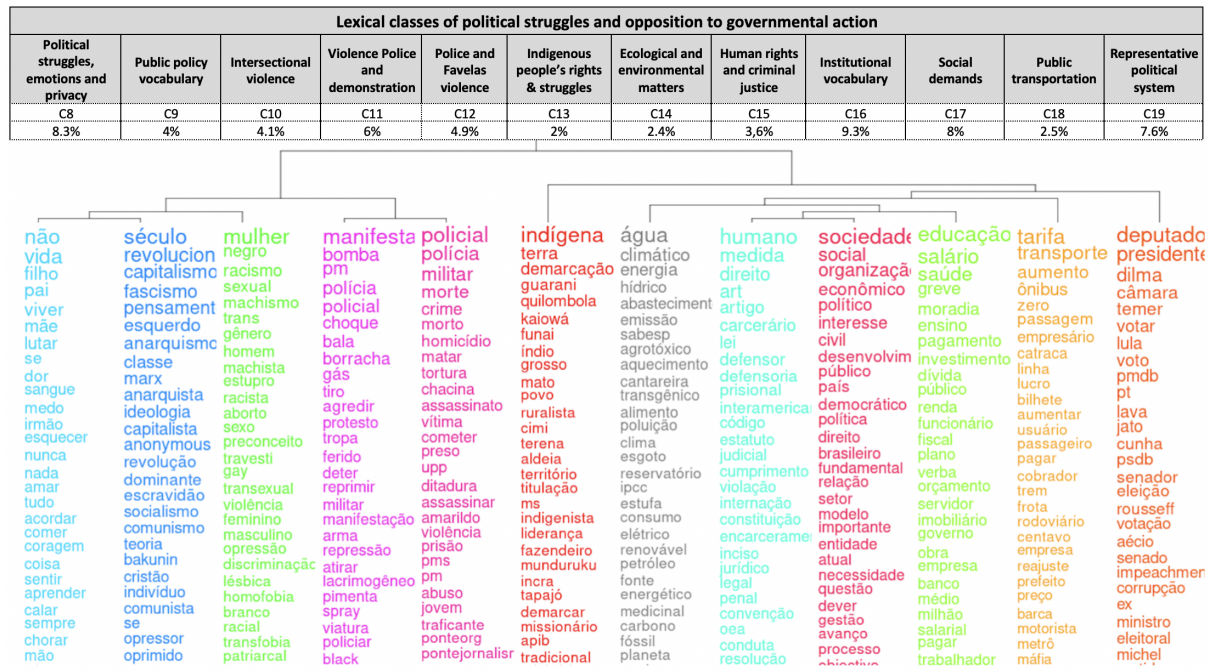
Figure 5. Dendrogram ranking the 19 categories identified by the lexical analysis



First repertoire of action: the appropriation of Facebook as a media arena in which to protest

If we zoom in on the first repertoire of action and only analyze the related lexical clusters, we can note that the first part of the dendrogram regroups various subjects and social issues around which these groups organize their combat (cf. categories C8 to C19 in Figure 6).

Figure 6. Vocabulary used in the contributors' messages to engage in political debate and oppose government action (n = 847,728 messages)



The first subdivision of these categories (C8 to C12) represents a significant part of the lexical content (27.3%), composing more than a fourth of the discussions on Facebook. It is essentially characterized by themes related to violence. What stands out first is intersectional, interpersonal and structural violence, as well as violence against women, the LGBTQIA+³ communities and different races (C10). Secondly there are two categories related to denunciations of various sorts of State violence perpetrated by officers of law enforcement during gatherings and street demonstrations (C11) and others, more deadly, that are part of the Brazilians' daily life. (C12).

Parallel to these categories that dominate and give the overall thematic tint to this lexical sub-category, we find a vocabulary formed by general political terms (C9): revolution, capitalism, fascism, anarchism, etc. These terms appear frequently in the messages published by the administrators of these Facebook pages. It is interesting to note that this category is linked to category 8 which regroups words related to emotions, to activists' experiences and their private lives. (C8). In other words, classical political terms (C9) and those relating to emotions and one's private life (C8) remain linked and are important in the way in which these groups define the object of their commitment and combat.

³ The acronym LGBTQIA+ designates the following communities: *Lesbian, Gay, Bisexual, Trans, Queer, Intersex and Asexual* and the sign + refers to other genders and sexualities.

The second subdivision of these categories (C13 to C19) refers to the different issues at stake around which social movements in Brazil have revolved these past years. We find protestation vocabulary relating to the Indian population and the Quilombolas community struggles (C13), as well as issues related to water management and “agro-hydro-business” (C14), which have become quite important in São Paulo. One category regroups terms linked to justice, human rights and criminal law (C15). These terms also represent matter for contest and are linked to those in category 16 where words such as democratic, for example, can be seen in the dendrogram. These two categories are equally tied to social themes (education, salary, health) (C17) and to category 18 that regroups the words concerning the long struggle around urban transportation that mobilized certain communities for several years. Category 19, to which the former refers, regroups words pertaining to a representative political system (deputy, president), the names of the leading actors as well as those related to the crisis that struck the system (i.e. the criminal investigation that revealed cases of corruption and the destitution process aimed at the President of the Brazilian Republic).

These two subdivisions of the lexical analysis highlight the way in which activists have appropriated Facebook as an arena of public protest and means for denunciation of governmental action. The impact of these lexical contents (C8 to C19) in the total corpus is highly significant (62.7%). This shows that this social media platform plays, above all, the role of a “conversation” and “information exchange” platform among activists, as is the case of its homologue, the microblogging platform Twitter, used for protesting (Theocharis et al., 2015).

Second repertoire of action: The appropriation of Facebook as a mobilization tool

The Facebook pages of Brazilian activist groups also contain a huge amount of lexical content related to the coordination of offline mobilizations. The second half of the lexical analysis initially inserted in the article above, the one containing 19 classes, is represented here in a new dendrogram (cf. Figure 7). The figure shows that this register of action repertoires appears in categories C1 to C7, which regroups 37.3% of the lexical material analyzed. If we have a closer look at this repertoire of action, we can note two sub-repertoires.

We shall start with lexical clusters (C5, C6, C7) that refer to the most standard and general terms used in messages to coordinate demonstrations of different types. These lexical realms deal with times (C6) and places of gatherings (C7), notably the names of streets and squares in Rio de Janeiro and São Paulo. The impact of these two categories in the total corpus (10.2%) shows that the scheduling of times and places to meet and gather plays an important role in the activists’ messages. These categories go hand in hand with a third one (C5) that also deals with coordination of mobilization in referring more directly to youth and modes of action. It contains the names of different collective organizations (*Levante Popular da Juventude, MTST, Mídia Ninja, DCE*) often composed of university or high school students in various cities (*Belo Horizonte, Porto Alegre*). The names of these collective organizations and places are used in messages announcing the rallies. We find terms specifying the type of action, for example, with terms like walk, forum or occupy (*marcha, forum, ocupação*). Slogans (*Fora Temer !*) are equally present in this digital network repertoire.

Figure 7. Vocabulary used by the participants in their coordination messages (n = 847,728 messages), focusing on the first half of the dendrogram in Figure 3

Communication & cultural program				Coordination & Mobilization		
Vocabulary of communication tools	Cultural events organization	Cultural events	Musical events	Youth and modes of action	Coordination of mobilization	Meeting points
C1	C2	C3	C4	C5	C6	C7
3.6%	8.9%	3.5%	6.1%	5%	5.9%	4.3%

br	inscrição	filme	banda	levante	ato	silva
org	cultura	cinema	rock	juventude	praça	maria
email	cultural	livro	show	popular	concentraç	oliveira
gmail	oficina	documentári	música	estudante	av	santo
compartilh	inscrever	exibição	dj	luta	17h	foto
mail	participar	cine	palco	ocupação	rio	souza
contato	programaçã	exposição	rap	horizonte	janeiro	prof
enviar	evento	flupp	som	alegre	feira	ana
página	encontro	exibir	mc	belo	rua	pereira
casadozezir	conferir	história	festival	porto	avenida	carlos
curto	aberto	metragem	grito	mtst	zona	professor
zezinho	atividade	literário	noite	ninja	largo	martins
ajudar	arte	escritor	festa	foratemer	estaçã	osé
link	colaborativo	literatura	samba	movimento	18h	rodrigues
telefone	dia	fotografia	circo	ocupado	centro	carvalho
facebook	vivo	fiup	carnaval	ocupatudo	masp	alves
inbox	coletivo	museu	musical	acampament	frente	lima
amigo	projeto	cineasta	disco	marcha	cinelândia	andré
comunidades	edital	lançamento	hop	dce	14h	ferreira
agradecer	eixo	fotógrafo	domingo	mg	dia	antonio
curtir	espaço	sessão	funk	secundarista	16h	felipe
doar	rede	matilha	tocar	grevegeral	15h	almeida
obrigar	curso	galeria	voador	brasilemgrev	paulo	dr
trilhar	festival	arte	atração	ocupar	próximo	ribeiro
whatsapp	parceria	conhecer	cantor	fórum	terminal	doutor
comentar	debate	coleção	the	campus	9h	luiz
	edição	fotográfico	discotecagem	estadual	candelária	gomes
		imagem	dancer			

Further analysis of the messages online then reveals how this coordination and mobilization repertoire can be broken down and harbors another repertoire of action. This new repertoire, to be considered as a subcategory of mobilization, deals with communication (C1) and the cultural agenda (C2, C3, C4). The messages published by the Facebook page administrators contain various references to communication tools (*email, telefone, facebook, whatsapp*) (C1), thus demonstrating their role in the coordination and organization of militant activities. It is interesting to note that these terms, related to communication, are associated with lexical realms inherent to the cultural field (C2, C3, C4). These categories contain different words that refer to cultural and artistic forms of expression (*filme, cinema, livro, literatura, fotografia*) with music, in a category of its own, clearly over-represented, possibly in relationship to the Carnival and its multiple activities (fanfares, Carnival blocks, etc.) (C4). These categories also contain references to institutions, places and, more precisely, modes of access to different forms of cultural and artistic expression (*museu, festival, cinema, exposição, galeria, etc.*). In other words, the various terms in the cultural field are used in these Facebook pages as an event, to encourage the Internet users and audiences of these pages to get “physically” involved, whether as simple spectators or actual volunteers actively contributing to the organization of the artistic event.

This analysis thus reveals that the diffusion of information about the upcoming cultural agenda and requests to become involved through artistic or cultural events (C2, C3, C4) play a key role (18.5%) in the online exchanges. It shows that the coordination of artistic and cultural events is linked to a highly political repertoire, one that supports activists in coordinating their mobilizations and demonstrations (C5, C6, C7). Such a finding is interesting for several reasons; first because this result may reflect the singularity of the Brazilians’ “civic culture” evoked by Dahlgren (2009) and extend upon this notion on the media practices front.

That being said, we would need to conduct comparative research, taking into account other countries, to document the originality of Brazilians' media participation. In addition to this analytical perspective, this finding is also worth underlining, given the mix of political and cultural/artistic realms. Facebook allows activists to expand their social and cultural practices, bringing together on a single platform causes they support as well as the cultural agenda and related concerts or exhibitions they may want to attend. Over and above a simple offer, the mix of the two repertoires shows that political engagement over time is connected to the cultural and artistic agenda. The analysis of militants' Facebook pages reveals to what extent concerts and exhibitions breathe life into organizations and collectives, enhance their everyday life and flame social actors' participation in future causes or struggles.

Changing levels of mobilization depending on the periods in time and social actors behind the posts

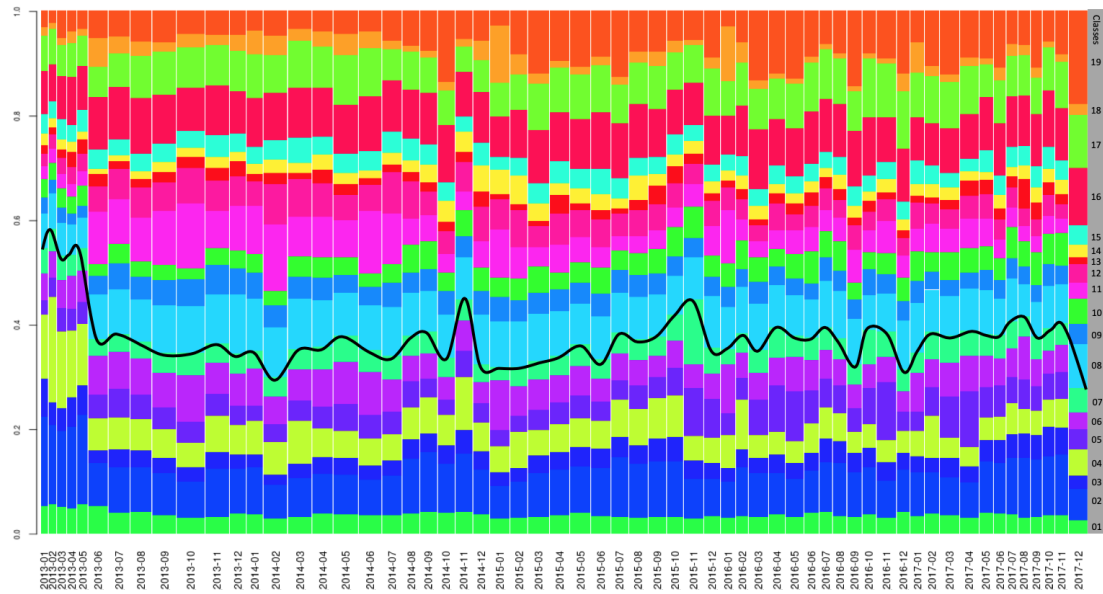
This next part of the article will zoom in on the mobilization digital network repertoire that we previously identified (cf. Section 1.2 above). We will further our understanding of this repertoire by first describing the articulation and evolution of this repertoire over time, between 2013 and 2017, to detail how Facebook was used by Brazilian activists over the years. Secondly, we shall evaluate the differences between the various groups of social actors in our corpus to determine if their use of Facebook, as a coordination tool, varies according to the "primary object" of their commitment to the cause they defend: the environment, feminism, living conditions in the favelas, etc.

Vocabulary of the mobilization and rates of participation: inversely proportional magnitude

We will take into account the 19 categories that emerged from the lexical analysis and visualize how all of these categories have evolved over time. The chronological representation below (cf. Figure 8) illustrates this evolution; the numbers of the categories are listed in the grey column on the right.

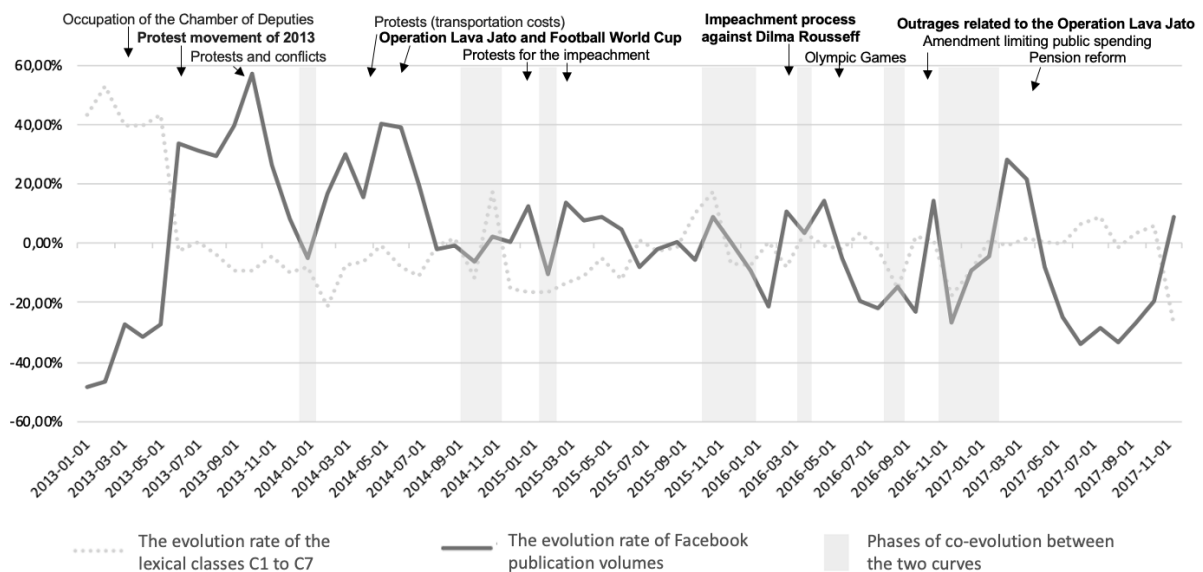
This figure allows us to better understand how the categories containing a mobilization repertoire have evolved over time. For reminders, this repertoire corresponds to classes C1 to C7, with on the one hand, clusters linked to coordination (C5, C6, C7), and on the other hand, classes linked to the information on and scheduling of cultural events (C1, C2, C3, C4). The evolution of the repertoire can be visualized in the black curve; everything below the curve (C1 to C7) corresponds to the mobilization repertoire, everything above the line (so from C8 to C19) does not pertain to this repertoire. What appears in the figure below is that the repertoire is strongly represented during the first six months of 2013, followed by several peaks when Facebook was used more by activist groups to coordinate their activities, whether they be engagement in cultural events or demonstrations. In particular, we can pinpoint the over-representation of these categories in December 2014, November and December 2015, and July to November 2017.

Figure 8. Chronological monthly representation of the impact of the lexical categories C1 to C7



We shall now try to comprehend if the periods of over-representation of these categories as highlighted by this curve (cf. Figure 8) correspond to times when there were the most publications and activity on the Facebook pages (cf. Figure 3). To determine if this is what is at stake and answer this question, Figure 9 represents the monthly evolution rates of Facebook publication between 2013 and 2017. This rate is positive when the number of monthly publications is higher than the average over the entire period. Figure 9 compares this evolution with the monthly evolution rates of classes C1 to C7 - i.e. the volumes of messages pertaining to the mobilization repertoire per month. What we can see here is publication rates follow opposite evolutions: when the volume of publication increases, the volume of the mobilization repertoire decreases and vice versa. In other words, more people converse online and take part in political public debates, the lower the number of messages relative to demonstrations and cultural events are. The more talk there is about the organization of demonstrations and the upcoming concert or exhibition, the less conversation there is about politics and specific causes. So, the impact of the vocabulary related to mobilizations is rather significant during phases when the daily number of publications on Facebook pages is low. This phenomenon can be observed most of the time, in 85% of the months between January 2013 and December 2017, except for 7 phases; they are represented in grey in Figure 9 to highlight the phases where the evolution rates increase or decrease at the same time.

Figure 9. Comparison between the evolution rate of Facebook publication volumes and the evolution rate of the lexical classes C1 to C7.



This finding leads us to consider that the phases in which administrators publish the most content are characterized by a diversification of themes and lexical content in the corpus, particularly the vocabulary reflecting opposition to governmental action that appears in categories C8 to C19 of the general analysis. During these phases, the proportion of the lexical categories in the mobilization repertoire (C1 to C7) is therefore statistically less significant. This conclusion shows that the phases in which activist group administrators publish the most amount of content corresponds to moments when the thematic diversity of exchanges is the greatest. Inversely, the role of Facebook as a mobilization resource is the least apparent in phases when a larger place needs to be made for discussions relating to subjects of social struggles.

We also note here the singularity of the cultural agenda repertoire. Like the other vocabulary in the mobilization repertoire, the lexicons in the cultural agenda are over-represented during phases in which the number of publications is the lowest. The promotion of artists or cultural events structures the daily activity on these Facebook pages, at a regular and constant rhythm according to the cultural events scheduled. When demonstrations are less prominent, concerts and exhibitions maintain social relations on a day-to-day basis, by providing activities and manners to get together, outside of the scope of strong social protest and mobilization in the streets. When mobilizations become more intense, this typical aspect of the activist culture is occasionally submerged in the voluminous flow of information related to the current subject in their combat.

Conclusion

The lexical analysis of publications posted online by left-wing Brazilian activist groups has allowed us to identify the digital network repertoires developed on Facebook by these groups between 2013 and 2017 (Chadwick, 2007). Facebook is mainly used as a digital media arena in

which contributors can criticize and oppose political representatives' choices and actions. In this respect, this article falls in line with what has been demonstrated in previous studies: it shows that, during social movements and power struggles over social conflicts, conversation and information-sharing play a central role in the use of Facebook to protest, similar to the way that Twitter can be appropriated for example (Theocharis et al., 2015).

Findings further reveal that Facebook harbors two main digital network repertoires. Firstly, Facebook is apprehended as a media arena by means of which people protest, voice opinions, push political agendas. This is the dominant political use of the platform with nearly 63% of the militants resorting to Facebook to carry out such media participations. Secondly, Facebook is used as a resource for the coordination of demonstrations and militant activities.

However, the second repertoire is of particular interest to us. It may be less prominent; it still represents over 37% of uses. This proportion is quite significant and shows to what extent the way in which Facebook is used differs from the way Twitter is used to protest (Theocharis et al., 2015). Activists resort to this platform over the long term to publicize their combats and coordinate their gatherings, whereas Twitter is solely employed as a communicative device.

Zooming in on the second repertoire, the lexical analysis further highlighted the importance of artistic and cultural modes of expression. People turn to Facebook to share an upcoming concert or spread the word about the opening of an exhibition. These types of messages are less present in peak periods of activity, during phases in which social movements are making news and the rate of publication is highest. Rather, they are at the heart of the daily, ordinary routines of these pages. The programming of cultural and artistic type activities plays a role in structuring the protest uses of Facebook in the long term, by providing content for the militant page newsfeed and offering spaces to continue gathering offline when there is less happening in the news to debate and less demonstrations taking place in the streets. They refer to the place cultural scheduling holds in the structuration of long-term social movements.

This place that cultural and artistic events have in activists' practices, highlights the importance cultural actors occupy in these collective combats. In line with the "civic culture" Dahlgren hints towards, we can consider that the place of lexicons relating to cultural events in the Facebook pages of Brazilian activist groups reveals a singular appropriation of the resources of this platform, linked to the civic culture of the country, even though we would need to extend on this finding in future research to properly document the particularity of the Brazilian's modes of appropriation. In any case, the creation of Facebook events, such as concerts or exhibitions, means that a large number of Facebook users can be invited to participate in cultural gatherings that have a political scope. We cannot determine how many users receive these invitations and actually join cultural events such as demonstrations. But we can consider that these cultural invitations can, at least sporadically, incite individuals to adhere to or feel concerned by a particular social struggle and even join the ranks of those protesting.

The main contribution of this research probably lies here. Facebook not only functions as an arena in which activist groups, day after day, share information and express criticism. This research shows that forms of artistic expression and the agenda of cultural events are central in the online action repertoires developed thanks to social media. The lexical realms of culture punctuate the normal exchanges of information among activists, particularly when social

combat is less intense. They promote the structuration of activist networks in the medium-term and thus prolong social movements by creating conditions for one-time gatherings, transversal to the different types of activism and various struggles. It would be interesting to know whether this phenomenon can be observed in other countries in order to comprehend whether these lexical realms related to cultural and artistic events, are specific to the Brazilian civic culture, as portrayed herein, if the modes of artistic expression and the agenda of cultural scheduling generally play a major role in structuring activist networks within social media in the medium term.

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