Under the Eyes of Big Brother:
Risks and Uncertainties in Using Facebook
as a Platform of Political Activism

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Abstract: The purpose of this article is to analyze the risks and uncertainties of the use of Facebook as a platform for political activism. In this paper, the history of the company is recovered, including the accusations and complaints received, such as the cooperation with the PRISM and the controversial positioning in favor of CISPA, as well as its growing use as a platform of activism for social movements and organizations from around the world. It also discusses the algorithm used to prioritize the content presented to users and the relationship between the American diplomacy and the Internet.org program.

Keywords: Facebook, social movements, algorithm, activism

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1. Introduction

In recent years, there has been an increase in the use of the Web 2.0 for political debates, for the dissemination of ideas and for the articulation of political actions. In this context, Facebook has been, with great advantage over other platforms, the most significant public space for political action in a global scope. With about 1.5 billion users (FACEBOOK, 2015a), Facebook has a global expansion project, called *Internet.org,* which aims to connect "other 5 billion people" to the Internet in developing countries through a company-controlled platform (ZUCKERBERG, 2015).

However, Facebook is a private and controlled space, whose business is based on collecting private information from users, profiling, mapping and analyzing social relationship networks. Its data collection does not miss any information uploaded or conversation typed by the users. In addition, the platform encourages the user to insert new information as well as confirming others. It also includes sophisticated facial recognition tools and data processing. With these, the company is able to obtain a complete history of the life of every citizen, as well as their interests, values and social relations, enabling multidimensional analysis and detailed profiles, which are of great commercial interest.

However, the platform does not suit only business objectives. The leak of information from the United States National Security Agency (NSA) by Edward Snowden has demonstrated that the company has been cooperating with the intelligence of that country since March 2009 through the PRISM program. The leaked information point out that Facebook has a backdoor access to the NSA, allowing direct access to the servers for obtaining information and monitoring users.

In this context, this article aims to discuss the use of Facebook for political action. What are the risks of using Facebook by Civil Society Organizations (CSOs) and citizens? What is the risk of political action when it is always predictable and surveillance is permanent?

2. Facebook

Facebook was founded in January 2004 by two students at Harvard University as a social network for students of that University. It later expanded to other universities in the United States, Canada, Australia, New Zealand, United Kingdom, Ireland and Mexico. It was only in September 2006 that Facebook became open for the registration of any person. At the end of 2007, Facebook had more than a hundred thousand business pages on the platform. In mid-2011, the platform became the biggest host of pictures on the web, with more than 100 billion photos. In the same year, more than 350 million accessed the platform through their mobile devices. (WIKIPEDIA, 2015)

In February 2014, with more than 1 billion active users, Facebook reached twice as many users in relation to the second competitor, Google +, and more than triple compared to the third one, LinkedIn, as be seen in the Infographic below. (LEVERAGE, 2014)

Social
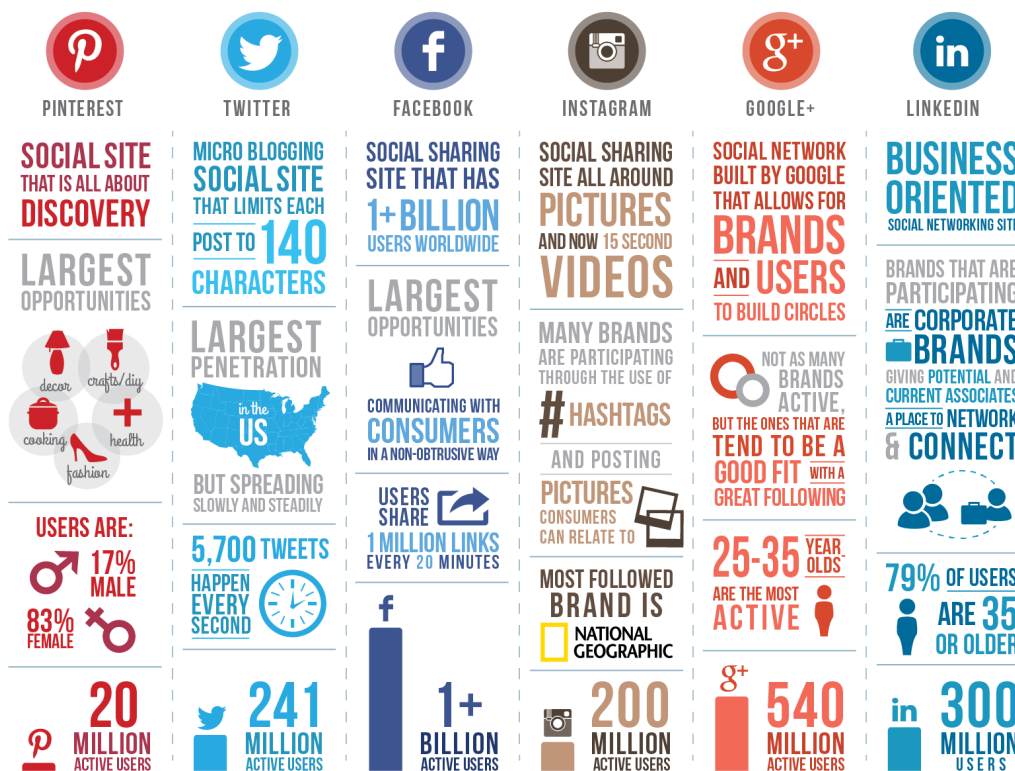
Media Comparison Infographic (LEVERAGE, 2014)

In June 2015, Facebook was estimated as having a market value of US$ 275 billion dollars. That puts it close to the giant Google, which according to the same survey, has a market value of US$ 363 billion (QZ.com, 2015). For comparison purposes, the giant Monsanto, notable for its dominance in the world market for grain and its intensive lobby, has an estimated value of US$ 59 billion (YCHARTS, 2015).

With the *Internet.org* project, Facebook hopes to include other "5 billion" users. The market value of the company has obviously increased in recent years simultaneously with its user base and volume of information stored.

It is worth mentioning that, similar to Google, in recent years, Facebook has been making large acquisitions in the sector, with emphasis to Instagram, in 2012, for US$ 1 billion, and WhatsApp, in 2014, paying the impressive amount of US$ 19 billion for a company that only had one app and a turnover of only US$ 300 million. Though this purchase has been considered insane, it makes perfect sense for a company whose success is related to the extraction of user information.

The main resource of the company Facebook is a web platform – with the same name of the company – where people and other companies can relate to each other. Each user has a timeline that allows them "to organize and provide the events and activities that matter most to them, allowing them to refresh their memory in searchable narratives that are chronologically organized." Entities such as organizations, movements, groups and especially companies can create pages within the platform. The user, as well as publishing content in his timeline, can learn about his friends and the world through news feeds which "regularly updates a list of stories of their friends, pages, and other persons and entities connected to Facebook." Finally, the platform allows users to publish photos, videos and communicate through text messages (Facebook, 2014b: 6 – 7).

3. Business Model

Facebook's creation and growth coincided with an important paradigm break in the operation of the website network. This new face of the network, which received the name of Web 2.0, can be described by the "web as platform" slogan. In the middle of the first decade of the millennium, the web was in full process of revitalization. Personal pages gradually were replaced by blogs, portals by search machines, folder hierarchies carefully organized by programmers resulted in the so-called "folksonomies"- tags assigned by the users themselves. The success of enterprises in the 2.0 era would deeply depend on the engagement that they could promote to their users in data production. As predicted by Tim O'Really in 2005, in the years that followed, there was a close race among companies to own certain classes of data (O'Really 2005).

At that time, Zuckerberg's newly created company knew how to compete very well in that newly created market based on a business model deeply consistent with the new web paradigm. The main

feature of Facebook is its web platform, where, on the one hand, users can remain connected with friends, family and other acquaintances, stay informed and express themselves, and on the other hand, partner companies can sell ads targeted to the intended audience, maintain institutional pages and engage their consumers in marketing their brand. Following the web 2.0 model, the value of the company comes from the content produced by the users themselves and the partner companies. The network effect, where the more users the greater the value of the application, associated with the double engagement (both users and companies) promoted by the platform, put Facebook in a favorable position in the race for the most coveted web database: personal preferences and the network of user contacts.

According to the annual shareholders' report, the company's business model is to produce value for people who use the platform, as well as for advertisers and developers. For people in general, the platform offers a way to connect with friends and to express themselves. For advertisers, the company helps them to achieve their goal, whether it is to sell online, to sell in the store or to promote their brand through targeted advertising. For developers, the platform provides an application programming interface (API) that allows integration with the platform (Facebook, 2014b).

Targeted Marketing is a modern advertising technique where adds are visible only to users who better fit the interests of a particular enterprise. Thus, users must be separated into categories called profiles, in a process known as profiling. In few words, profiling consists of the collection and use of information about individuals in order to make assumptions about them and their future behaviors. The interest of marketing firms in this technique is to foresee and direct the future behavior of consumers and to offer advertising in accordance with such predictions (EDRi 2006).

In order to produce these profiles and direct the advertising, the company collects a huge amount of data generated by users on their platform and others.

4. Data usage

According to their terms of service, the data produced on Facebook are owned by the user who produced them, but the company has a "global non-exclusive, transferable, sub-licenseable, royalty-free license to use any content" published or linked to the platform (FACEBOOK, 2015a).

The company stores a huge amount of user data. In addition to the information from the profile and posts, it stores metadata such as dates and times of connection, the device used, the IP addresses from which it is connected, browser info, cookies stored, clicks made – as well as day/time and number of times, topics addressed to the user associated with the tastes and interests of the timeline, the apps used, all the chat conversations held, all likes performed, the shares made, all photos and videos posted and their metadata, groups in which they participate or have participated in, all the people who clicked like in places, events, cities they have logged in, all the searches made on the site, the friends that the user removed from the account and a set of other information, even if the user has already deleted them (FACEBOOK, 2015a). Facebook practically does not erase what has been published and records the interaction made on the company's platform, regardless if it is active or passive.

Facebook also collects third-party data. They are web sites and applications that use Facebook services, getting information about visits to such sites and the interactions performed (such as likes, comments and shares). The company also receives information from external partners on user activities inside and outside Facebook. For example, information from one of the services offered by Facebook in conjunction with a partner or an advertiser on their experiences and interactions with it (FACEBOOK, 2015b).

In addition, Facebook receives information from companies belonging to the group or controlled by it, such as WhatsApp, Instagram, Facebook Payments Inc, Onavo and others (FACEBOOK, 2015c).

The company says that it uses the data to provide "services, personalized content and make suggestions using this information to understand how you use and interact with our services, with people or things to which you are connected and in which you are interested, both inside and outside our services."

The data collected by Facebook are shared with third parties for the purposes of targeted advertising, analysis and measurement. The company claims it transfers "information for suppliers, service providers and other partners that support our business worldwide, providing services of technical infrastructure, analyzing how our services are used, measuring the effectiveness of ads and services, making payments and conducting academic research."

It must be observed that when the user comments or likes the content on a publication of another person (or company) on Facebook, this person decides the public who can see or like his or her

comment and who can share the data. That is, even with restricted privacy settings, the user may have their interactions shared with third parties.

Even information about people who do not have any relationship with the company, but are mentioned within the platform, is collected. In August 2011, the Irish Office of Data Protection officially filed a complaint (ODPC, 2011) against the representation of Facebook in that country by collecting data from people not related to the company and creating profiles - called shadow profiles – with such information. The data collected are used to improve the services offered, including the application security, but mainly the targeted marketing services and, for this purpose, it is shared with partner companies, especially profiling companies (FACEBOOK 2015e).

It is interesting to note that the company is conducting academic research with the data of the users. The company is funding research to better exploit its huge database. It is researching on data mining, facial recognition, machine learning, user experience, human-computer interaction, economy and social computing. (FACEBOOK, 2015d).

 In 2014, an enterprise research - signed by the Core Data Science Team, Facebook - was accused of violating ethical principles of research when using features that manipulated the user. This was the "Experimental evidence of massive-scale emotional contagion through social networks" (KRAMER, HILLORY & HANDCOOK, 2014), published in the US Proceedings Journal of the National Academy of Sciences. A sample of 689,003 unwary users was the subject of a research to induce "emotional states" selectively presenting positive or negative stories in their news feeds. The research was an experiment in "massive scale of contagion via social networks."

Kashmir Hill, a columnist for Forbes magazine, points out that the company's data policy states that the data obtained by the platform can be used "for internal operations, including problem solving, data analysis, testing, research and improvement of service", which makes all users potential subjects of experiments. The columnist warns of the risk of combining the use of the mysterious Facebook algorithms that control what you see in the news feed with the company´s research experiments (FORBES, 2014).

5. Diplomacy 2.0 and Internet.org

At the end of the second term of the George W. Bush government, the US State Department had incorporated the ideas promoted by web 2.0 in its speech. The idea of the so-called 2.0 diplomacy was to incorporate the new information technologies not only to influence but also to engage people in the political interests of the U.S. Government (ORTELLADO, 2012). This convergence of interests between internet technology companies and the State Department can be found in two texts.

The first, a story written in The Wall Street Journal in 2008 by Senator Glassman emphasized the role of the web to divert potential "terrorists" from the path of action against the United States. The goal of the new diplomacy would be not to "win hearts and minds", but "more immediately and realistically" divert certain segments of the population from trajectories that lead to "violent extremism" (GLASSMAN, 2008).

The second text, a book written in partnership between Eric Schmidt and Jared Cohen (Google's Executive Director and the Director of the non-governmental organization Google Ideas, respectively) summons the information technology companies, like Google, to engage in the task assigned by Glassmann and understand their services as "an inherently political commodity" whose main objective is "to provide connections that cross borders." According to the authors, "[the] most powerful strategy against radicalization will focus on the new virtual space, services as "an inherently political commodity" whose main objective is "to provide connections that cross borders."(COHEN & SCHMIDT 2010)

Therefore, the declared interests of the United States diplomacy merged with the mission of the big service companies on the web, in particular, with Facebook's mission of "giving people the power to share and make the world more open and connected." Julian Assange, founder of Wikileaks – the platform responsible for the leak of thousands of hitherto confidential data about wars promoted by the United States, as well as diplomatic information – described the book of Cohen and Schmidt as "an attempt by Google to position itself as a geopolitical visionary of the United States, the only company able to answer the question "where should America go" (ASSANGE, 2015). If it is true that Google had a head start in this race to attract the attention of the United States State Department, Facebook was not far behind.

Consistent with both its institutional mission and diplomatic interests in dispute, the company launched a program called *Internet.org* which is "a Facebook initiative to bring together technology leaders, nonprofit organizations and local communities, with the goal of connecting two-thirds of

the world who do not have access to the internet" (FACEBOOK 2015f). So, in April 2015, the CEO of Facebook, Mark Zuckerberg, and the President of Brazil, Dilma Rousseff, met in person in Panama City and announced the implementation of a project that supposedly will broaden the access to the internet in more socially vulnerable regions of the country. The diplomatic meeting between a State leader and an American executive in the information technology area illustrates well the process described in the previous paragraphs.

Despite what was disclosed, those "benefited" by the program will not have access to the Internet, but to a tiny part of it: basically Facebook Platform and its commercial partners. Such a proposal is in flagrant contradiction with the country's current legislation which, through the Civil Rights Framework for Internet Use (in Brazil), guarantees the principle of net neutrality. This principle lays down that "those in charge of transmitting, switching or routing has the duty to isonomically treat any data packets, without any distinction of content, origin and destination, service, terminal or application." In other words, an internet service provider cannot allow certain applications and services to be accessed faster or slower and cannot discriminate against certain applications and services to be accessed – platforms and sites of partner companies to Facebook – but not others (BRAZIL, 2014).

The intention behind the principle of neutrality is precisely the protection of the diversity of services in the network, avoiding their control by only a few companies. The violation of neutrality gives companies that are already established in the market an immense advantage over small or new companies that do not have the resources or influence to negotiate agreements with the providers. The dystopian image of an internet where there is no neutrality is an access system similar to cable TV where the user purchases packages that include certain channels. The zero rating model – one in which some services are offered free of charge by the provider – is not free from this type of criticism. In such a model, users would be split into two categories: those who can pay for unrestricted access and those who cannot. The latter would have access to only certain services. Thus, large companies such as Facebook and its partners would have a huge commercial advantage, because they would have exclusive access to a generous share of the consumer market. The situation is aggravated, since its business model has a network effect. In other words, even those who have the condition to pay for the unrestricted access will have to opt for Facebook if they want to communicate with people in the niche that only has access to this platform. This inhibits the emergence of other social networks and strengthens the company's monopoly in the business.

6. Facebook and the NSA Backdoor

In June 2013, the periodicals The Guardian and Washington Post denounced the NSA PRISM Program. Facebook was among the companies that cooperated with the NSA, offering access to its servers directly through a backdoor. Despite the complaints, Zuckerberg denied that the company had any involvement in the PRISM program (ZUCKERBERG, 2013).
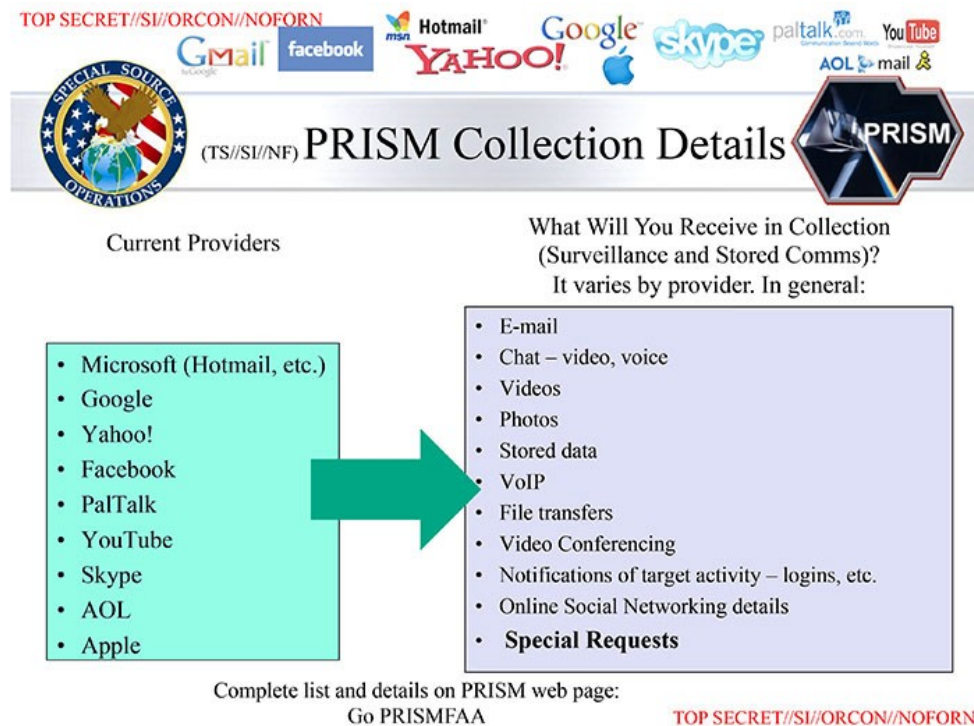

PRISM Operating Scheme

Source: WP, 2013

PRISM is a secret surveillance program by which American intelligence collects information from electronic communications from at least nine of the largest United States companies operating on the Internet. It was released in 2007. Facebook adhered to it in 2009.

Based on the 1978 Foreign Intelligence Surveillance Act (FISA), the NSA secretly obtained from the public legal access to such data.

PRISM came to completion in association to the UPSTREAM program. This, in its turn, was the interception of telephone and Internet traffic through direct access to cables and switches that make up the local networks of computers, both outside and inside the United States.
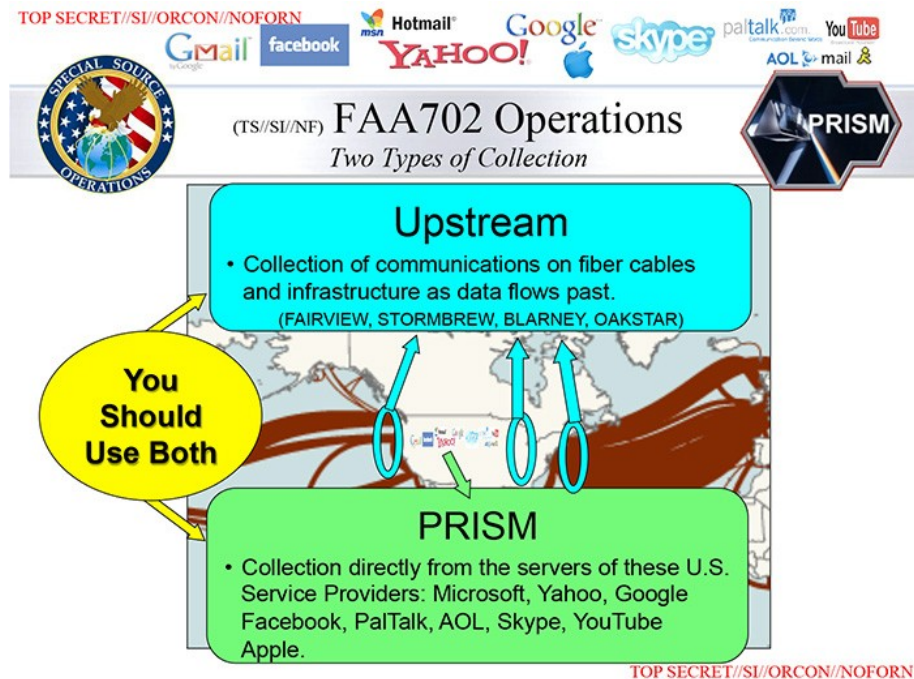
The relationship between the UPSTREAM and the PRISM
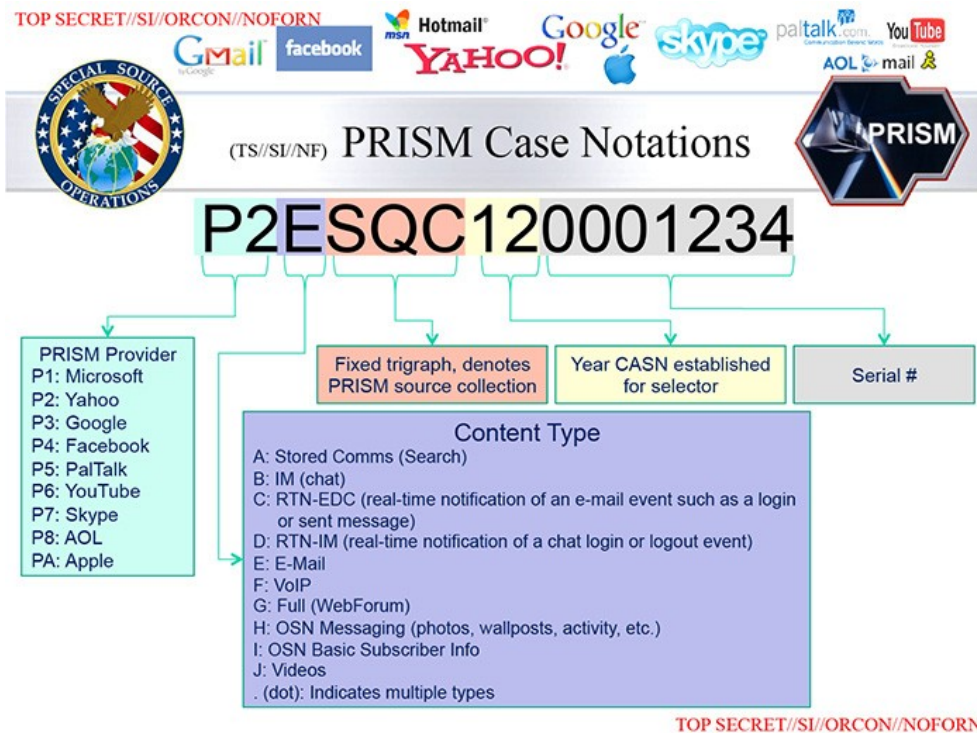
Source: WP, 2013

The Washington Post (WP, 2013) revealed that the PRISM is the main source of intelligence for obtaining raw data used in the NSA's analytical reports, accounting for 91% of the NSA internet traffic obtained through the FISA (US-FIS, 2015).
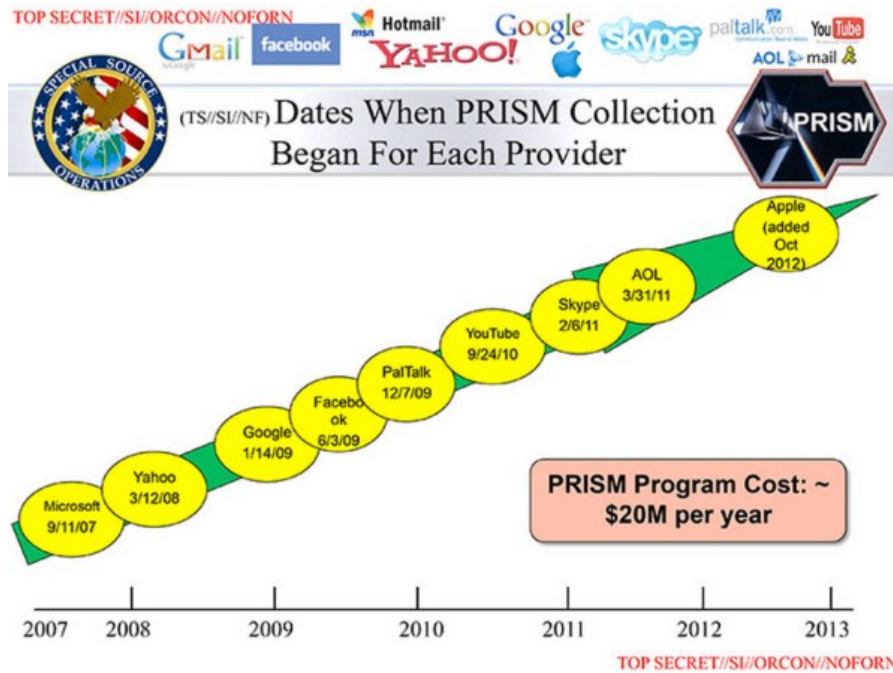
PRISM Timeline
Source: WP, 2013

The slide below shows the identifier code of the obtained data. The data obtained from Facebook are encoded as P4. The type of information obtained is then identified by a letter, followed by the identifier of the PRISM (SQC), the two digits regarding the year and the seven other digits assigned to the data series.

Identifiers of PRISM information sources
Ssource: WP, 2013

There is no way of knowing what volume of information has been used by the United States intelligence services through the PRISM and neither to what purpose. But when it comes to Facebook, it is noteworthy that the company supported the Cyber Intelligence Sharing and Protection Act (CISPA), a bill that established the information sharing of the internet traffic under the control of technology companies and the United States Government.

In a letter dated from 06 February 2012, Facebook explicitly supported CISPA. The letter, signed by the Vice President of Public Policy for Facebook, Joel Kaplan, praised the bill, because it "eliminated rules that can inhibit the protection of the Internet ecosystem" (FACEBOOK, 2012). Joel Kaplan had been the White House Deputy Chief of Staff for Policy for George W. Bush cabinet between 2006 and 2009.

Under CISPA, any company can "use cyber systems to identify and obtain information about cyber threats to protect the rights and property of the company", and then share this information with third parties, including the Government, as long as it is for cyber-security purposes. CISPA was written in a sufficiently wide manner in order to allow communication service providers, as well as cloud storage companies, to share their information with the Government. CISPA also created a broad immunity for the companies against any civil and criminal liability, providing coverage and legal

certainty for companies to share large volumes of potentially private and personal information with the Government (EFF, 2013).

CISPA has been heavily criticized by organizations that defend privacy and civil liberties, as the Electronic Frontier Foundation, American Civil Liberties Union, Free Press, Reporters without borders and Avaaz (Wikipedia, 2015). In addition, it was the target of a major Avaaz campaign, which obtained more than 800 thousand signatures (AVAAZ, 2013).

After much pressure, FACEBOOK withdrew, in March 2013, its name from the list of supporting companies. But still, it avoided to openly oppose CISPA (RT, 2013).

7. The News Feed algorithm

The platform news feed is one of its essential parts. It is customized to each user and its content is regularly updated with what is published in the timeline of their friends, as well as the pages they are interested in. The content displayed on this page is prioritized according to several factors. The posts receiving the most comments are emphasized, as well as those receiving the most likes, referring to trending topics, receiving a lot of likes in a short period of time, etc. So, as the user relates with this news, an algorithm uses these data to adjust the publications that should have more or less custom emphasis.

Featured Publications, which appear at the beginning of the list, better capture the user's attention. In particular, the closer they are to the top, the greater the chance of a user clicking on the publication. Therefore, the algorithm that defines the order in which the publications appear defines what will and what will not be displayed. It can suppress content that is of little interest, produced by persons not so close, and can highlight content promoted by close friends and certain pages. In fact, along with targeted marketing, this is one of the ways Facebook uses to monetize its business: corporations and other groups can pay for their publications to reach a broader range, that is, so that their posts have the highest priority in the news feed of a larger number of users.

The algorithm that prioritizes the content published in the news feed of each user, in addition to being an industrial secrecy, it is hard to be audited. It is probably a machine-learning algorithm – an algorithm that produces models from input data to make both predictions and decisions – thus adapting to the data it receives. Even though an authority can read its source code, it would not be

able to audit it without having all the immense body of data used to build its models. Nonetheless, several researchers have attempted to show the bias used in its content prioritization. In 2015, a group of researchers showed that the algorithm slightly tends to not highlight news that confront with the ideological positions of the users (BAKSHY *et. al* 2015). This produces the so-called "bubble effect" in which, in its limit, each user has access only to information that is familiar, enjoyable and that confirms their beliefs (PARISER 2011).

The contents viewed certainly influence the behavior of the users, as shown in the study previously mentioned, where the news feed had been manipulated (Kramer *et. al* 2014).

8. Social movements and the Facebook

During the Arab spring in 2010, Facebook gained notoriety as a tool of political action. Dodging the control of the government communications, the platform was used – as well as Twitter – to organize protests, disseminate photos and videos of the repression and denounce the Governments of the region, and to promote the general communication between people in societies in which the mainstream media is under strong influence of the Government. The 15-M (Spain) and the Occupy movements have also benefited from the Facebook connectivity.

GABY & CAREN (2012) report that the Occupy movement created over 1500 pages on Facebook to support the movement. ISKANDER (2001) states that in the protests in Egypt, there was a crossover between information circulating in social media and what was going on in the mainstream media.

After studying the use of Facebook in the protests against the FARC, NEUMAYER & RAFFL (2008) emphasize the role of social networks in the confrontation of oppressive or elitist forms of political decision, being especially important in developing countries, where social inequalities are greatest.

In Brazil, in June 2013, millions of people went to the streets on a wave of protests that swept the whole country. According to the National Confederation of Municipalities (*Confederação Nacional de Municípios*), on June 20, the peak of demonstrations, about 2 million people went to the streets in 438 counties (EBC, 2013). And the protests were organized mostly through Facebook.

During the World Cup in Brazil, the use of the platform was also intense. However, the monitoring and information request were also great. Facebook did not disclose data that allow us to evaluate it in greater detail, but between 2013 and 2014, Facebook received more than 4 thousand legal requests for personal information (FACEBOOK, 2014a).

9. Conclusion: reasons for concern?

The aim of this article was much more of raising questions from facts, in order to provoke a reflection on the risks in the use of the Facebook Platform for political activism.

What are the risks of the detailed personal information of 1.5 billion users being under the custody of a corporation that operates outside any public scrutiny? And if we consider that this Corporation directs all its resources to expand the process of collecting, processing and analyzing data and discovering the behavior patterns of those same 1.5 billion people? And that they also have a project of "digital inclusion" to add "other 5 billion" users to their platform? And that it also had its past associated with accusations of cooperation with the NSA and explicit support to CISPA? Is Facebook a safe platform for political activism?

What is there to say about the subtle possibility of manipulating people's values and visions of the world through manipulating their news feeds? What about the mysterious Facebook algorithm that, as if by magic, provides the user with the information he will read on his page on the platform?

Unfortunately for Internet enthusiasts, the utopia of a free, distributed, decentralized network, based on stand-alone servers has been undone. Instead, we are rushing into an Internet divided among very few communication platforms, controlled by a small handful of corporations. In the worst-case scenario, we can come to a global network that will be standardized and structured by only two giants: Google and Facebook – both acting as of tentacles of the global secret surveillance of the United States.

Lawrence Lessig stated, almost 10 years ago, in his famous book "The Code 2.0", that the network society is effected through intermediaries of human communication. Thus, programs, algorithms, protocols and standards should be open, transparent and fully auditable (LESSIG, 2006). The surveillance, control and disproportionate power of corporations regarding the citizen have become increasingly needy of such transparency.

As an alternative to Facebook, there is Diaspora, a group of freelancers that operate in the form of a free software-based network with open protocols. However, Diaspora has the equivalent to 0.03% of Facebook users (DIASPORA, 2014) and few attractions to be seen as a real alternative to the giant.

Is quitting the use of Facebook a solution? Whoever did this would not be giving up on all the social, political and economic relations that go through this social platform? Would the conscious use of Facebook – being aware that it is supervised, monitored and eventually even manipulated by those who know rich details of your life and that of your friends be a solution?

This conscious behavior would not be the same as living in panopticon, idealized by BENTHAM (1791). For Foucault, the main effect of panopticon is to induce in the inmate a state of conscious and permanent visibility that assures the automatic functioning of power, sustaining a power relation, regardless of the person who exercises it (FOUCAULT, 1991).

For Jeremy Bentham, the Panopticon would be the ideal prison: where the inmate is seen at all times by a guard that cannot be seen. Statesville Prison, USA.

Which commitment to society must a company offering an online communication platform have? Would it be feasible to have some kind of regulation, such as those that already exist in other types of media? Or would it be an improper intervention in a private venture in which people agreed with the "terms of use"?

The Internet is still expanding as global communication network, but it is more and more dependent on few companies who dominate the market and impose designs and patterns of communication. In this context, the *Internet.org* project should be viewed with many reservations. The protection of privacy and the creation of a secure, transparent and protected environment for political expression is still not a subject that attracts a lot of attention. In this regard, the authors hope that this article fulfills the role of generating a deep reflection on the use of Facebook as a platform for political activism.

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