Microtargeting and Electoral Segmentation in Advertising and Political Communication Through Social Networks: Case Study

Rodrigo Elías Zambrano
University of Seville, Spain

Milagros Expósito Barea
Universidad de Sevilla, Spain

Gloria Jiménez-Marín
Universidad de Sevilla, Spain

Irene García Medina*
Glasgow Caledonian University, United Kingdom

Abstract
Western political debate, like other areas, has entered the digital world. Political actors have had to adapt to new communication strategies linked to technology in general and to social networks in particular. A new debate has opened that has provoked changes in the traditional system of political communication with its different audiences. Thus, the configuration of negotiation and dominance in democratic systems is linked to technological change. This research aims to provide a descriptive interpretation of the role of social networks, specifically Facebook, by the Popular Party to win the elections of June 26, 2016 in Spain. How the strategies of microtargeting, data mining, and geolocation were hollowed out in order to capture the indecisive vote and thus obtain the seats necessary to expand the electoral advantage. To this end, a comparison will be made with Barack Obama's campaigns in 2008 and especially 2012, which were also carried out by The Messina Group (TMG) and whose results were a great success. The results show that Facebook is one of the social networks more successfully used in the campaigns.

Keywords: Campaign; Communication, Politics; Micro-targeting; Social media; Segmentation.

1. Introduction

1.1. Theoretical Framework
There is currently a paradigm shift in political communication that is reflected in a permanent campaign by political parties and the government whose feedback will be present in citizens’ use of social networks. The political debate has ceased to be exclusive of physical interpersonal communication and has made its way into the digital world. Political actors have had to adapt to new strategies linked to technological innovation and, more specifically, to the use of social networks, which have led to changes in this system of political communication. As Bimber states, the exercise of power and the configuration of advantage and domination in democracy are linked to technological change. In the areas of policy advocacy and social movements, the digital media revolution has already led to demonstrable changes in the structure and strategy of political organization around the world (2014: 130). However, Gerodimos and Justinussen note that while there is great potential for politicians to make use of the Internet to empower citizens and reduce the democratic deficit, political actors actually opt for a fairly conservative use of the web, while citizens prefer to remain consumers exclusively despite increasing levels of access, interaction and civic literacy that can create an “architecture of participation” (Jackson et al., 2009) that should force politicians to engage more meaningfully (2015: 114). These authors also echo that recent studies show how political campaigns on the web have become more effective in improving the reception and acceptance of political messages. This is confirmed when individuals can see the information disseminated and shared by their peers on social networks. Likewise, reinforcement seems less relevant when considering undecided voters, because they have not yet been persuaded. They seek the emotional and economic stimuli of the campaign although it has not yet been ascertained how users interact with specific political messages and what kind of content they consider most worthy of sharing (Gerodimos and Justinussen, 2015).

Murray and Scime (2010), make a study on microtargeting and electoral segmentation that demonstrates that data mining methodology can increase the efficiency of political campaigns, but they also suggest that, from a democratic theory perspective, overall participation can be improved by communicating more effective messages that better inform intended voters and motivate people to vote who might otherwise abstain. This methodology was used in the June 2016 elections in Spain by the Popular Party in an effective manner, despite the limited time to establish messages and prior analysis of data by some of the members of The Messina Group (TMG), the team in charge of the campaign on Facebook.
The key question here is how microtargeting, from the world of advertising and marketing, has become a fairly effective tool at the electoral level, as well as a principle of organization and way of life for many companies. Barbu (2014), defines it this way:

*Microtargeting can be defined as advanced psycho-geographic segmenting which is based on an algorithm determining a series of demographic and attitudinal traits to distinguish individuals for each targeted segment.*

*Microtargeting is well known in the US, especially because it is used during election campaigns, where with the help of companies that have huge databases containing information about the voters, and efficiently utilized, can become a most potent weapon for winning elections.*

Therefore, this strategy goes beyond the traditional postal code, the neighbourhood and the strictly demographic orientation. It is a new level that combines attitudes, available consumption data and demographic data to find people related to the message to be transmitted.

In this way, and as Agan (2007):

*Twenty years ago targeting based on zip code was revolutionary. Ten years ago targeting based on the household with only a general idea of what the response might be was considered leading edge. In micro-targeting we now operate at the sub-household level targeting individual people within the household and we know very accurately how they will respond.*

Microtargeting creates winning messages because they are personalized and specifically designed for a specific target, as well as being able to predict, in a certain way, the impact because they are messages delivered directly to people. Often these people can be very different demographically, but what unites them is the motivation for similar issues and the ability to predict what they will do.

When you target micrometerically you don't target a market, the public or voters, but very specific segments within those categories. In order to do this, you have to know the public perfectly to offer them content they want even before they even know they want it. In the case of election campaigns what is done is to try to adapt the messages of the political candidate to each group in the most approximate way possible so that they feel as close to the party and the candidate.

There are two main reasons that push companies, companies and governments towards the use of microtargeting. First, traditional advertising in conventional media is becoming less effective, maintaining an increasingly outdated approach. However, as technology advances, analytical capabilities improve at a lower cost, microtargeting becomes one of the most viable alternatives to more traditional approaches. Audiences can be studied in more detail and messages can be more effective. Second, the media on which the old model is based are entering a rapid decline, being replaced by more fragmented ones. It is increasingly difficult, if not impossible, to saturate consumers with a single message, hence the importance of messages actually reaching the right target.

Authors Korolova (2011), Barbu (2014) and Murray and Scime (2010) agree that social networks, and Facebook in particular, have a great deal of user information, data that has become fundamental pieces of information for microtargeting and geolocation. They all agree that simply by opening a Facebook profile they are providing the following references: name and surname, email, gender and date of birth in a first phase, which is followed by uploading images or photos that also provides information about the user, work and academic background, places where you have lived, basic and contact information, family and relationships, details about the user and important events, creating a relevant fingerprint for data mining and microtargeting strategies, as will be seen below.

2. Materials and Methods

The methodology used is based on the comparison of the strategies carried out by The Messina Group in the 2008 and 2012 Obama campaigns and the 2016 June campaign of the Popular Party. For them, the principles that define TMG's work and the importance of the use of social networks will be taken into account, although in the case study it only applies to one social network, Facebook.

2.1. Analysis

On November 6, 2012, the 57th presidential election in the United States would pit Mitt Romney against the Republican Party and Barack Obama against the Democratic Party. The electoral campaign that took place during the months prior to that date was marked by the use of innovative tools in terms of obtaining and managing voter data, as well as its relationship with the use of social networks and other forms of communication through the Internet. As Scherer (2012b) later told Time magazine, on November 4 of that year a group of senior advisors to Barack Obama's campaign agreed to describe to the magazine the work they had been doing for nearly two years on the condition that they did not cite their names and, above all, that nothing would be published until after the elections, which would be held two days later.

In 2010, the team of Obama, then President of the United States, set in motion "the biggest political machine ever built in the United States" according to the Financial Times (Bayo, 2012). Jim Messina, Obama's campaign manager, created a project based on data mining techniques and microtargeting applied to political communication, with the aim of achieving the re-election of the president in the 2012 elections. But he didn't do it from scratch. They had behind them the experience and work done for the 2008 campaign from which they already obtained a working system with digitized data that they could now perfect. They called the project Narwhal (for the little known cetacean called narval in Spanish), although other names like Dreamcatcher were also used. The Democrats would confront him with another similar system put into practice by the Republican Party, which they called the Orca project (Scherer, 2012b).
Messina was responsible for hiring an analysis team five times larger than that of the 2008 campaign, among which there was an abundance of computer scientists and mathematicians, with experts such as Harper Reed as CTO (chief technology officer) or Rayid Ghani as chief scientist. Ghani, who already had experience as an analyst in using data to, among other things, maximize the efficiency of sales promotions in supermarkets in the company Accenture Labs, proposed among other formulas to use Facebook pages to recruit potential voters that would then serve to launch messages to their contacts exponentially, according to Rutenberg (2013) in The New York Times.

"We're going to measure everything in this campaign," Messina told his team (Scherer, 2012b). For nearly two years, they were installed under the highest secrecy in an isolated, windowless precinct at the north end of Obama's Chicago election headquarters. Outside that place, which they began to call the cave, only Jim Messina knew the details of the work that was going on 24 hours a day, 7 days a week. When asked about the work of this team, campaign spokesman Ben LaBolt replied that they were working "on our nuclear codes" (Scherer, 2012b).

After the 2008 electoral victory, the campaign team recognized that one of its weak points had been the use of a multitude of unconnected databases. Thus, according to Scherer (2012a), the first thing the researchers did was to unify all the databases previously used by Obama's various teams in the campaign in which he overwhelmingly defeated McCain. Following the Times reporter's narrative, they devoted 18 months to it, getting a huge database that included information provided by donors, pollsters, volunteers or Democratic Party files, as well as data collected through social networks. Thanks to this, they obtained personal references from potential voters ranging from the most basic data such as age, sex or place of residence, to more complex ones such as their income level, political inclination, degree of electoral involvement, consumption profile, preferences or circle of personal relations (family and friends), among many others.

It should not be forgotten that in the United States there are American National Election Studies (ANES) which consist of a series of public opinion surveys financed with long-term public funds, designed to produce quality research data on voting, public attitudes and political participation. ANES has been conducted in nearly every federal election since 1948 and, in the process, has interviewed more than 47,000 respondents with more than 900 survey elements designed to assess individuals' attitudes about national elections and their results (Murray and Scime, 2010).

After that, and using very powerful computers, they introduced the millions of voter profiles created in predictive software, automatically studying the stimuli that could get those people to support Obama. And they detected that the tool that could help them contact each voter efficiently, accurately and personalized was one of those social networks: Facebook.

But Facebook was not the only digital tool they used to take advantage of the huge mass of data obtained, since for example the use of mailing (massive sending of emails) gave them great performance especially when it came to raising funds from individuals, thanks to which they obtained more than one billion dollars in small spontaneous donations, a figure never before achieved in a U.S. campaign. According to Scherer (2012b), the next step consisted of focusing their efforts on the so-called swing states, the 'swing states' that tend to oscillate in their support for candidates from one party or another, places where the difference in votes that usually separates Democrats and Republicans is scarce. In this case they detected 7 states that could be key in the final result¹, among which Ohio, Florida, Pennsylvania and Michigan stood out. In Ohio, for example, they concentrated their research on some 29,000 voters, of whom they studied in detail their reactions to each event, checking for example what type of voters varied their voting intention during the month of September observing, specifically, that most of them were originally supporters of Romney, which indicated Obama's progress in that state. On election day, Obama won in Ohio with 50.1% of the vote (New York Times, 2012).

Across the country, every night computers ran 66,000 simulations of Election Day, and the result of these calculations indicated the priorities to be followed on the next day, according to the probability of success it would grant in the aforementioned states in dispute (Scherer, 2012a).

Another key tactic in the run-up to the election was the launch of a computer application that automatically transmitted messages encouraging people to vote, attend a rally or any other activity related to the campaign. They managed to get millions of Americans to download it voluntarily, thus becoming (exponential) collaborators of the communication network of the campaign team. In this way, and confronting the evolution of the data on the reactions of potential voters, the 'cave' team observed that 20% of Facebook users who received a message sent by a 'friend'² did exactly what was asked of them (Bayo, 2012).

The complexity and detail of the calculations that were achieved reached levels never seen before. The example of another of the competing states, Florida, is very illustrative. According to data on potential voters residing there, the key was a very specific profile that was undecided: Miami-Dade County women under the age of 35. By concentrating their studies on these very specific profiles, they were able to observe that the people who had created these profiles were for the most part followers of certain television series, and so they took action to take advantage of this important information. In this way, they bought advertising space in programs such as Sons of Anarchy or The Walking Dead in which they launched campaign messages specially designed for this type of female and young profile.

---

¹ In the U.S. presidential election system, unlike in Spain, the winning candidate in each state, regardless of the difference in votes with his or her rival, gets the total number of pledges attributed to that state.
² In the social network Facebook, the contacts with which we establish a direct relationship are called 'friends', a link that must be approved by both profiles in order to be carried out.
Just on the opposite side of the country, on the west coast, the study of Facebook profiles identified another demographic group that could be fundamental to the development of the elections: women between 40 and 49 years old. After analyzing personal data such as preferences, tastes or consumer trends, it was observed that something very desired by them was to enjoy a dinner with the actor George Clooney. Thanks also to Obama's good relations with this actor, they were able to orchestrate a draw aimed at those voters in which the winner would enjoy an evening at Clooney's home in Los Angeles, accompanied by Barack Obama (Scherer, 2012a). The repercussion and success of this communicative action was enormous and, possibly, fundamental for the subsequent victory of the Democratic candidate by 49.9% against 49.2% of his rival Mitt Romney (New York Times, 2012).

Faced with such a good reception, the 'cave' team tried to apply the same strategy to see who could achieve a similar result among the men of the east coast. The result in this occasion was not so concrete, but of the options that appeared in the study with probabilities of success, the chosen one was the actress Sarah Jessica Parker. Thus, they repeated the formula with a draw among male voters that made it possible to enjoy dinner in the apartment in which the interpreter resides in the New York neighborhood of West Village, of course with the candidate Obama (Scherer, 2012a).

But not all the work on social networks was concentrated on Facebook. As Rogers (2012) told The Guardian in August 2012, three months before the elections, the database machinery observed that thousands of seemingly undecided voters were participating in the social network Reddit. Therefore, Obama's team and the President himself registered in it and began to participate and interact with users, achieving thousands of impacts in addition to generating significant visibility on the network. Especially significant was the presence of the president in his famous AMA's (acronym for 'ask me anything')⁴, in which people offer to answer live for a while to any question that the rest of the users want to ask them related to their specialty or their knowledge.

Three days before the election, with polls predicting a technical tie between the two candidates, Obama had the lowest campaign popularity rating of any U.S. president since 1980, when Carter was swept away by Bayo (2012). And with the country's unemployment rate, no other president had reached re-election since the aforementioned Reagan in 1984. In spite of this, undoubtedly helped by the strategy described above, Obama managed to impose himself in the great majority of the 'hinge states', among which were Ohio, Florida, Pennsylvania and Michigan, obtaining the electoral victory with 303 pledges against the 206 that Romney achieved (New York Times, 2012).

After the great success in the United States, The Messina Group (TMG), the company set up by Jim Messina to exploit the formula created for Obama's re-election, worked for David Cameron in Great Britain, Mauricio Macri in Argentina or Matteo Renzi in Italy, among other success cases. In Spain, in 2015, Jorge Moragas held the position of campaign director of the Popular Party for the general elections of December 20 of that year. Aware of the results obtained by TMG in various countries, he contacted them to contract their services, but the price of one million euros requested made the agreement impossible. Months later, due to the repetition of the elections scheduled for June 26, 2016, the possibility of collaboration with Mariano Rajoy's candidacy was reopened. In the new negotiations, this time it was Messina who reused the agreement as it was focused on advising David Cameron again in Great Britain to try to stop Brexit. After Cameron's own mediation and in exchange for 100,000 euros, TMG agreed to send a member of the team, Isabelle Wright, along with his assistant Ben Mallet (Negre and Mucha, 2016).

As Javier Negre told Antena 3, both arrived in Spain at the end of May as Wright herself showed by sharing photos on Twitter from the Palacio de La Moncloa, and joined the Moragas team that was made up of more than 50 people, of whom about 25 came to deal only with social networks. Isabelle Wright's main objective: to improve the use of these networks, especially on Facebook, to capture the undecided vote, this time in the Spanish provinces whose polling data indicated that the PP was close to getting some more deputies⁵, in most cases in struggle with the Ciudadanos party. These provinces were 12: Ourense, Salamanca, Lleida, Madrid, Toledo, Cuenca, Valencia, Alicante, Badajoz, Sevilla, Almería and Santa Cruz de Tenerife. For this, microtargeting was fundamental. First, undecided voters in those particular geographic areas were identified and individualized through their comments, tastes, shared material, and likes on Facebook. Once the first problem was solved, messages designed for that group of voters had to be created, messages that in this case were focused on the danger that Podemos could reach the presidency or that Ciudadanos would get more votes. It was encouraged to go out to vote, it should not be forgotten that it was the first time in Spain to repeat a general election since the first were on December 20, 2015 (Antena3.com, 2017).

The elected voters belonged to different geographical areas but had one thing in common: they were potential undecided voters so the messages had to refer to the need for their vote as a potentially useful vote, the Popular Party had lost about 12 seats by a few votes. After analyzing the databases and segmenting them into common profiles, a georeferencing was obtained that was crossed with the specific data obtained. Once the profiles were selected, ads were created to be launched, in this case short videos and easy to understand to be seen on Facebook. A person stopped in Toledo could receive a personalized video different from that of a businessman in Valencia. Thanks to Big Data, content could be sent on demand for each profile.

On the last day the PP opted for a model called reach and frequency that allowed to guarantee a concrete audience in a short period of time without bids to obtain the propagandistic space, which they used to launch the videos that had better reception, of course taking into account the profiles. Both of Pablo Iglesias, one of them doubting the euro after the result of the referendum on the Brexit, and another in the television program La Tuerka,

---

3 Obama personally participated in a Reddit WADA on August 29, 2012, The Guardian reported on its Web site that afternoon.
4 The Spanish electoral system is governed by the Sistema d'Hondt, which divides the number of votes cast for each party by the number of elected representatives in each constituency, distributing the commitments proportionally.
supporting the aggression to a policeman”. Last minute mobilising and motivating messages. The result: as Isabelle wrote on Twitter on 27 June, “Incredible result for the PP in Spain tonight. Public polls predicted 117 seats for the PP, TMG predicted 135, final result 137. Euphoria.” (Negre and Mucha, 2016).

4. Results

If we start from the rules of Jim Messina, CEO of The Messina Group, to carry out a successful work for a political campaign we have to bear in mind that: we have to think about social networks, not traditional media, messages must be effective, must be informed and inspired, as well as making calls to action, content must be thought for the channel in which it will be transmitted, make a thorough analysis of data and innovate 24 hours a day. Rules that Isabel Wright put into practice taking into account the budget and time for the Popular Party campaign.

What are the advantages of this strategy and where is its guarantee? In the first place, having such a well-defined target, the effectiveness of the message increases considerably since it is not being delivered to any user, but to those who are interested in the content of the message because it affects them directly. Secondly, it reduces competition with messages from other senders that may be of a more general nature, it should be borne in mind that surgical messages are created for strategic targets. And finally there is a real time control of the communication, it can be easily monitored.

The Popular Party managed to use Facebook in a totally effective way because it got 800,000 more votes than in the first elections of 2015. In addition to 14 seats, his strategy was designed to get 12 of those 14 final seats, so the investment in TMG was more successful than expected. While Podemos or Ciudadanos opted for social networks like Twitter, the Partido Popular chose one that works much better for targeting messages to a specific audience and for analyzing which PP voters were abstaining and which PP voters were unhappy with Mariano Rajoy’s policy but also did not see Ciudadanos as the best option, but as a useful vote to the right.

The first thing Jim Messina’s group did was to throw ten popular faces of the Popular Party on Facebook to see which candidates could be the prescribers. Of those ten faces, the result was that María Rajoy could not be one of them, but Soraya Saenz of Santa Maria and Pablo Casado, whose memes on the net had more impact on the search for the target they expected.

The comparative electoral results between the first and second elections show the triumph of microtargeting in the areas where it took place, the peculiarity is that not in all the vote was displaced from Ciudadanos.

| Table-1. Alicante election results |
|-----------------------------------|
| Alicante (12 escaños)             | 2015 | 2016 |
| PP                                | 4    | 5    |
| PSOE                              | 3    | 2    |
| C’S                               | 2    | 2    |
| PODEMOS-COMPROMÍS-EUPV            | 3    | 3    |

From: Ministry of the Interior of Spain

| Table-2. Almería election results |
|-----------------------------------|
| Almería (6 escaños)               | 2015 | 2016 |
| PP                                | 2    | 3    |
| PSOE                              | 2    | 2    |
| C’S                               | 1    | 1    |
| PODEMOS-IU-EQUO                   | 1    | 0    |

(2015 solo como PODEMOS)

From: Ministry of the Interior of Spain

| Table-3. Badajoz election results |
|-----------------------------------|
| Badajoz (6 escaños)               | 2015 | 2016 |
| PP                                | 2    | 3    |
| PSOE                              | 3    | 2    |
| PODEMOS-IU-EQUO                   | 1    | 1    |

From: Ministry of the Interior of Spain
Table 4. Cuenca election results

|               | 2015 | 2016 |
|---------------|------|------|
| **PP**        | 2    | 2    |
| **PSOE**      | 1    | 1    |

From: Ministry of the Interior of Spain

Table 5. Lleida Alicante election results

|               | 2015 | 2016 |
|---------------|------|------|
| **ERC-CATSI** | 1    | 1    |
| **CDC**       | 1    | 1    |
| **ECP**       | 1    | 1    |
| **PSC-PSOE**  | 1    | 0    |
| **PP**        | 0    | 1    |

From: Ministry of the Interior of Spain

Table 6. Madrid election results

|               | 2015 | 2016 |
|---------------|------|------|
| **PP**        | 13   | 15   |
| **PODEMOS-IU-EQUO-CLAS (En 2015 como PODEMOS y aparte IU-UPC)** | 8 + 2 | 8 |
| **PSOE**      | 5    | 7    |
| **C’s**       | 7    | 6    |

From: Ministry of the Interior of Spain

Table 7. Ourense election results

|               | 2015 | 2016 |
|---------------|------|------|
| **PP**        | 2    | 3    |
| **PSdeG-PSOE**| 1    | 1    |
| **PODEMOS-EN MAREA-ANOVA-EU** | 1 | 0 |

From: Ministry of the Interior of Spain

Table 8. Salamanca election results

|               | 2015 | 2016 |
|---------------|------|------|
| **PP**        | 2    | 3    |
| **PSOE**      | 1    | 1    |
| **C’s**       | 1    | 0    |

From: Ministry of the Interior of Spain
If a comparison is made of the results obtained by the Partido Popular in the 12 areas in which the microtargeting strategy was applied, it can be observed that the seats obtained from more did not belong exclusively to Citizens, some of them were from the Partido Socialista and Podemos. Only in cities like Seville, Toledo, Salamanca or Madrid, where he got an extra seat from the expected stolen from Podemos, is where Citizens lost in favor of the People’s Party. So in Almeria, Ourense and the aforementioned Madrid, the party that was harmed was...
the Coalition Podemos, Izquierda Unida and Equo. In Alicante, Badajoz, Santa Cruz de Tenerife and Lleida it was the Socialist Party.

5. Discussion and Conclusions

As the world of communications continues to fragment, as people's lives and interests focus and specialize, and consumer personalization expectations continue to rise, microtargeting is emerging as the most powerful technique for politicians and businesses to succeed (Agan, 2007: 11).

In this work we have analyzed above all the use of a particular social network, Facebook, but the phenomenon of course is much more complex, and everything points to this complexity will increase. The access, storage, management and use of the so-called big data, that huge sum of personal and professional data of the people who use the Internet, is called to be fundamental in the success of communication strategies, persuasion and sales in the present and, above all, the future. This situation offers enormous potential, both to adapt the messages to our tastes and searches on the net, and to manipulate us no longer by lucubrando, but by knowing de facto thousands of objective data about our lives, thoughts, relationships, purchases, passions, weaknesses or desires, whose digital trail we leave daily at the mercy of who has access to them.

The case studies are a sample of how this use is changing the rules of the game, offering facilities or 'marked cards' to those who can afford to hire those who know how to develop these techniques and whose chances of success are very high.

One question this raises is whether such access and storage should be regulated and, of course, whether legislation should be passed on the use of such data without the consent of the user, today a voter, tomorrow a consumer, and always an influence. Today, in a way that until a few years ago only showed science fiction.

References

Agan, T. (2007). Silent marketing: Micro-targeting. Schoen & Berland White Paper: Penn. http://www.wpp.com/~media/sharedwpp/marketing%20insights/reports%20and%20studies/psb_silent%20marketing_mar07.pdf

Antena3.com (2017). Isabelle Wright, la gurú que impulsó la campaña de Mariano Rajoy para el 26-J. Available: http://www.antena3.com/noticias/espana/elecciones-generales/26-j/isabelle-wright-la-guru-que-impulso-la-campana-de-mariano-rajoy-para-el-26-j_201607055777b7ac04beb28a1dc3ae139.html

Barbu, O. (2014). Advertising, microtargeting and social media. Procedia – Social and Behavioral Sciences, 163: 44-49. Available: https://www.sciencedirect.com/science/article/pii/S187704281406385X

Bayo, C. E. (2012). El arma total de Obama para vencer a Romney: un megacerebro informático que controla Facebook”. Recuperado de. Available: http://www.publico.es/actualidad/arma-total-obama-vencer-romney.html#ixzz2WBWjzUjG

Gerodimos, R. Y. and Justinussen, J. (2015). Obama’s 2012 facebook campaign: Political communication in the age of the like button. Journal of Political Marketing, 12(2): 113-32.

Jackson, Nigel, A., Lilleker and Darren, G. (2009). Building an architecture of participation? Political parties and web 2.0 in britain. Journal of Information Technology and Politics, 6(3-4): 232–50.

Korolova, A. (2011). Privacy violations using microtargeted ads: A case study. Journal of Privacy and Confidentiality, 3(1): 27-49.

Murray, G. R. Y. and Scime, A. (2010). Microtargeting and electoratesegmentation: Data mining the american national election studies. Journal of Political Marketing, 9(3): 143-66.

Negre, J. Y. and Mucha, M. (2016). La gurú de San Francisco que hizo ganar las elecciones a Mariano Rajoy. Available: http://www.elmundo.es/cronica/2016/07/03/577791f0ca474159d04e4609.html

New York Times (2012). President map. Election 2012. Available: https://www.nytimes.com/elections/2012/results/president.html

Rogers, K. (2012). Barack Obama surprises internet with Ask Me Anything session on Reddit. Available: https://www.theguardian.com/technology/us-news-blog/2012/aug/29/barack-obama-ask-me-anything-reddit

Rutenberg, J. (2013). Data you can believe in. The obama campaign’s digital masterminds cash in. Available: http://www.nytimes.com/2013/06/23/magazine/the-obama-campaigns-digital-masterminds-cash-in.html

Scherer, M. (2012a). How Obama’s data crunchers helped him win. Available: https://edition.cnn.com/2012/11/07/politics/obama-data-crunchers/index.html

Scherer, M. (2012b). Inside the secret world of the data crunchers who helped obama win. Available: http://swampland.time.com/2012/11/07/inside-the-secret-world-of-quants-and-data-crunchers-who-helped-obama-win/