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Political advertising on social media: Issues sponsored on Facebook ads during the 2019 General Elections in Spain

Abstract

Facebook's advertising platform provides political parties with an electoral tool that enables them to reach an extremely detailed audience. Unlike television, the sponsored content on Facebook is seen only by the targeted users. This opacity was an obstacle to political communications research until Facebook released advertiser-sponsored content in 2018. The company's new transparent policy included sharing metadata related to the cost and number of impressions the ads received. This research studies the content sponsored on Facebook by the five main national political parties in Spain during the two General Elections held in 2019. The research corpus consists of 14,684 Facebook ads. An extraction algorithm detected the key terms in the text-based messages conveyed in the ad. The prominence of these topics was estimated from the aggregate number of impressions accumulated by each term. Different content patterns were assessed following three categories: user mobilization, candidate presence, and ideological issues. PSOE and PP positioned themselves more toward calls to action. Podemos had the greater number of issues related to policy among the most salient topics in its advertising. Ciudadanos' strategy focused more on its candidate and mobilization. Vox sponsored few Facebook ads, and they barely included policy issues. Spain was a highly prominent term in all parties' campaigns. Ciudadanos shared the middle ground on the ideological axis: they promoted social issues more aligned with left-wing parties as well as economic topics usually advocated by the right-wing. Overall, our results point to a greater emphasis on

candidates rather than issues.

Keywords

Facebook ads, political advertising, 2019 Spanish General Elections, political issues, ideological content, national identity.

1. Introduction

Political advertising allows parties to control the message they send to voters (Kaid, 2004). This feature becomes critical in electoral campaigns where the electorate receives information from multiple sources and there is growing demand for political information. For parties, paid media provide a channel to convey messages that have been shaped by their

strategists (Holtz-Bacha & Kaid, 2006; Maarek, 1995). Among mass media, television has been studied the most in political advertising given its extensive coverage (Fowler *et al.*, 2021; Johnston & Kaid, 2002; Ridout *et al.*, 2014).

Social media advertising is currently part of the political marketing toolkit (Kreiss, 2016). If its coverage could be considered more restricted than television, it has the advantage of targeting users through highly detailed selection (Dommett & Power, 2019; Kim *et al.*, 2018; Kreiss & McGregor, 2018). However, unlike television, electoral messages are only shown to targeted users (Sinclair, 2016). This situation changed in May 2018 when Facebook made sponsored content public in response to a major data privacy crisis (Cadwalladr & Graham-Harrison, 2018).

This content release provides valuable data for political communications research. One limitation of studying televised advertising lies in the broadcast system: a gap between the message disseminated and measuring its actual exposure. Assessments on the impact of TV are, ultimately, based on surveys (Mytton *et al.*, 2016). Nevertheless, digital media, due to their configuration, track the exact response of all users. For Facebook advertising, the Ad Library not only opens the content sponsored by advertisers, but also provides metadata about its impact, cost, and target. Although these data are not supplied as an exact number, they can be useful in analyzing different strategies at spot and advertiser level, bridging the gap between media content and audience exposure.

This research studies Facebook advertising for the Spanish General Elections in 2019. These ballots were among the first to benefit from Facebook's transparency policy on advertising. We analyzed a database of 14,684 ads posted by the five main national parties during both campaigns. The paper furthers previous research on this corpus (Calvo *et al.*, 2021; Cano-Orón *et al.*, 2021). It focuses on the topics conveyed in the ads in relation to three campaigning aspects: user mobilization, candidate presence, and ideological issues.

One original contribution of this research relies on its methodology. To find the topics, we employed the Keyphrase Digger algorithm (Moretti *et al.*, 2015). This software was developed to analyze Italian texts, and this study is –to the best of our knowledge– the first in which the algorithm has been applied to Spanish texts. The research assesses the prominence of these topics in the campaigns by linking the algorithm's outputs to the metadata obtained from the Ad Library.

The paper is structured as follows. A preliminary review of research literature regarding political advertising on Facebook is carried out. We then introduce the political scenario of the 2019 electoral cycle in Spain. After that, the corpus and the research methodology are described, and the results presented. The discussion tackles the implications of our study regarding political advertising research. The paper concludes with comments on the limitations of the study and points to some lines for future research.

2. Literature review

2.1. Political advertising on Facebook

Facebook advertising has become part of the electoral campaigning toolkit (Dommett & Power, 2019; Kreiss, 2016; Lilleker, 2015; Sinclair, 2016). Its model links advertisers to audiences by inserting sponsored content into the user's newsfeed. Like mass media, this platform sells space to advertisers to capture users' attention. However, unlike mass media, Facebook allows advertisers to target audiences in granular detail thanks to the personal information given by users in their biographies and left by them in their digital footprints (Boerman *et al.*, 2017; Dommett & Power, 2019). User attributes such as age, sex, location, cultural interests, political partisanships, commercial brands, or favorite sports are used to define the target to whom specific content will be sent (Kim *et al.*, 2018; Kreiss & McGregor, 2018; Sinclair, 2016). Facebook also provides an estimate of the reach once the target audience

is decided, allowing advertisers to control their costs in advance. The platform allows companies to run low-budget advertising campaigns in the same manner as those who are more ambitious (Anstead, 2017; Dobber *et al.*, 2017). The output is also tracked in real-time, so campaigners can implement tactical decisions on the fly.

The persuasive power of this kind of advertising cannot be underestimated. Matz *et al.* (2017) studied the effect of tailoring the ad message based on users' psychological traits¹. They conducted a series of field experiments reaching 3.5 million users. Their conclusions suggested that matching the content –including persuasive appeals to individuals' psychological traits– influenced user behavior in terms of clicks and purchases. In political communications, there has been some research to clarify these microtargeting effects. Krotzek (2019) evaluated the influence on political behaviors when the content was adapted to the psychological profile. This researcher found evidence of an improved ability to assess candidates when this congruence between ad content and user profile was introduced, but not in changing voting decision. Other scholars have explored resistance effects when the users are aware of being targeted with tailored political content (Kruikemeier *et al.*, 2016). In some cases, this awareness has been proved to reinforce a dynamic of users refraining from acting spontaneously (Dobber *et al.*, 2019).

The content distribution on Facebook follows a different pattern to the mass media: sponsored posts are only shown to the targeted users in their personal feeds. Unfortunately, this opaque advertising model makes it a privileged vehicle for spreading fake news and disinformation (Gray *et al.*, 2020; Lukito, 2020). As with offline advertising, negative appeal content on this channel exerts a strong impact on users (Yousef *et al.*, 2021). Facebook ads have proved effective when the intention is to seed division among the electorate (Ribeiro *et al.*, 2019). This point becomes even more worrying when this advertising can be promoted by anonymous campaigners (Kim *et al.*, 2018). When negligent practices on Facebook regarding protecting user privacy in critical electoral campaigns were revealed in 2018, the whole advertising model was strongly questioned by global public opinion (Cadwalladr & Graham-Harrison, 2018). One measure immediately taken by the company was to publish the sponsored content openly. In May 2018, Facebook released the Ad Library in which any user could consult the ad content paid by any advertiser. Political parties were immediately required to comply with this transparency policy.

Before the release of the Facebook Ad Library, studying political advertising on the platform was difficult. Despite this situation, Ridout *et al.* (2021) analyzed a large corpus of Facebook Ads collected by a marketing research firm that had been sponsored for US Senate campaigns in 2018. They found a relationship between the goals intended by the ads and the time they were posted, which was more intense as Election Day drew closer. Based on an extensive analysis, Gitomer *et al.* (2021) concluded that geographical segmentation played a key role in running Facebook ads in the US campaigns. This kind of advertising was usually concentrated in a single state or in a wide range of states, but barely addressed users in a small group of states.

Since the Ad Library was opened, rich insights about this social media advertising tool have been unearthed. López Ortega (2021) studied microtargeting practices on 4,091 Facebook ads from general elections held in four European countries. His conclusions suggested a slight difference in terms of topic diversity between microtargeted and non-microtargeted ads, but not a significant difference in terms of negative content. Schmøkel and Bossetta (2022) carried

¹ This issue was put under the spotlight by Cadwalladr and Graham-Harrison (2018). They revealed the practices carried out through Facebook advertising by the electoral consulting firm, Cambridge Analytica, in supporting Brexit. Messages had been tailored based on users' psychological traits, and a portion of those posts contained questionable content. This article resulted in an enormous scandal for Facebook. Although the main legal problem was related to user data privacy, this misuse of the advertising platform raised a lot of concern on both sides of the Atlantic, and was pivotal in making this company more accountable.

out a computer-based visual analysis of 1,279 unique images belonging to a 90,342-image corpus from ads sponsored for the 2020 US primaries. According to their findings, the candidates most often displayed happiness and calm in their facial expressions, and when the ads portrayed the opponents, these were usually presented with emotions such as anger, sadness, and fear. In addition to this focus on content, research has also considered regional segmentation.

Significant research was conducted by Fowler *et al.* (2021), who compared offline and online advertising promoted by a large set of US candidates to different ballots in 2018. This study provided evidence of a greater use of the Facebook platform than TV advertising by challenger and down-ballot candidates due to the lower costs of running social media ads. As a result, voters were exposed to information about more candidates on Facebook than on TV, resulting in a desirable development for democracy. However, when studying the content advertised by the same candidate on both channels, their findings showed that Facebook ads engaged in significantly fewer attacks toward the opponent than on television, less issue discussion, and increased partisanship. These three differences pointed toward to social media ads being used more to mobilize existing supporters than persuading marginal voters. According to these authors, this main function could be considered a relevant shift regarding TV advertising.

2.2. General Elections in Spain during 2019

The Spanish elections held in 2019 benefited from the Facebook's new advertising platform transparency policy. That year was electorally intense in Spain, as there were two General Elections, along with European and local ballots. These electoral dates were preceded by an intense period of events that ended the national governance held by Partido Popular (PP, People's Party) –the conservative party. The bid by the Catalonian government to call an independence referendum in 2017 triggered unprecedented territorial tensions across the whole country. The following year, some of the PP's high-ranking figures were convicted of corruption. This drove the major opposition party, Partido Socialista Obrero Español (PSOE, Spanish Socialist Workers' Party) to call for a vote of no confidence in the Parliament. It was supported by the Unidas Podemos coalition (UP, United We Can) and some regional parties, particularly from Catalonia and the Basque Country. President Mariano Rajoy was forced to resign, and Pedro Sánchez, from PSOE, was appointed president (Simón, 2020a).

A General Election was called for April 28, 2019 and the campaign was considered highly polarized (Simón, 2020a). Two new national parties had consolidated a few years before: Unidas Podemos and Ciudadanos (Citizens). The former arose from a coalition between Podemos (We can) and Izquierda Unida (IU, United Left) and it occupied the far-left position on the political spectrum, whereas the latter aspired to hold the middle ground between the historical national parties, PSOE and PP. The previous polls revealed the increase of Vox (Centro de Investigaciones Sociológicas, 2019). This party supported political options positioned more to the right than PP. The ballot results made a very fragmented parliament in which the five national parties were represented. Negotiations to form a government were unsuccessful, and a new General Election was called for November 10, 2019. The results of this second ballot were no better than the first. However, PSOE and Unidas Podemos signed a coalition agreement that was supported by some regional parties, so that Pedro Sánchez was finally invested as president.

Having introduced Facebook as the political advertising media and the context of the electoral campaigns under scrutiny, we now propose a set of research hypotheses.

2.3. Research hypotheses

One aim of electoral advertising is promoting the vote for a particular option. Law (2021) quantified the different effects of TV political ads to switch the vote and to cast the ballot. His

findings suggested that exposure to a candidate's advertising increases the probability of choosing that option, and that advertising influenced the mobilization to vote the most. Focusing on the targeting problem inherent to mass media, Claibourn and Martin (2012) confirmed the difficulty of mobilizing groups through TV ads. According to their research, selective mobilization can be achieved more easily when messages are aimed at less ideologically defined groups and when they highlight symbolic rather than material appeals of the issue. Hence, aspects such as the ad's tone, message, and target are key in mobilizing the audience. In this regard, some scholars have pointed to the use of the negative tone addressed to opponents in advertising intended to influence voting decision (Goldstein & Freedman, 2002).

Mobilizing voters through social media platforms has been researched extensively in the field of political digital communications (Baumgartner & Morris, 2010; Lilleker & Koc-Michalska, 2017; Magin *et al.*, 2017). Nevertheless, there is less evidence for assessing mobilization messages conveyed in social media advertising. As mentioned above, Fowler *et al.* (2021) suggested that online advertising could be considered more oriented to mobilizing party supporters rather than persuading or informing on electoral proposals in a clear difference to televised ads. Following these authors, we expect the majority of messages disseminated via the Facebook advertising platform in the 2019 campaigns will be intended to mobilize users. Hence, we propose the following hypothesis:

H1. Calls to action will be most prominent in the Facebook ad campaigns of each party during the 2019 Spanish General Election campaigns.

One major distinction in the research on televised political advertising content consists of whether the focus points to the party's candidate or political issues. The seminal study led by Patterson and McClure (1976) found the prevalence of *issue-oriented* over *candidate-qualities* in the TV political advertising. This was explained as a strategy to reach those viewers less informed about politics through news coverage. These results have been confirmed by subsequent research both in the US (Kaid, 2004, 2012) and in European countries (Holtz-Bacha, 2000; Scammell & Langer, 2006). Ridout *et al.* (2014) analyzed the TV political ads aired in the US between 1998 and 2012, and found there was a greater incidence of topics linked to issues than to candidates' qualities or presentation in all campaigns.

It could be expected that these findings about the prevalence issue on TV advertising also be found in social media advertising, given both media attract an audience seeking entertainment. Following this line of reasoning, we hypothesize that the topics regarding political issues in the texts of the Facebook Ads sponsored during the 2019 Spanish campaigns will be more prevalent than the content regarding candidates.

H2. Topics regarding policy issues will be more prevalent than topics regarding candidates for each Facebook advertising campaign.

Turning our attention to the issues promoted during the Spanish campaigns in 2019, it must be remembered that this year saw the consolidation of a multiparty system (Simón, 2020b). Two political axes had traditionally dominated the political discourse in Spain, one for the classical left-right ideology, and the other for the center (Simón, 2020a). The previous bipartisanism had favored a clear division of issues between the main parties: PP used to emphasize topics regarding the economy and job creation, whereas PSOE tended to focus more on issues related to the welfare state and social rights (Valera Ordaz, 2015). Regarding social issues, the right wing in Spain has been historically associated to be more traditionalist and conservative, whereas the left has been more liberal and progressive. The territorial axis also participated in this left-right distinction, as Spanish nationalism had been more associated with the right and regional nationalism with the left (Simón, 2020a). A third axis could be added to this framework: the division between old and new parties. The newcomers capitalized on dissatisfied voters and the lack of trust in political institutions, which was manifest in the early 2010s (Orriols & Cordero, 2016). In this scenario, Ciudadanos, which had

positioned itself as a centrist party, ended being perceived closer to right-leaning positions due to their strong posture on national identity. As a result, from the standpoint of the ideological spectrum, there were two clear political blocs: PSOE and Unidas Podemos as the left-wing options, and Ciudadanos, PP, and Vox on the right (Simón, 2020a). Considering the background to the 2019 General Elections, we consider the following hypothesis for our research:

H3. In each Facebook advertising campaign, the agenda of PSOE and Unidas Podemos will mainly highlight topics related to social rights and the welfare state, while PP and Vox will mainly stress topics related to the economy and national identity, and Ciudadanos will focus on those shared across both agendas.

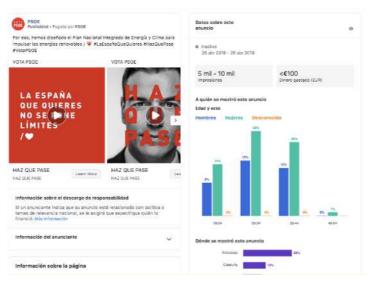
3. Materials and methods

3.1. Corpus

The research corpus comprised the Facebook and Instagram ads sponsored during the two General Election campaigns in Spain by the five main national political parties: PSOE, PP, Unidas Podemos, Ciudadanos, and Vox. As the Unidas Podemos coalition had no Facebook advertiser account, we included the ads promoted individually by the two coalition parties (Podemos & IU). This corpus is limited to the ads promoted by the main accounts of the national parties. The campaigns run by local divisions or other partners have been excluded.

The API for managing the Facebook Ad Library had several difficulties to get reliable data (Mozilla, 2019). For this reason, we opted to code a Python-based web scrapper to download the data directly from the Facebook Ad Library website. We focused only on the main accounts of each party; we did not consider party regional accounts. For each ad, we got the text, the image, the schedule indicating when it was active, the spend, and the number of impressions (see Figure 1). The downloading process was done in two stages: the first in May 2019 for the ads sponsored for the April 28 General Election, and the second in the last week of November 2019 for those of the November 10 General Election. In total we obtained 14,684 ads.

Figure 1. Example of the information provided by the Facebook Library for one sponsored ad.



Source: Facebook Ad Library.

We then identified the different text-based messages sponsored by each party in each campaign. We considered the text-based message of an ad as the combination of two

elements: the content written in text format and the eventual content written in the ad image. Here, we distinguished 1,754 unique text-based messages in the main corpus. Table 1 provides the description of the corpus.

Table 1. Number of downloaded ads and number of different text-based messages by party and by General Election.

	Apr 28 GE			Nov 10 GE			Total	
	Number of Ads	Different text-based messages	%	Number of Ads	Different text-based messages	%	Number of Ads	Different text-based messages
PSOE	336	146	43.45	285	244	85.61	621	390
PP	3,609	766	21.22	908	21	2.31	4,517	787
Ciudadanos	6,098	217	3.56	2,462	44	1.79	8,560	261
Podemos & IU	392	254	64.80	550	47	8.55	942	301
Vox	0	0		44	15	34.05	44	15
Total	10,435	1,383	13.25	4,249	371	8.73	14,684	1,754

Notes: GE: General Election. Source: Own elaboration.

3.2. Most salient topics

To identify the topics in each parties' campaign, we used the Keyphrase Digger (KD) algorithm proposed by Moretti *et al.* (2015). KD is an automatic keyphrase detector that combines statistical procedures with linguistic information. This kind of software provides a list of terms meant to capture the main important concepts discussed in a given text (Turney, 2000). Keyphrase is usually one word, but can also include two or more terms. The KD algorithm can evaluate keyphrases inside a set of documents. Furthermore, KD is ready to be used for English, Italian, and German texts, and provides an easy way to set up new languages. We made use of this functionality to analyze the ad text-based message corpus and, to the best of our knowledge, our research is the first implementation of KD for Spanish texts.

KD involves several stages. First, the text is processed by a *tokenizer*, which separates the words as different units. Using Part-of-Speech (PoS) tagging, each unit is then classified according to its grammatical function, e.g., noun, verb, adjective, etc. The researcher then decides the PoS patterns considered potentially relevant that will be assessed in the document. When the pattern includes two words, it is referred to as a *bigram*. For example, if we consider relevant the expression *banda terrorista* (terrorist group), the PoS pattern *noun+adjective* should be defined. This implies that all bigrams whose PoS tag matches this pattern will be considered for the following KD steps. These will be the potential topics or keyphrases associated with that text.

After this preprocessing, KD is ready. The algorithm computes a relevance score for each combination that matches the selected PoS patterns. That value is the KD score. Some of the parameters that the algorithm considers are the position of the first occurrence, the number of keyphrases to assess, and the function to perform the text vectorization. This function depends on the way the texts are assembled. In our case, we considered each ad's text-based message as one document distributed according to each party and both campaigns. Hence, we had two electoral campaigns and five political parties. However, as Vox did not sponsor any Facebook Ads in the first campaign, we ultimately had nine sets of text-based messages.

This document configuration led us to compute the text vectorization function through the Term Frequency/Inverse Document Frequency score (*tf/idf*). It combines the frequency of a term in a document with the inverse frequency of that term across a set of documents. The higher the *tf/idf* score, the more relevant that term is in that particular document considering all the documents.

As we wanted to explore all the possible meaningful concepts in the ads' text-based messages, we included hashtags and emoticons in the tokenization as relevant terms for the algorithm. The PoS patterns selected for our analysis were: noun, verb, adjective, proper noun, adjective+noun, proper noun+adjective, noun+verb, and proper noun+verb. For bigram patterns, the algorithm considers the different order of both words equally. Finally, we set the algorithm to extract the 200 most relevant keyphrases for each set of Facebook Ads. When reviewing the results after running the KD algorithm for the first time, we missed some bigrams that are key to our research. This was the case, for instance, of "Unidas Podemos." To solve this issue, we included the following PoS patterns in the algorithm: verb+adjective and auxiliary verb+adjective. After that, we ran the KD algorithm.

To estimate the salience of every keyphrase, we used the information about the impressions of the ads. We estimated the number of impressions achieved by a particular keyphrase through the aggregated sum of the impressions of the ads where that keyphrase was present in the text-based message. However, the Ad Library provides the data regarding impressions in ranges. Some of them are 50 mil-100 mil (50,000-100,000 impressions), 5000-10 mil (50,000-100,000), and 4K-5K (4,000-5,000). As can be seen, there were several formats of showing this information. As we wanted to compare the topics according to their salience in the ad campaign, we decided to allocate the minimum value of the range as the number of impressions achieved by an ad. For instance, in the case of the 4,000-5,000 range, we considered the number of impressions to be 4,000. The only exception was the first range, which extended up to 1,000 impressions. In this case, the allocated quantity was the midpoint, namely 500. The number of impressions calculated cannot therefore be considered the exact number achieved by that keyphrase. It only allows us to compare the positions among the keyphrases, and to get an estimation of the impact achieved by a particular keyphrase.

Finally, we did a manual review of the results. We found that some topics were replicated in the output list. Most times, this problem corresponded to the candidate's first name and the bigram of their first name and surname. For instance, in Ciudadanos' first campaign, the keyphrases *albert rivera*, *albert*, and *rivera* obtained the same number of impressions. Evidently, these keyphrases refer to the same person –Ciudadanos' candidate in this case. The procedure to reduce similar keyphrases to one was performed by keeping the keyphrase with the highest number of impressions. In the event of keyphrases with the same volume, we retained the term with the highest KD score. This manual procedure needs to be performed as the algorithm extracts the keyphrases automatically. Figure 2 shows the procedure followed in this research.

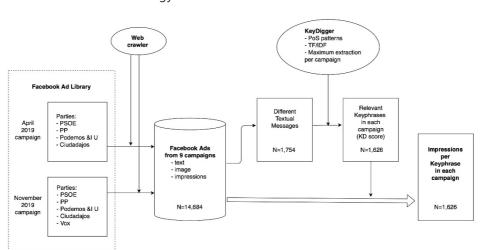


Figure 2. Research methodology.

Source: Own elaboration.

4. Results

There were two campaigns in which the KD algorithm did not need to apply the topic extraction limit. These campaigns were PSOE in April (179 keyphrases) and PP in November (47 keyphrases). In both cases, the messages were primarily conveyed in videos and images. The complete list of the relevant keyphrases sum up 1,626 terms.

The most viewed keyphrases for PSOE reveals the prevalence of electoral slogans and calls to vote. In the first campaign, PSOE launched two slogans: *la España que quieres*, the Spain that you want, and *haz que pase*, make it happen. Keyphrases associated with these claims ranked first in terms of visibility: 11.6m impressions for the first, and 9.5m for the second. In the November campaign, the electoral slogan was *ahora sí*, now yes, as it evoked the second round of the General Elections. This claim ranks third and fourth place with 3.5m estimated impressions.

There is a strong presence of 'Spain' in both campaigns: in April, it ranked first and in November, it was fifth. In the first campaign, the most viewed keyphrase associated with policy was *política migratoria*, migration policy, with 589.5k impressions. After this issue, we find terms promoted in April regarding social issues (*igualdad*, equality, *mujeres*, women, *reto demográfico*, demographic challenge), education (*educación*, education, *educación gratuita*, free schooling), and job issues (*salario mínimo*, minimum salary, *microcréditos*, microcredits). In November, the policy issues present in the ads were related to the job market (*empleo*, job, *estabilidad*, stability, *salario mínimo*, minimum salary) and social issues (*igualdad*, equality, *jóvenes*, youths, *pensiones*, pensions, *mejores oportunidades*, best opportunities). In both campaigns these keyphrases were much less promoted than calls to vote or the electoral slogans.

PP prioritized their slogan in both campaigns. In April, their electoral claim was *valor seguro*, safe value, and in November it was *por todo lo que nos une*, for everything that unites us. The results show that the most viewed keyphrases corresponded to these mottos: *#valorseguro*, #safevalue, which amounted to 35.5m impressions, and *une*, it unites, with 1.8m impressions. We see a large gap between the third and fourth-placed keyphrases in both campaigns. In April, third position got the twice the impressions the fourth keyphrase did, and in November the difference of these positions was more than three times. The wide majority of the PP's top 20 keyphrases most viewed in April are related to the slogan, the call to vote, and the party, save for three keyphrases: *empleo*, employment (7.3m impressions) *pedro sánchez*, Pedro Sánchez (6.6m impressions) and *paro*, unemployment (5.1m impressions).

Looking at the whole list of results, the policy issues developed by PP in April were mainly related to job (autónomos, self-employees, emprendedores, entrepreneurs, in addition to employment and unemployment), education (educación, education, modelo educativo, educative model, red pública, public network), social (mujeres, women), and economic (pensiones, pensions, impuestos, taxes). In November, we found keyphrases related to education (universidad, university, capacitación, training), job (trabajo, job, empleado, employee, autónomo, self-employee), social (vivienda, household, hipoteca, mortgage, alquiler, rental), and economic (pensiones, pensions, impuesto, tax). In this latter campaign, all these issues had very little overall impact: the maximum number of impressions achieved by a political issue was 208k, whereas the top keyphrase got 1.8m.

'Spain' is located among the top 20 terms in both PP's campaigns, but it doesn't have the prominence we find in PSOE's results. Furthermore, the whole keyphrase ranking contains all Spanish provinces, suggesting they implemented geographic targeting. Probably the most remarkable finding in the April campaign is the presence of PSOE references over their own candidate: Pedro Sánchez achieved 6.6m impressions, Zapatero (the previous Spanish president who was from PSOE) 3.5m, and *moncloa* (a term that refers to the government as it

is the name of the president's official residence) 1.6m, whereas Pablo Casado, PP's candidate, recorded just 516k impressions.

In the case of Podemos & IU, the topic dissemination is distributed equally in both campaigns. In April, the top keyphrase was *unidas podemos* (52.4m impressions) and, in November, it was *#quientienequedormir*, #whohastosleep (9.2m impressions, second position). The content associated with this hashtag is a video in which Podemos claimed to prioritize the welfare of the population. The hashtag is also related to Pedro Sánchez's declaration that he would distance himself from Podemos' leader.

Among the top 50 keyphrases deployed by Podemos & IU, there are 15 promoting policy issues in the first campaign and nine in the second. They are related to job market (*empleo*, employment, *digno*, dignified, *estable*, stable, *salario*, salary, *precariedad*, insecurity, *desempleo*, unemployment, *contrato temporal*, temporal contract), social issues (*prestación*, compensation, *mujeres*, women, *familia*, family, *violencias machistas*, sexist violence), and economic issues (*banca pública*, public banking, *rescate bancario*, bank rescue). There were also terms appropriated by the party discourse since its origins, as *grandes fortunas*, great fortunes, and *grandes patrimonios*, great patrimonies. In November, we found very few repetitions, such as women, along with a new pool of keyphrases (*recortes*, cuts, *madres*, mothers, *abuelas*, grandmothers, *desaceleración*, deceleration, *vivienda digna*, dignified household, *alquiler*, rental and *cambio climático*, climatic change).

The term 'Spain' is prominent in Podemos & IU's April campaign (11th position), whereas it was absent in November. However, we found one term related to national identity ranking high (14th position) as a response to Vox's leader: *patriotismo*, patriotism. The main difference between the two campaigns was the strategy regarding the coalition candidate. In April, Podemos' candidate Pablo Iglesias was in 23rd position (14.4m impressions), and in November he held fourth position (7.9m impressions). Furthermore, the second candidate Irene Montero was absent in the April list, but was in 16th position (2.9m impressions) in November. There was a shift in strategy to promote the candidates more intensely for the second ballot.

Ciudadanos' ads enhanced the figures of their candidates in both campaigns. In April, Albert Rivera got 14m impressions and Inés Arrimadas 9.4m, and in November, Rivera reached 16.4m and Arrimadas 5.4m. In April, the references to other opponents were more salient than references to policy issues. This was the case of keyphrases associated to PSOE (Sánchez, 7.9m impressions; *gobierno*, government, 7.6m; and PSOE, 7.4m), and PP (6.1m).

The most viewed policy keyphrase in April was *igualdad*, equality (4.4m impressions). In this campaign, the policy keyphrases were related mainly to social issues (*familias*, families, *hijos*, sons and daughters), territorial issues (*nacionalistas*, nationalists, *separatistas*, separatists, *constitución*, constitution) and job market (*trabajo*, job, *autónomos*, self-employees, *emprendedores*, entrepreneurs). In November, policy issues had higher visibility. The most viewed keyphrase associated with policy was *impuestos*, taxes (10.9m impressions). Among the top 50 keyphrases, we found *autónomos*, self-employees, *seguridad social*, social security, *jubilación*, retirement, *pensión*, pension, *empresas*, companies, *pymes*, SMEs, and *startup tecnológicas*, technology startups, along with other more social topics such as *hijos*, sons and daughters, *madre*, mother, *conciliación*, work-life-balance, and *familia*, family. Ciudadanos bet clearly on national identity: 'Spain' was the second most viewed keyphrase in April (15.8m) and fourth in November (14m).

Finally, the keyphrase with the highest diffusion in Vox's November campaign corresponds to *españa*, Spain (709k impressions), more than twice the number of impressions than the party's name (264k). We only found one keyphrase slightly related to political issues among the top 20: *programa económico*, economic program (219k impressions). References to policy issues were scant in the whole list of results, whereas three of the party's candidates accumulated significant visibility (Santiago Abascal, 235k impressions, Iván Espinosa, 226k, and Javier Ortega, 202k). We found two keyphrases containing contemptuous allusions to left-

wing ideology: *dictadura progre*, progressive dictatorship, 223k impressions, and *progres explicando*, progressive people explaining, 219k.

Figure 3 summarizes these results in word clouds, one for each campaign and each party. The parties are sorted according to the ideological spectrum. The words correspond to the top 20 salient keyphrases referring to slogans, candidates, and political issues. The relative word sizes reflect the relative differences of the estimated number of impressions.

Figure 3. Word clouds of the most salient topics promoted in Facebook advertising by party and campaign.



Source: Own elaboration.

5. Discussion

This research studies the topics sponsored through Facebook advertising by the main national parties for the 2019 Spanish General Elections. The analysis was performed using KD, an automatic extraction algorithm that identifies the most relevant keyphrases in a set of documents (Moretti *et al.*, 2015). With the data provided by the Facebook Ad Library, we have been able to estimate the salience of these topics in each campaign.

The first glance at the corpus revealed that most of the ads repeated content. The main party with this strategy was Ciudadanos: in April, 3.56% of their ads had unique content and in November this number dropped to 1.79% (see Table 1). PP and Podemos changed their strategy for the second campaign, as they repeated much more content in November. In the case of PP, 21.22% in April was unique content, whereas in November it was 2.31%. Podemos recorded 64.8% unique content in April that dropped to 8.55% in November. PSOE took the opposite path: where 43.45% of the ads had unique content in April, this figure rose to 85.61%

in the subsequent campaign. Vox sponsored no Facebook Ads in April. In November its ad volume was little and had 34.05% unique content.

The analysis for the H1 revises the calls to action conveyed in the ads. One party, PSOE, heavily stresses mobilization messages in both campaigns; two parties, PP and Podemos & IU, switch their strategy between the two campaigns, moving from salient calls to action to discrete or even non-existent calls, and Ciudadanos and Vox, the other two parties, lack terms encouraging mobilization.

PSOE promoted mobilization through one of the slogans for the April campaign ('make it happen'), with an estimated 9.4m impressions. In the same campaign, the call to vote ('#votePSOE,' 'vote PSOE') was among the top 10 most prominent keyphrases. In the second campaign, however, the call to vote was clearly more salient: 'vote PSOE' and the slogan '#nowyes' accounted for a large part of the impressions. One possible explanation could be that PSOE wanted to stimulate undecided voters to consolidate their leading position in the previous ballot.

PP's main message in the first campaign was mobilization. There is a great divide in the number of impressions between the top three most salient keyphrases and the rest. In the ranking, calls to vote occupy second and the sixth positions ('vote,' 'vote [People's] Party'). A similar pattern is found with Podemos in the April campaign, where the calls to vote are present in the top five keyphrases ('vote,' 'vote Unidas [Podemos]').

Another way of promoting mobilization is by referring to opponents in negative terms (Martin, 2004). PSOE does not follow this pattern, but the other parties partly use this strategy. PP and Ciudadanos include mentions of other parties among the top keyphrases. Surprisingly, in the PP's keyphrase rankings, we found a greater presence of PSOE's candidate than their own. Podemos & IU is different though. In the second campaign, their top keyphrase alluded to a declaration from Pedro Sánchez that reflected reluctance to make agreements with Pablo Iglesias. However, the party with the most negative content was Vox as we found some contemptuous expressions among the top 20 keyphrases of November campaign.

H2 hypothesized the salience of topics related to policy issues over the candidate image, as had been observed in televised political advertising (Kaid, 2004). Only one of the nine campaigns showed a coexistence of these two kinds of issues rather than a prevalence –Podemos & IU in April 2019. They shifted the strategy in the second campaign to focus more on their main candidates. Despite this, their advertising campaigns contained a wider variety of policy issues than the rest of the parties.

The two main parties, PSOE and PP, promoted calls to vote, the party, and electoral slogans among the main textual content disseminated. Where the latter mentioned their candidate in the ad texts, the former refrained from doing so but showed him many times in pictures. This strategy is unique in our corpus. Maybe the reason for this procedure relies on the fact that the candidate was the president of the Government, so the party capitalized on his well-known image.

According to our analysis, Ciudadanos' and Vox's candidates were more salient in the Facebook sponsored content than policy issues. In fact, it was only Vox that practically discarded policy issues in their Facebook advertising. In addition, its presence in this advertising platform was by far the lowest of the five parties. This was most probably due to using the organic social media to diffuse their messages (Castro Martínez & Díaz Morilla, 2021). Furthermore, as the newest player, Vox placed great emphasis on their candidates and a strong contradistinction to the other parties, particularly the one in office. This approach is in accordance with the general trend of new parties in European countries in the last decade (Haughton & Deegan-Krause, 2020). Hence, the final balance does not support H2, given the prominence of mobilization and candidates over policy issues.

This trend of giving precedence to candidates or campaign issues over policy issues suggests a different standpoint for Facebook advertising over television (Fowler *et al.*, 2021).

The difference could be explained by media targeting. On social networking sites, advertising is much more focused toward specific profiles. Perhaps, given the political rivalry of these ballots, the parties were more confident in inspiring trust by speaking about their candidates to a nuanced audience. This strategy aligns with Krotzek (2019), who concluded with the strong influence of ad content being tailored to the psychological traits on the positive evaluation of candidates.

The issue-related content of the ads was the subject of H₃. In our results, national identity was particularly prominent. Mentions of 'Spain' were generally present in all campaigns analyzed except that of Podemos' November campaign. In this case, the visibility of the term patriotism was a clear move to own an issue strongly related to Vox. The generalized salience of this issue was strongly related to events in Catalonia two years before (Simón, 2020a). This extraordinary territorial tension required a clear positioning from the candidates.

Moving to ideological issues, Vox barely referred to this kind of content, except in terms of contempt. The other parties had two major topics in common; job market and women. The use of keyphrases about the job market reflected the different ideological framing of each party. Some terms were common to the left-wing parties (minimum salary, stability), whereas PP and Ciudadanos employed others keyphrases with right-leaning connotations (selfemployees, entrepreneurs). In social issues, there was a term present in three parties: equality. PP and Vox lacked references to this topic. PSOE focused on terms close to youths, and Podemos and Ciudadanos paid more attention to keyphrases related to family. The issue about sexist violence was present in the Podemos & IU corpus, as evidence of issue ownership (Banda, 2013). Furthermore, Podemos stressed their radical left-wing position by employing some expressions that were characteristic of the discourse in their origins (Lluch Villar, 2015). These findings seem to support H₃. PSOE and Podemos & IU have clearly been positioned with left-wing oriented topics, and PP and Vox did the same with right-wing topics. The selfpositioning of Ciudadanos as a centrist party led them to sponsor issues from both parts of the ideological spectrum, in particular, economic topics closer to right-leaning policies and social rights of the left.

One notable finding in our research was in the use of emojis. The KD algorithm listed these linguistic elements, so that they could be evaluated as relevant topics in the campaign. We found an unbalanced used of emojis among the parties. PSOE has no emojis in their lists, and Vox incorporated emojis related to letters. PP included pointing fingers emojis, which basically functioned as a complement to the text. Podemos & IU integrated more expressive facial emojis. Lastly, Ciudadanos employed angry facial expressions and the orange fruit, as orange is their party color. These uses are coherent with other findings that suggest that the use of emojis is mainly pragmatic and dependent on the communication context (Sampietro, 2020).

The main takeaways of this research are the insights acquired about the different strategies implemented by Spanish parties in the Facebook and Instagram advertising campaigns. Our findings suggest that the main general function has been to mobilize users where, unlike with televised political advertising, candidates have been more prominent than issues, and the ad contents reflected the ideological positions of the main parties. These conclusions will help to enrich the picture of Spanish elections, but also contribute to a better knowledge of the possibilities of Facebook advertising.

6. Limitations and future lines of research

The conclusions of this paper are constrained by some limitations in the research process. The topic analysis was restricted to the text-based messages conveyed in the ad. This point is significant for multimedia content, as we just considered the text written in the image. This limitation affects pictures, as they can communicate topics not explicitly written, but it mainly

affects videos, whose scripts can convey complex messages. All this indicates that our results must be taken with caution. Furthermore, the numbers of the impressions achieved by an ad are approximated. This limitation is due to the way Facebook provides the data.

For future research, the Library as a source of information offers promising avenues. It would be of great interest to relate content to cost, so that other aspects of social media campaign strategies might be unveiled. The data regarding targeting can be also linked to content. A way of completing our results could be to analyze the messages with qualitative methods, including videos. In this regard, the conclusions could be more nuanced, as we have relied on automatic analysis techniques.

Another question opened by our research is related to the persuasive effects. Recent research suggested that candidate evaluations improve when users were targeted with messages congruent to their psychological traits (Krotzek, 2019). Our study detected the salience of messages focused more on candidates rather than issues. However, the parties did not omit content about their political proposals from their Facebook advertising campaign. This makes it appropriate to study user evaluations on issue-centered ad content.

Finally, social media advertising platforms are just one tool employed by party campaign staffers. It might be desirable to tackle political advertising from an integrated perspective considering all available channels. This challenge is now possible thanks to the information provided by the Facebook Ad Library.

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