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Emotions of Candidates on Twitter in the 2023 Seville City Council Election: A Second-Order Campaign?

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Abstract: This paper analyses the messages that candidates emitted on the social network Twitter (now called "X") during the campaign for the 2023 municipal elections in the city of Seville and the emotions they used. This type of electoral process has usually been deemed as second-order elections within multilevel governance political systems, implying that the national arena may affect local dynamics to some degree. Thus, the main research objective is to determine the extent to which elements of nationalisation were used in candidates' rhetoric, along with the emotional components associated with each political formation during a local campaign somewhat relevant on the state level. A total of 960 tweets were retrieved through R Statistics and the Application Programming Interface of the social network itself. They were then analysed drawing upon the Linguistic Inquiry and Word Count programme. The results show that certain elements of nationalisation were indeed used by candidates, in addition to emotional-level differences present in their messages. This accentuates the evident need for further research on municipal elections and campaigns, as well as on their potential distinctive features regarding political jurisdiction.

Keywords: Twitter; emotions; elections; Seville; Spain; LIWC

1. Introduction

The Internet continues to expand deeper into people's daily lives. As a consequence, the environment provided by social media has become crucial for modern political communication, especially when it comes to electoral campaigns. The dissemination of digital tools and platforms over the past few decades has inevitably led political actors to adapt their strategies in order to succeed in elections. As a matter of fact, its influence has done nothing but increase in importance, which is evidenced by the large amount of research published in the past ten years; in particular, within the political context of the United States and Europe (Jaráiz-Gulías et al. 2020b; Pellegrino 2023; Towner and Lego-Munoz 2016). These papers are linked to the traditional views on electoral campaigns and election studies, given their persistent interest in understanding how political debate unfolds and impacts society and how the most relevant political actors play their part—such as parties, media and citizens (Duncombe 2019; Norris et al. 1999).

Before the twenty-first century, a wide variety of propositions within the core of political science included models and approaches inspired by rationalism that overshadowed the potential emotional factor (Marcus 2002; Marcus et al. 2000). On the contrary, empirical theories and strategies contemplated by recent papers have allowed enquiries to be made about the importance of emotional components in the various dimensions of politics (Corduneanu 2018; Jaráiz-Gulías et al. 2022; Pereira et al. 2021). The way digital social networks are naturally configured makes them suitable spaces for expressing emotions (Duncombe 2019; Rivera-Otero et al. 2021a) and, consequently, for studying their impact on political processes. This has led media research and electoral analysis to increase their interest in understanding the emotionality present in these platforms' content; for example, through the speeches and debates that take place (Arce-García et al. 2022; Himelboim

et al. 2016; Jaráiz-Gulías et al. 2020a, 2020b; Kušen and Strembeck 2018) or the multiple activities performed by political parties and candidates (García-Hípola and Pérez-Castaños 2021; Kruikemeier 2014; Novelli et al. 2022; Pérez-Castaños et al. 2023; Sharma and Ghose 2020). Similarly, the correlation that may exist between the emotions manifested in these contexts and the electoral behaviour has also been explored (López-López et al. 2020). To all intents and purposes, these researchers provide evidence for the need to access political knowledge on social media—and beyond—considering the affective dimension for a better comprehension of the derived interactions and their impact.

Through the same research scope, the current article investigates the emotional factor in messages spread on social media during a municipal electoral campaign. With regard to electoral studies, this type of process has drawn little attention from the literature in comparison to other domains, such as national elections (Delgado-Sotillos and Redondo-Rodelas 2020; Gendźwiłł and Steyvers 2021). A similar phenomenon occurs amongst studies on electoral campaigns and social media. Notwithstanding the notable amount of research devoted to this level of politics, the number remains inferior in contrast to other types of processes (Raynauld and Greenberg 2014; Sobaci et al. 2016). Hence, not only does this paper aim to seek deeper into emotions and politics, but also to contribute to strengthening knowledge of local elections and campaigns while considering the approaches that foster the particularities present at this level.

The case study selected to carry out this research is a social network used as a medium by the campaign for the municipal elections in Seville (Spain), held on 28 May 2023. In addition to being the fourth most populated Spanish city (682,000 inhabitants in 2022) and the capital of the Autonomous Community of Andalusia (self-governing subnational entity with the largest population), Seville offers some interesting elements for the elaboration of this paper. In particular, before said elections, it was the largest city with a mayor from the party governing the country. Furthermore, while Andalusia only held the local elections for their institutions, municipal and regional elections took place simultaneously in other territories in Spain (Montabes-Pereira et al. 2023). As a result, the centre of attention may be focused on the local arena reducing the interferences from other issues, while gaining more national-scale influence. The formal structure of the present paper consists of four sections besides this introduction. Hereunder, the theoretical framework and groundwork laid for this research are developed. The third section is a detailed examination of the method design, and the fourth section presents the findings and results. To conclude, the final part is reserved for discussing the points established above and the conclusions.

2. Theoretical Foundations and Background

As noted in the introduction, municipal elections have drawn less attention than other types of electoral processes (Delgado-Sotillos and Redondo-Rodelas 2020; Gendźwiłł and Steyvers 2021). One of the main reasons is that municipal elections are often addressed as if they were one single process, when, in fact, nothing could be further from the truth. The Spanish case clearly illustrates this point, with more than 8000 local governments being elected on the same polling day. Technically, every municipal council undergoes an electoral process with a wide range of possible variations of electoral rules or political parties participating in the competition (Capó-Giol 1996; Delgado-Sotillos 2010, 2023; Montabes-Pereira et al. 2023). Nonetheless, the vast majority of the literature has appraised municipal elections in their aggregated form, considering them an additional political process from the state perspective. On this topic, several studies have approached these elections deeming them of second-order class, based upon the conceptual framework proposed by Reif and Schmitt (1980) on the European Parliament elections. This conjecture assumes that, within political systems formed by different electoral arenas, major-scale issues are solved in first-order elections—legislative or presidential processes to elect the State government—whereas the rest of the elections are subjected to the outcome of the former—which is why they are considered secondary in relation to the others (Marsh 1998; Norris 1997). Thus, the stage set by the different arenas competing would be profoundly

affected by the national elections in regard to the parties' dispute or the relevant issues of each moment, for instance.

As opposed to other national electoral processes with more power at stake, municipal elections have generally been classified as second-order ones (Delgado-Sotillos 2023; Marien et al. 2015). Consequently, certain explanations for these political events are examined from a national perspective, taking into account the relevant timing of the first-order electoral cycle as well as the Government's popularity. Despite the different election context for this case, the quantitative support to the various candidacies may be estimated based upon two major factors: acknowledging the similar party competition scheme and taking into consideration how punishment and reward theory applies to the multiple scenarios that may stem from the national circumstances (Trujillo and García-Hípola 2020; van der Eijk et al. 1996). The moment in which second-order elections take place in relation to first-order elections is crucial. For example, there are notable influence differences between a honeymoon phase and a political exhaustion stage. This assessment, combined with the curiosity for the inherent components of the local layer, the studies on competition dynamics and the vote in municipal elections, have accentuated the interest in elements of nationalisation and elements of localism. Needless to say, there is also an attempt to clarify their impact on this scale (Delgado-Sotillos 2010; Heath et al. 1999; Marien et al. 2015; Ortega and Recuero-López 2020).

One of the most remarkable aspects of the municipal elections research has been the impact of local candidacies and leaders. It had been stated that this environment was favourable to fostering in-depth knowledge of these individuals, and this personalisation could be relevant to the political competition (Marien et al. 2015; Ortega and Recuero-López 2020; Riera et al. 2017). However, these dynamics currently evolve onto more complex dimensions than those traditionally founded on firsthand knowledge or personal proximity. essentially owing to social media platforms, which have been drawing progressively more attention during electoral campaigns, as was pointed out in the introduction. The expansion of these spaces has translated into the proliferation of optimal environments that intensify personalisation through the communicative individual channels offered by political representatives from all levels of government. Evidence for this can be clearly seen in the overall social media presence of politicians, along with its widespread use progressively turning bidirectional to a greater degree (Gómez-Calderón et al. 2017; Kruikemeier 2014). For this reason, these spaces provide potential strategic applications for certain population sectors, taking into account the district class—with variables such as size, sociodemographic composition, etc., that is, regardless of the fact that candidates' local-scope interaction is also enabled by traditional offline methods. As a result, analysing local leaders on social media may lay the groundwork for deeper insight into their potential impact, as well as the dissemination of their primary messages in the municipal arena.

From all existing social media, the microblogging platform Twitter[1] has achieved remarkable prominence in politics and electoral campaigns (Davis et al. 2017; Frame et al. 2016). Not only did Twitter empower interaction through text, but it also expanded the options through linking and sharing media resources such as videos and pictures, despite the number of changes the platform has undergone since its creation in 2006 (Moe and Larsson 2013; Quevedo et al. 2016). Today, the role that Twitter may play in elections is the subject of a vast amount of research under various methods and resources (Jungherr 2016)[2]. Nevertheless, studies of this kind corroborate the lower interest shown towards local electoral processes, owing to the limited number of studies carried out to date in contrast with other fields. Along these lines, part of such content has been approached as a group of various cases within one single election (Borja-Orozco 2022; Criado et al. 2013; Hagar 2015; Jara et al. 2017; Kropf 2021; Lampoltshammer et al. 2023; López-de-Ayala-López et al. 2016; Martínez-Rolán 2016; İkiz et al. 2014; Sobaci et al. 2016). On the other hand, others have tended to focus on one specific local campaign or election as a case study (Carrillo-Rodríguez and Toca-Torres 2022; García-Carretero and Pérez-Altable 2017; Lombana-Bermúdez et al. 2022; Nicasio-Varea and Pérez-Galdón 2021; Raynauld and

Greenberg 2014)[3]. What stands out is the fact that most of these papers gravitate around candidacies' actions and rhetoric on said platform. In any case, the lack of a larger amount of assessments demonstrates the need to expand and complete available empirical data through a consistent supply of specific evidence for this type of election—especially on individual cases or campaigns.

As foreseen in the introduction, social media platforms are particularly ideal for expressing emotions, which is the reason why scientific literature has developed extensive relevant research plans and goals in recent years (Duncombe 2019; Rivera-Otero et al. 2021a). The theoretical framework includes psychology and culturalism approaches on communicative, political and sociological dimensions (Jaráiz-Gulías et al. 2020a; Rivera-Otero et al. 2021b). While numerous classification methods can be contemplated as a response to a wide variety of theoretical hypotheses and/or empirical strategies, diagnosis generally defines a distinction between negative and positive expressions. This can be seen in the work undertaken by Sentiment Analysis, for example, whose refined methods confirm the vital potential role of emotional components in social media contexts (Kušen and Strembeck 2018; Rivera-Otero et al. 2021a; Sharma and Ghose 2020). Once more, the majority of the vast literature currently available fails to establish a solid framework for specific enquiries into said emotional components through the lens of municipal elections and Twitter. The existence of positive and negative messages emitted by candidates has been demonstrated (Borja-Orozco 2022), besides the discrepancies that may manifest according to which electoral system is operating (Kropf 2021). Virtual social debates also illustrate the notable importance inherent to the affective dimension (Carrillo-Rodríguez and Toca-Torres 2022; Raynauld and Greenberg 2014). Nonetheless, there is insufficient imbrication of these possible affective components within the natural disposition of electoral processes and campaigns that may incorporate elements from the state competition, as outlined above.

This article seeks to strengthen this area of study. To accomplish that, empirical evidence extends towards new research questions that take into consideration the characteristics of these municipal elections and the nationalisation possibilities. Therefore, it is crucial to deal with the context that defines the study case, as well as with the emotional dimension that it may acquire regarding the campaign's expression on social media. In this case, the research focuses on the city of Seville, Spain, and the municipal elections that took place in May 2023, a year when electoral intensity was expected to be high across the entire country. The four-year-long term of office—initiated after the national elections in November 2019—was coming to an end. In fact, said elections were the outcome of a failed attempt to form a government after the ones held in April of the same year. The electoral cycle ending in 2023 has been heavily influenced by the sharply polarised competition among the different ideological blocs (Rodon 2020). Thus, the first-ever left-wing coalition government within the current democratic regime was born. It was formed by PSOE (Partido Socialista Obrero Español) as the leading party at the Congress of Deputies (lower parliamentary house) in alliance with UP (Unidas Podemos)[4]. Due to its minority condition, the development of this coalition's political action has entailed a constant seek to obtain parliamentary support from other parties, especially those classified as Non-Statewide Parties (NSWPs). On the other hand, PP (Partido Popular) emerged as the dominant force within the right-wing sector of the political spectrum—although still considerably far from the winning party—alongside the far-right group Vox, which gained access to the Parliament for the first time in April and progressively increased in relevance until becoming the third political force, due to the repetition of elections in November (Jaráiz-Gulías et al. 2022). In addition, the aforementioned suffrage had a quantitative detrimental effect on Cs (Ciudadanos), which had also been crucial throughout the former term, having obtained the third position in April 2019, extremely close behind PP[5].

The tension between the progressive and the conservative ensembles has been notorious throughout the entire term, despite the high legislative output and the several significant issues faced, such as the COVID-19 pandemic and the Russian invasion of

Ukraine. The renovation of the Spanish legislative chambers (Congress of Deputies and Senate) was preceded by the municipal elections in which the entire country participated in May, as well as the renovation of 12 regional parliaments (Assemblies of Autonomous Communities) whose terms also commenced in 2019 (Montabes-Pereira et al. 2023). Suffice it to say that numerous polls published in the media months prior to these elections projected a national stage with a worn-out PSOE in contrast with a rising PP as a primary competitor. In the case of Vox and UP, the polls suggested an even wider range of predictions, with a certain negative tendency for both despite their consistent status as third and fourth national political forces, respectively.

Within said framework, the 2023 Seville City Council election may be deemed as a particularly relevant scenario in regard to the dynamics of nationalisation. The results of 2019 generated a local map without critical differences in the competition scheme, as opposed to the national map[6]. A total of 13 representatives were obtained by PSOE, whereas 8 were achieved by PP, 4 by Adelante Sevilla (coalition formed by the alliance between UP and other parties), 4 by Cs and, lastly, 2 by Vox. This distribution enabled PSOE representatives to govern the council as the most-voted party[7]. These elections led Seville to become the largest municipality ruled by a PSOE mayor. The strongly polarised environment along with the predictions suggested by national polls were driving factors for positioning Seville as a key enclave on the state scope, considering the likelihood of an eventual rearrangement of majorities. In addition to said national symbolism, focusing the study on the case of Seville is also particularly interesting for another reason. While both regional and local elections took place simultaneously in 12 autonomous communities, Andalusia exclusively elected its municipal bodies[8]. Thus, this type of issue was expected to play a determining role on the local stage in other places; in contrast with Seville, where this phenomenon was predicted on a smaller scale and with reduced potential interferences of this type of issue in the local campaign[9].

Prior projections on the dispute for Seville's council pointed to a technical draw between PSOE and PP, predicting satisfactory results for the socialist[10]. However, the outcome defied all odds, presenting a new local government and majority. PP claimed 14 (+6) representatives, 12 (−1) were received by PSOE, 3 (+1) by Vox and 2 (−2 with respect to Adelante Sevilla 4 years prior) by Con Andalucía (associated with UP). This time, neither Cs (−4) nor Adelante Andalucía (a division of Adelante Sevilla) earned any representation despite gathering nearly 5 per cent of support each. Hence, a PP representative became mayor due to the relative majority accomplished. This case demonstrates the interest in assessing whether state competition was a critical factor in the results of this campaign, as well as in evaluating the magnitude of a possible emotional mediation.

3. Research Design

The primary goal of the present paper is to contribute to broadening knowledge on municipal electoral campaigns and their peculiarities pertaining to differing levels, additionally to expanding election-focused research on emotions within social media. Specifically, the selected study case attempts to determine whether there was a discernible use of emotions amongst candidates through a certain digital social network. In line with the premises and enhanced theoretical elements, we pursue to answer the following research questions.

Firstly, electoral processes deemed as second-order—just like municipal elections—are expected to hold campaigns influenced by state issues, insofar as these factors may condition the electoral results along with local matters (Delgado-Sotillos 2010; Marien et al. 2015; Ortega and Recuero-López 2020). Since the social media framework enhances the personalisation of candidates even more, as noted above, it is crucial to analyse the role played by these leaders through their accounts to spread their key campaign messages. This lays out the first research enquiry in relation to evaluating whether local candidates can contribute to a possible nationalisation:

RQ1. *To what extent are the local candidates' channels used to generate a nationalisation of the campaign?*

Secondly, previous researchers have also demonstrated that candidates' political communication on social media integrates both positive and negative emotional strategies (Borja-Orozco 2022; García-Hípola and Pérez-Castaños 2021; Kruikemeier 2014; Novelli et al. 2022; Pérez-Castaños et al. 2023; Sharma and Ghose 2020). Hence, the question arises as to whether candidates have different emotional approaches towards the local and national matters that may emerge in this type of campaign; in particular, whether said differences are linked to the specific role that candidates' parties play at local and state levels in terms of government/opposition—taking into account the potential expectations on the electoral results since said elections are of second-order character. This entails the following research enquiry:

RQ2. *Are there any differences among the emotional approaches, depending on the type of message (national/local) and the positions that candidates hold in each competition arena?*

To respond to these questions, we employ an empirical–descriptive method drawn upon a quantitative analysis of the electoral campaign carried out on Twitter by candidacies from the main political parties. The choice of this social network as fundamental groundwork for further research progress goes beyond the variables stated in the previous section. The decision is also determined by the fact that Seville constitutes the second most active Spanish city on Twitter[11] (The Social Media Family 2022), which also justifies the use of this specific criteria. The individual accounts of candidates were considered as units of analysis, owing to their importance within the framework of local elections research. In particular, the data taken into account for the analysis are composed of the content published on Twitter during the legally authorised electoral campaign—that took place from 12 to 26 May inclusive—by the six candidates that possessed representation in the Council of Seville prior to the elections: José Luis Sanz (PP), Antonio Muñoz (PSOE), Cristina Peláez (Vox), Susana Hornillo (Con Andalucía, coalition integrated by UP and other formations within the progressive and ecologist spectrum), Sandra Heredia (Adelante Andalucía, emerged from Adelante Sevilla) and Miguel Ángel Aumesquet (Cs).

These data were retrieved using an academic[12] account of Twitter's official Application Programming Interface (API)—that was still open then to academic access free of charge and granting access to 10 million tweets per month, which made it possible for this research to be developed with no limitations—through the academictwitteR package (Barrie and Ho 2021) in Rstudio. After every single day of the campaign period, those 24 h would be collected. Then, the day after the campaign concluded, data on the full period were also obtained with the aim of exposing the entirety of interactions. A sum of 1094 publications were downloaded, 134 of which corresponded to replies to other users.

The data preprocessing was limited to filtering the publications that were the object of study and ruled out said replies—since the latter only appear on the user's timeline in so far as said user follows both accounts involved in the conversation—as well as solving the limitations resulted from the ongoing changes on the platform then, which had not been integrated in the API's functioning, as it will be explained in Section 5.

This resulted in a total of 960 publications considered for analysis as susceptible to being seen by all the followers. Amongst these 960, the various assessments require distinguishing between retweets and those produced by candidates themselves—tweets and quote tweets. Moving on to the studied leaders, Susana Hornillo (Con Andalucía) is the candidate with the largest number of publications, as illustrated in Table 1. She is followed by Miguel Ángel Aumesquet (Cs) with 183, Antonio Muñoz (PSOE) with 158, Cristina Peláez (Vox) with 139, the winner José Luis Sanz (PP) with 131 and Sandra Heredia (Adelante Andalucía) with 124. Figure 1 shows data distributed amongst the differing contents. It is noticeable that Susana Hornillo and Cristina Peláez present the highest rate of shared content[13].
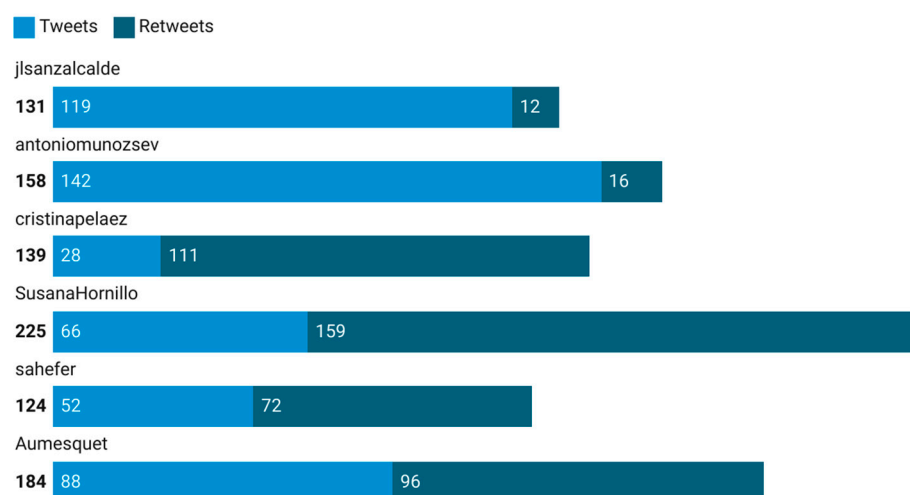
Figure 1. Publications by candidate and class.

Table 1. Number of publications analysed by candidate.

Candidate	Party	User	N
José Luis Sanz	PP	jlsanzalcalde	131
Antonio Muñoz	PSOE	antoniomunozsev	158
Cristina Peláez	Vox	cristinapelaez	139
Susana Hornillo	Con Andalucía (UP)	SusanaHornillo	225
Sandra Heredia	Adelante Andalucía	Sahefer	124
Miguel Ángel Aumesquet	Cs	Aumesquet	183

After data extraction, each retweet undergoes a dichotomous classification based upon its message or content from a national or local perspective, in order to verify the level of nationalisation in the electoral dispute. To accomplish this distinction, any mention of the Spanish Government or any state issue that shifted the campaign onto that field was classified as national, including the presence of photographs or videos with national leaders. After conducting the previous categorisation, the software Linguistic Inquiry and Word Count (LIWC) assesses emotions manifested in tweets. This program, created in 2001 by J.W. Pennebaker at the University of Texas at Austin, recognises words present in a text with the objective of classifying them by different linguistic variables—the choice of dictionary determines the resulting number—from standard language to content or psychological processes (Rúas-Araújo et al. 2016).

Regarding the functioning of LIWC, the software compares each word in a document to its internal dictionary, which contains—depending on the dictionary—a specific number of words, roots, expressions and emojis. During this operation, the LIWC processing module accesses each text in its database and compares the language within each text to its dictionary, allocating each term into a specific linguistic category and reporting the percentage of total words in each division (Cohn et al. 2004; Boyd et al. 2022). This classification covers from standard linguistic dimensions—for instance, personal pronouns, articles and negative tenses—to psychological processes, which may contain categories related to emotional language and cognitive processing, as well as various divisions that may shed light on other communicative aspects. Thus, the counting of words is presented as the absolute number of terms, whereas the rest of the variables are displayed in percentages—which are calculated by counting the number of words that belong to a specific word category, and then dividing them by the absolute total of words (van der Zee et al. 2021).

To carry out the current paper, the dictionary of choice was the Spanish version, which contains 7515 words and has been scientifically validated (Ramírez-Esparza et al. 2007), as well as its English version (Tausczik and Pennebaker 2010). After discarding the rest of the options provided by the software, a total of six variables were established and evaluated:

positive emotions (PE), negative emotions (NE), fear or anxiety (Anx), anger or rage (Ang), sadness (Sad) and inhibition (Inhib).

Based upon prior research that used the software LIWC (Fernández-Cabana et al. 2014), the present paper has also detected potential analysis issues stemming from failing to understand the "non-literal sense of expressions and the influence of possible grammatical or semantic interpretations on what is expressed" (Rúas-Araújo et al. 2016)—such as irony or sarcasm—as it will be explained in the final section of this article. Similarly, the number of Spanish entries included in the dictionary (a sum of 7515 words, in contrast with the 93,000 terms in the official Spanish dictionary) may prevent part of the text from being assessed: depending on the analysed tweet, its extension and complexity, the percentage of words coinciding with the dictionary varies, with an average of 76.61 per cent of recognised words per tweet. However, it can be stated that the overall tasks of the programme are fulfilled.

4. Results

To begin with, a quantitative assessment is conducted on the national allusions present in the local campaigns. Table 2 and Figure 2 illustrate the data generated by the classification based upon publications' content. At first sight, it can be confirmed that no relevant nationalisation took place in the candidates' campaigns on Twitter, due to a majority of local publications: this type of publication represents more than 90 per cent of the content created by four of the six candidates. The two remaining candidacies also show high local figures, despite being visibly lower in comparison. With an 87 per cent rate, Vox closes the gap drawn by 90 per cent, whereas a 75 per cent rate distances Susana Hornillo. In this latter case, the number of retweets by this candidate plays an important role.

Table 2. Number and percentage of publications by candidate, approach (a) and class (c).

User	Approach	N [a]	% [a]	Class	N [c]	% [c]
jlsanzalcalde	Local	123	93.9	Retweet	10	7.6
				Tweet	113	86.3
	National	8	6.1	Retweet	2	1.5
				Tweet	6	4.6
antoniomunozsev	Local	146	92.4	Retweet	15	9.5
				Tweet	131	82.9
	National	12	7.6	Retweet	1	0.6
				Tweet	11	7
cristinapelaez	Local	121	87.1	Retweet	98	70.5
				Tweet	23	16.5
	National	18	12.9	Retweet	13	9.4
				Tweet	5	3.6
SusanaHornillo	Local	168	74.7	Retweet	111	49.3
				Tweet	57	25.3
	National	57	25.3	Retweet	48	21.3
				Tweet	9	4
Sahefer	Local	120	96.8	Retweet	69	55.6
				Tweet	51	41.1
	National	4	3.2	Retweet	3	2.4
				Tweet	1	0.8

Table 2. *Cont.*

User	Approach	N [a]	% [a]	Class	N [c]	% [c]
Aumesquet	Local	173	94.5	Retweet	89	48.6
				Tweet	84	45.9
	National	10	5.5	Retweet	7	3.8
				Tweet	3	1.6

Figure 2. Publications by candidate, approach and class.

Figure 3 illustrates an alternative analysis that provides the following findings. The assessment of the 100 most used words or emojis does not result in an emerging supremacy of national matters. Nonetheless, what can indeed be observed are the allusions to the regional level, in so far as the word 'Andalucía' makes an appearance in both term clouds: while this insight presents certain potential relevance that will be examined in the pertinent discussion section, the fact that the name of the autonomous community appears in the name of two candidacies must be taken into account.

Figure 3. The 100 most used words or emojis by the ensemble of candidates. (**a**) On tweets; (**b**) On retweets.

In regard to the study of emotions manifested in tweets and retweets, Table 3 compiles the outcome provided by LIWC for the entirety of publications by each candidate as well as simultaneously indicating the number of words detected in each ensemble of words. To begin with the positive emotions (PE)—assessed by the program without a subsequent subdivision—we can detect a more notorious use by the socialist candidate, who is in fact the user who published the largest amount of words throughout the campaign. In contrast, the Vox candidate presents the lowest figure. As additionally pointed out in this table, said candidate is also the one who generates the lowest rate of negative emotions, considerably distanced from the following: Antonio Muñoz's 0.38 in opposition to Miguel Ángel Aumesquet's 0.85.

Table 3. Emotions by candidate.

Candidate	N	WC	PE	NE	Anx	Ang	Sad	Inhib
jlsanzalcalde	131	5747	3.11	1.17	0.28	0.23	0.44	0.42
antoniomunozsev	158	10,064	3.41	0.38	0.11	0.19	0.04	0.21
cristinapelaez	139	4392	2.53	1.37	0.30	0.61	0.18	0.41
SusanaHornillo	225	7425	3.22	0.98	0.18	0.46	0.16	0.47
sahefer	124	3938	3.17	0.94	0.15	0.48	0.10	0.48
Aumesquet	183	6576	2.93	0.85	0.14	0.55	0.11	0.62

On the other hand, PP and Vox candidates make more extended use of negative emotions, for example, José Luis Sanz, the most-voted candidate in the 2023 elections. This pattern repeats for two of the four evaluated negative emotions: anxiety and sadness. Regarding anxiety, the aforementioned candidates double their numbers when compared to the rest of the participants. The socialist is in fact the one who least expresses it. Nevertheless, the two major parties (PSOE and PP) possess the candidates with the lowest rate of anger expression, a variable led once again by the far-right candidate, followed by the Cs candidate, the UP candidate and the Adelante Andalucía candidate. Turning to sadness, this emotion is barely noticeable in the case of the concerning subject, whereas it is outstanding for the PP candidate, with a remarkable gap separating him from the rest of the candidates.

Next, the emotional component is analysed from the messages' perspective, generating the results illustrated in Table 4. In regard to positive emotions, their presence is more extended on publications with national content when it comes to the two most-voted candidates, contrarily to the remaining four subjects, who experience the opposite effect. When evaluating negative emotions, the higher rate of emotional content on the national level rather than the local ascends in the case of the four candidacies with representation after the elections. José Luis Sanz (PP) was the candidate who incorporated the highest degree of positive emotionality in his publications on national matters, followed very closely by Antonio Muñoz (PSOE). The latter incorporated the largest amount of emotionally positive content within the local dimension, preceding Susana Hornillo (Con Andalucía, UP). Moving on to Vox, Cristina Peláez used negative emotions with a higher frequency in both national and local publications, followed by the PP candidate in both cases. It is clear that these specific emotions are not present at the national level when it comes to the Adelante Andalucía candidate. As for the rest of the negative emotions, we can outline the anger on the national publications by José Luis Sanz (0.89) and Cristina Peláez (1.19), as well as anxiety on national publications (0.44) and sadness on local ones (0.45) in the case of the former. Now concerning inhibition, we discern a bigger difference amongst candidates. Overall, sadness is less present in national publications, with the exception of Susana Hornillo and Miguel Ángel Aumesquet.

Table 4. Emotions by candidate and approach.

User	Approach	N	WC	PE	NE	Anx	Ang	Sad	Inhib
jlsanzalcalde	Local	123	5522	3.06	1.16	0.27	0.20	0.45	0.42
	National	8	225	4.44	1.33	0.44	0.89	0.00	0.44
antoniomunozsev	Local	146	9214	3.35	0.37	0.11	0.18	0.04	0.18
	National	12	850	4.00	0.47	0.12	0.24	0.00	0.47
cristinapelaez	Local	121	3721	2.61	1.32	0.32	0.51	0.19	0.46
	National	18	671	2.09	1.64	0.15	1.19	0.15	0.15
SusanaHornillo	Local	168	5437	3.29	0.88	0.17	0.40	0.13	0.51
	National	57	1988	3.02	1.26	0.20	0.60	0.25	0.35
sahefer	Local	120	3822	3.24	0.97	0.16	0.50	0.10	0.50
	National	4	116	0.86	0.00	0.00	0.00	0.00	0.00
Aumesquet	Local	173	6165	2.97	0.86	0.15	0.57	0.10	0.62
	National	10	411	2.43	0.73	0.00	0.24	0.24	0.73

To understand the connection that exists between these differences and the type of content, Tables 5 and 6 make a distinction between original content (tweets) and shared content (retweets) after assessing the data contained within Table 4. In so far as what was previously stated, the latter were more used by Cristina Peláez (Vox) and Susana Hornillo (Con Andalucía). Hence, this article intends to assess the degree to which these events can potentially contextualise the data provided. As for positive emotions, they manifest to a higher degree within the national context rather than the local when PP's (Sanz) and PSOE's (Muñoz) tweets are analysed. The retweets of the former show a repetition of this pattern, whereas it is inverted in the case of the latter. For the rest of the candidacies, positive emotionality is higher in tweets within a local framework than in a national context. Nonetheless, retweets show a higher degree of positive emotions on local content rather than statewise when it comes to the candidates from Vox (Peláez) and Adelante Andalucía (Heredia). This contrasts with the opposite phenomenon faced by the Con Andalucía (Hornillo) and Cs (Aumesquet) candidates. When it comes to negative emotions, they

represent a more influential factor through shared content on a local level in the case of Vox, Adelante Andalucía and Cs, whereas the same occurs to Con Andalucía on a state level.

Table 5. Emotions by candidate and approach in tweets.

User	Approach	N	WC	PE	NE	Anx	Ang	Sad	Inhib
jlsanzalcalde	Local	113	5275	3.05	1.21	0.27	0.21	0.47	0.44
	National	6	155	4.52	1.94	0.65	1.29	0	0.65
antoniomunozsev	Local	131	8593	3.31	0.4	0.12	0.2	0.05	0.19
	National	11	806	4.09	0.37	0.12	0.12	0.00	0.5
cristinapelaez	Local	23	696	4.02	2.16	0.57	1.01	0.43	0.43
	National	5	227	3.08	3.08	0.44	2.64	0.44	0.00
SusanaHornillo	Local	57	2155	3.85	0.74	0.28	0.42	0.00	0.6
	National	9	443	2.93	0.9	0	0.68	0.45	0.45
sahefer	Local	51	1671	4.07	0.78	0.12	0.24	0.12	0.3
	National	1	31	3.23	0.00	0.00	0.00	0.00	0.00
Aumesquet	Local	84	3725	3.14	0.70	0.08	0.4	0.11	0.75
	National	3	129	0.78	0.78	0.00	0.00	0.00	0.78

Table 6. Emotions by candidate and approach in retweets.

User	Approach	Retweets	WC	PE	NE	Anx	Ang	Sad	Inhib
jlsanzalcalde	Local	10	247	3.24	0.00	0.4	0.00	0.00	0.00
	National	2	70	4.29	0.00	0.00	0.00	0.00	0.00
antoniomunozsev	Local	15	621	4.03	0.00	0.00	0.00	0.00	0.16
	National	1	44	2.27	2.27	0.00	2.27	0.00	0.00
cristinapelaez	Local	98	3025	2.28	1.12	0.26	0.4	0.13	0.46
	National	13	444	1.58	0.90	0.00	0.45	0.00	0.23
SusanaHornillo	Local	111	3282	2.93	0.98	0.09	0.4	0.21	0.46
	National	48	1545	3.04	1.36	0.26	0.58	0.19	0.32
sahefer	Local	69	2151	2.60	1.12	0.19	0.7	0.09	0.65
	National	3	85	0.00	0.00	0.00	0.00	0.00	0.00
Aumesquet	Local	89	2440	2.70	1.11	0.25	0.82	0.08	0.41
	National	7	282	3.19	0.71	0.00	0.35	0.35	0.71

By and large, while anger and inhibition are the most present emotions on retweets, tweets are more defined by other emotions, such as anxiety and sadness. However, it may be observed that certain recent nuances make their appearance in the case of the two candidacies that used retweets the most. The negativity expressed by Vox's candidate (Peláez) has a bigger impact on retweets with a local approach over the ones nationally contextualised. Opposite to that, national content generally presents a higher degree of this type of emotionality for Susana Hornillo.

With the aim to provide further and more complete insight into the campaign conducted on Twitter by the different candidacies, the following Table 7 illustrates the interactions with tweets. For this matter, retweets are not taken into account, in so far as the previously mentioned software collected and evaluated solely the amount of retweets, without considering likes and quotes. For each candidate, said table additionally defines the approaches taken by the publications within the established local–national dichotomy.

Despite the minority of publications with a national nature, Sanz and Muñoz (candidates with the largest state presence) obtained broader average support through publications with this type of approach over the ones with local character, based upon the three assessed variables. A similar pattern can be seen in the case of Sandra Heredia, although her pertinent data must be interpreted taking into account the number of only one national tweet. On the other hand, local publications attributed to Susana Hornillo were more supported than those on a national level. The pattern is somewhat more unstable in the case of the rest of the candidates: Cristina Peláez received more retweets and quotes than likes on her national content, whereas Miguel Ángel Aumesquet claimed more retweets and likes than quotes on a local level. In so far as these findings must always be analysed paying close attention to the drastic difference between the types of approaches observed in the publications, they also provide evidence for the importance of the defining impact that various contents may have on the campaign's framework.

Table 7. Interactions by candidate and approach in tweets.

User	Approach	N	Retweets	$\overline{X}$	Likes	$\overline{X}$	Quotes	$\overline{X}$
jlsanzalcalde	Local	113	5802	51.3	12,343	109.2	210	1.9
	National	6	440	73.3	981	163.5	31	5.2
antoniomunozsev	Local	131	7042	53.8	13,167	100.5	319	2.4
	National	11	878	79.8	1513	137.5	52	4.7
cristinapelaez	Local	23	591	25.7	1383	60.1	12	0.5
	National	5	138	27.6	243	48.6	4	0.8
SusanaHornillo	Local	57	3771	66.2	6098	107.0	138	2.4
	National	9	437	48.6	824	91.6	14	1.6
sahefer	Local	51	798	15.6	2348	46.0	53	1.0
	National	1	60	60.0	131	131.0	5	5.0
Aumesquet	Local	84	1561	18.6	2454	29.2	28	0.3
	National	3	50	16.7	76	25.3	2	0.7

Along the same lines, it is vital to consider that candidates' Twitter activity does not necessarily mirror their outcome in the posterior elections. Evidence of this is provided in Figure 4, which compares the activity developed by different candidacies and their outcome in the pertinent elections. As illustrated in said figure, the two most active leaders on the said social network were amongst the three least supported formations at the elections.
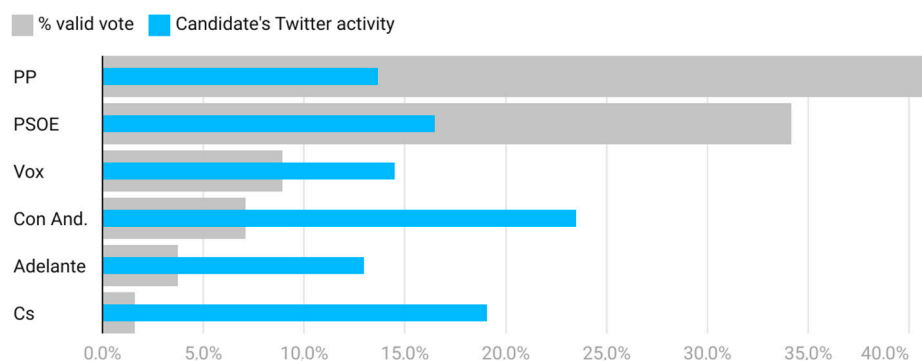
Figure 4. Comparative data between candidates' Twitter activity and the valid vote rate in the election.

5. Discussion and Conclusions

The primary goal of this paper was to lay the groundwork for further academic debate on municipal campaigns and elections through the study of the emotional aspects implemented in a social network within the framework defined by a local campaign. To that end, the developed study case is centred on the local elections held in 2023 in the city of Seville with respect to the activity carried out by the main candidacies on the social network Twitter. Considering the theoretical elements and precedents, several research enquiries were contemplated and guided the empirical analysis. They can be understood as they are answered in the following terms.

Regarding RQ1, it can be confirmed that candidacies include elements of nationalisation in their messages despite the municipal nature of the elections. Nonetheless, it is undeniable that their proportion is inferior to 10 per cent for the majority of candidates. As a consequence, despite verifying that certain state elements are indeed present in the studied elections, the primary candidacies have not contributed to a great nationalisation of the campaign—at least, through their strategies on the social network Twitter. This strengthens the image of how candidates contribute to maintaining the focus on the local character of the elections, which is also connected to the previous findings on the impact that these figures can have on the vote (Marien et al. 2015; Ortega and Recuero-López 2020; Riera et al. 2017). Besides, based on the obtained evidence, the absence of remarkable differences among candidacies must also be taken into account. Vox and Con Andalucía had the highest rate of both retweets and content mentioning state matters, which helps to comprehend the differences with the rest. Nonetheless, it should be pointed out that there is relevant evidence to pursue the future continuation of this study line. Although the present paper has been centred on the possible presence of elements of state interest in the candidates' strategies, the relevance that other arenas may acquire—based upon data shown in Figure 3—cannot be discarded, for instance, the regional scale. Given this context, it would be interesting to propose a wider approximation as to possible interdependences that have also been corroborated by recent research in regard to the electoral behaviour in this type of local election (Ortega and Recuero-López 2020).

As for RQ2, on the differences in the emitted messages from an emotional approach linked to the executed positions, the following has been demonstrated: firstly, the messages emitted by the assessed candidacies did not present a homogenous behaviour; and secondly, certain differences linked to the positions in the competition can be discerned. However, the point just made must be interpreted with caution. Regarding the differences, the PSOE candidate (local incumbent and leader party of the state's coalition government) presented the highest rate of positive emotional content and the lowest negative one, being more intense on the state dimension than on the local level. Moving on to PP (main formation of the local and national opposition), this party showed an outstanding use of both positive and negative terms and with a greater intensity, which contrasts with the statewise contents. Regarding Vox, on both local and national levels, highly emotional messages were used by this opposition party, particularly with a negative tone. Moving on to the Con Andalucía candidacy associated with UP (formation in the local opposition, yet part of the state government), there is certain high positive emotionality at all levels and a greater negative intensity on the state scale. Finally, among the parties that did not accomplish representation, the Adelante Andalucía candidacy was remarkable for its notable positive emotionality focused on the local scope, whereas the Cs candidate also spread a considerable amount of positive emotional messages on both local and national levels. Thus, it is confirmed that parties were not directed by the same strategies in terms of emotionality and that there is a lack of global variables that discern between the emotional presence in local and national content.

Besides the different strategies confirmed by the research's findings, it can also be observed that the positions that the candidates obtained within the competition framework may be relevant to their comprehension. With the focus on those that claimed representation, PP and Vox (opposition parties at the local and national scales) stood out—particularly

the latter—for their higher rate of negative emotionality. It should be pointed out too that the Con Andalucía candidate (UP, part of the state's coalition government) presented an increased negative emotionality in state-related messages as opposed to the PSOE candidate (formation that leads the above-mentioned governing coalition). Nevertheless, this assessment based on the roles performed in the different electoral arenas must be approached with caution and considering certain points. On the one hand, there is evidence that some parties or candidates tend to use emotional strategies to a greater degree than others (García-Hípola and Pérez-Castaños 2021; Novelli et al. 2022), in terms of intensity and polarity (negative or positive), and with respect to the type of organisation and/or ideology. Therefore, this may occur regardless of the roles played in an exceptional specific context of competition. In addition, notwithstanding the occupied positions and how they influence the general campaign strategies, it cannot be ignored that there is certain conditioning regarding the debate terms established on Twitter—which eventually impacts the emotional sense of messages in each campaign (Borja-Orozco 2022). Hence, in conclusion, despite verifying that parties emitted messages with different intensities and polarities depending on the studied arenas, their interpretation as a manifestation of level interference must be corroborated in future research, especially through studies that include a larger number of cases—so that the political formations of each candidacy may be analysed by different roles—as well as to learn the consistency of the strategies in the same positions, regardless of the parties or the campaign's circumstances.

In spite of the findings and their pertinent analysis, more generic limitations to this research must also be addressed. The method section of the present paper addressed the main and most common restrictions concerning the functioning of the software used; for instance, those related to the non-literal sense of certain expressions—with irony or sarcasm—and their interpretation (Rúas-Araújo et al. 2016). As an example of said restrictions, we can turn to Sandra Heredia (Adelante Andalucía), whose tweets with national content have obvious negative allusions at first sight[14]. However, the software fails to detect them as such when using its own dictionary.

It is also of great relevance to address the intrinsic limitations of the social network as well as the changes that it is undergoing. Throughout the elaboration of the current paper, the free Academic plan vanished from the plans offer announced by the social network at the beginning of this year, within the framework of company changes after its acquisition by Elon Musk by the end of 2022. Ever since June, this has obstructed the collection of large amounts of data from this network for scientific research, owing to established fees that exceed the majority of budgets. In fact, the present article could not have been elaborated now had data not been previously obtained. To the detriment of alternatives that enable their success, future studies may provide enlightening insight on activist behaviour in the differing parties, on the nature of their publications and how they differ from the use that ordinary users make of emotions and nationalisation, and even on candidates evaluated on the present paper. As data analysis shows, the API had not been adapted to the ongoing changes on the social network, consequently leading data extraction to miss certain information, such as tweets longer than 280 characters allowed to subscribed accounts (the then implemented Twitter Blue, now called X Premium). PSOE, PP and Cs candidates possessed this subscription, hence their ability to edit published tweets and release content beyond the traditional character limit. With the goal of preventing our analysis from being incomplete, the remaining data were collected manually.

Regardless of that, the fundamental objectives of our research may be concluded as satisfied. It has been confirmed, as predicted, that emotions are also present in municipal campaigns, and that these types of campaigns on social media must be assessed within a framework that contextualises them with other electoral processes, while at the same time considering their peculiarities. In addition, this research provides evidence for possible different strategies that may be implemented by parties on this scope, regarding the competition circumstances in the various political arenas. Nevertheless, it remains necessary

to continue expanding empirical knowledge on these matters in order to strengthen the fundamental groundwork for this study.

Notes

[1] Towards the end of July 2023, Twitter was rebranded as "X" and a capital letter 'x' substituted the iconic blue bird logo that had represented it since its origins.

[2] Overall, the information contained in this social network, combined with analytic strategies associated with big data, is allowing new and interesting research questions to be proposed and explored in several academic fields (Kumar and Jaiswal 2020; Thakur 2022; Taecharungroj 2023; Zimmer and Proferes 2014).

[3] In addition to the above-noted, several researches have analysed other social networks alongside Twitter (for instance, Dumitrica 2016; Lappas et al. 2016; Skogerbø and Krumsvik 2015; Trejos-Gil 2021).

[4] PSOE is a social democratic party whose deputies at the European Parliament belong to the S&D group. With respect to UP, located on the left of the latter, it consists of a coalition with deputies at the European Parliament that are included in the groups GUE/NGL and Greens/EFA.

[5] PP mirrors the conservative and christian-democratic ideology that defines the group EPP, to which its representatives are affiliated at the European Parliament. Turning now to Vox, its far-right representatives owe allegiance to the group ECR on the European level. To conclude, in so far as it is defined as a liberal formation, Cs is integrated within Renew in the European framework.

[6] In the whole, the entirety of Andalusia has entered the general regime that models party competition (Ocaña and Oñate 2000), despite the particularities displayed in its own competency structure (Ortega and Montabes-Pereira 2011).

[7] The Spanish municipal electoral system is defined by its representative character and based upon the one designed for the lower chamber, with some slight changes. Under these circumstances, there is one unique constituency for the entire local territory, whose number of seats for each individual municipality is subjected to the size of their population—in the case of Seville, 31 representatives are elected. Candidacies are submitted as closed and blocked lists, and seats are then distributed to those formations with a valid vote rate higher than 5 per cent, as the D'Hondt formula dictates. Once the council collegiate body is formed, the mayor is elected by absolute majority; otherwise, the councillor at the top of the most-voted list is proclaimed mayor (Delgado-Sotillos 2010; Montabes-Pereira et al. 2023). As was the case of Juan Espadas in 2019 after he led the top of PSOE's list, in so far as there was no alternative absolute majority. However, he resigned in January 2021 and was replaced by Antonio Muñoz, who was number three on the list and would later become the candidate of the same party for the May 2023 elections.

[8] Elections to the Parliament of Andalusia were held in 2022, when PP achieved an absolute majority for the first time in the history of said autonomous community. The institutional access to autonomy of every autonomous community shapes their electoral calendar (Montabes-Pereira et al. 2023).

[9] Nevertheless, available evidence supports that interdependence may manifest permanently between arenas due to Spain's multi-layered political system (Ortega and Recuero-López 2020).

[10] Estimations resulted from the 40dB poll for the PRISA group—issued 6 days prior to the elections—projected the aforementioned technical draw, portrayed the then mayor as the most recognisable candidate, claimed PSOE was the party with the greatest affinity rate from respondents, and assessed governmental management as positive or very positive by a 34 per cent against the negative or very negative 24 per cent (https://elpais.com/espana/elecciones-municipales/2023-05-22/el-psoe-aventajaria-por-la-minima-al-pp-en-sevilla.html, accessed on 25 July 2023).

[11] Preceded by Granada (Andalusia), the most active city.

[12] This type of accounts was fully valid from January 2021 to June 2023. https://blog.twitter.com/es_la/topics/product/2021/haciendo-posible-futura-investigacion-academica-twitter-api (accessed on 14 october 2023).

[13] However, this is the result of different strategies. When it comes to Cristina Peláez, 80 per cent of this type of publication reflects the general diffusion of her party's accounts on different levels, such as municipal. As for Susana Hornillos, 71 per cent consists of retweets of national leaders from her origin party ("Podemos") as well as retweets of the national account, amongst others. Needless to say, she also retweets several of her anonymous partisans to a lower degree.

14   Tweets referring to real estate speculation or criticising centralism and capitalism.

References

Arce-García, Sergio, Fátima Vila Márquez, and Joan-Francesc Fondevila-Gascón. 2022. Analysis of the Twitter discourse in the 2019 electoral debates in Spain: A comparative algorithmic study. *Communication & Society* 35: 45–61. [CrossRef]

Barrie, Christopher, and Justin Chun-ting Ho. 2021. academictwitteR: An R package to access the Twitter Academic Research Product Track v2 API endpoint. *Journal of Open Source Software* 6: 3272. [CrossRef]

Borja-Orozco, Henry. 2022. Political consumerism: Communication strategies based on ideological and performance voting. *Revista Latinoamericana de Psicología* 54: 12–22. [CrossRef]

Boyd, Ryan L., Ashwini Ashokkumar, Sarah Seraj, and James W. Pennebaker. 2022. *The Development and Psychometric Properties of LIWC-22*. Austin: University of Texas.

Capó-Giol, Jordi. 1996. Elecciones municipales, pero no locales. *Revista Española de Investigaciones Sociológicas* 56: 143–64.

Carrillo-Rodríguez, Jesús, and Claudia Eugenia Toca-Torres. 2022. La opinión pública en Twitter Análisis durante la contienda electoral en la capital colombiana. *Opinião Pública* 28: 787–827. [CrossRef]

Cohn, Michael A., Matthias R. Mehl, and James W. Pennebaker. 2004. Linguistic Markers of Psychological Change Surrounding September 11 2001. *Psychological Science* 15: 687–93. [CrossRef]

Corduneanu, Victoria Isabela. 2018. El papel de las emociones sociales y personales en la participación política. *Revista Mexicana de Opinión Pública* 26: 71–96. [CrossRef]

Criado, J. Ignacio, Guadalupe Martínez-Fuentes, and Aitor Silván. 2013. Twitter en campaña: Las elecciones municipales españolas de 2011. *Revista de Investigaciones Políticas y Sociológicas* 12: 93–113.

Davis, Richard, Christina Holtz Bacha, and Marion R. Just, eds. 2017. *Twitter and Elections around the World: Campaigning in 140 Characters*. London: Routledge. [CrossRef]

Delgado-Sotillos, Irene. 2010. Elecciones municipales en España. dimensiones analíticas y aspectos distintivos de ocho procesos electorales (1979–2007). *Política y Sociedad* 47: 13–36.

Delgado-Sotillos, Irene. 2023. Reconsiderando la teoría de las elecciones de segundo orden. ¿Cómo clasificar a las elecciones municipales españolas de 2019? *Revista Española de Ciencia Política* 62: 13–39. [CrossRef]

Delgado-Sotillos, Irene, and Javier Redondo-Rodelas. 2020. El sistema electoral municipal: Análisis de los efectos de dos sistemas diferentes. In *Sistemas Electorales en España: Caracterización, Efectos, Rendimientos y Propuestas de Reforma*. Edited by Carmen Ortega, Juan Montabes-Pereira and Pablo Oñate. Madrid: Centro de Investigaciones Sociológicas, pp. 329–46.

Dumitrica, Delia. 2016. Imagining engagement: Youth, social media, and electoral processes. *Convergence: The International Journal of Research into New Media Technologies* 22: 35–53. [CrossRef]

Duncombe, Constance. 2019. The Politics of Twitter: Emotions and the Power of Social Media. *International Political Sociology* 13: 409–29. [CrossRef]

Fernández-Cabana, Mercedes, José Rúas-Araújo, and María Teresa Alves-Pérez. 2014. Psicología, lenguaje y comunicación: Análisis con la herramienta LIWC de los discursos y tweets de los candidatos a las elecciones gallegas de 2012. *Anuario de Psicología* 44: 169–84.

Frame, Alex, Arnaud Mercier, Gilles Brachotte, and Caja Thimm, eds. 2016. *Tweets from the Campaign Trail Researching Candidates' Use of Twitter During the European Parliamentary Elections*. Lausanne: Peter Lang Academic Research.

García-Carretero, Lucía, and Laura Pérez-Altable. 2017. Barcelona en Comú on Twitter. Analyzing the electoral communication of the confluence during the 2015 council election. *El profesional de la información* 26: 871–83. [CrossRef]

García-Hípola, Giselle, and Sergio Pérez-Castaños. 2021. Las emociones como estrategia de comunicación en las elecciones europeas de 2019: VOX. *Más Poder Local* 43: 20–27.

Gendźwiłł, Adam, and Kristof Steyvers. 2021. Guest editors' introduction: Comparing local elections and voting in Europe: Lower rank, different kind… or missing link? *Local Government Studies* 47: 1–10. [CrossRef]

Gómez-Calderón, Bernardo, Sergio Roses, and Francisco-Javier Paniagua-Rojano. 2017. La campaña en 140 caracteres. Empleo de Twitter por parte de los candidatos de los partidos mayoritarios ante las elecciones generales de 2016 en España. *El profesional de la información* 26: 816–23. [CrossRef]

Hagar, Douglas. 2015. #Vote4me: The impact of twitter on municipal campaign success. Paper presented at the 2015 International Conference on Social Media & Society, London, UK, July 16–18.

Heath, Anthony, Iain McLean, Bridget Taylor, and John Curtice. 1999. Between first and second order: A comparison of voting behaviour in european and local elections in Britain. *European Journal of Political Research* 35: 389–414. [CrossRef]

Himelboim, Itai, Kaye D. Sweetser, Spencer F. Tinkham, Kristen Cameron, Matthew Danelo, and Kate West. 2016. Valence-based homophily on Twitter: Network Analysis of Emotions and Political Talk in the 2012 Presidential Election. *New Media & Society* 18: 1382–400. [CrossRef]

İkiz, Ozlem Ozdesim, Mehmet Zahid Sobaci, Nilay Yavuz, and Naci Karkin. 2014. Political use of twitter: The case of metropolitan mayor candidates in 2014 local elections in Turkey. Paper presented at the 8th International Conference on Theory and Practice of Electronic Governance, Guimaraes, Portugal, October 27–30; pp. 41–50. [CrossRef]

Jara, René, Antoine Faure, Jarnishs Beltrán, and Gonzalo Castro. 2017. La notoriedad política en los candidatos que usan Twitter. Un ejercicio de clusterización durante las elecciones municipales en Chile (2016). *Revista Latina de Comunicación Social* 72: 803–17. [CrossRef]

Jaráiz-Gulías, Erika, María Pereira-López, and José Manuel Rivera-Otero. 2020a. Análisis de emociones originadas por las publicaciones en Twitter de los candidatos a las elecciones generales de Bolivia y España en 2019. *Journal of Iberian and Latin American Research* 26: 371–88. [CrossRef]

Jaráiz-Gulías, Erika, Paloma Castro Martínez, and Gabriel Colomé García. 2022. The Emotional Dimension of the Spanish Far Right and Its Effects on Satisfaction with Democracy. *Social Sciences* 11: 475. [CrossRef]

Jaráiz-Gulías, Erika, Paulo Carlos López-López, and Miguel Anxo Bastos Boubeta. 2020b. Economía, política social y Twitter: Análisis de las emociones negativas en cuatro elecciones presidenciales latinoamericanas a través del LIWC. *RISTI-Revista Ibérica de Sistemas e Tecnologias de In-formação* E26: 270–82.

Jungherr, Andreas. 2016. Twitter use in election campaigns: A systematic literature review. *Journal of Information Technology & Politics* 13: 72–91. [CrossRef]

Kropf, Martha. 2021. Using Campaign Communications to analyze civility in ranked choice voting elections. *Politics and Governance* 9: 280–92. [CrossRef]

Kruikemeier, Sanne. 2014. How political candidates use Twitter and the impact on votes. *Computers in Human Behavior* 34: 131–39. [CrossRef]

Kumar, Akshi, and Arunima Jaiswal. 2020. Systematic literature review of sentiment analysis on Twitter using soft computing techniques. *Concurrency and Computation: Practice and Experience* 32: e5107. [CrossRef]

Kušen, Ema, and Mark Strembeck. 2018. Politics, sentiments, and misinformation: An analysis of the Twitter discussion on the 2016 Austrian Presidential Elections. *Online Social Networks and Media* 5: 37–50. [CrossRef]

Lampoltshammer, Thomas J., Gabriele De Luca, and Lőrinc Thurnay. 2023. Digital News and Political Tweets in the Lower Austrian Municipal Elections: A Case Study on Digital Journalism and Political Communication. *Social Sciences* 12: 18. [CrossRef]

Lappas, Georgios, Amalia Triantafillidou, Prodromos Yannas, Anastasia Kavada, Alexandros Kleftodimos, and Olga Vasileiadou. 2016. Social Media Battles: Their Impact during the 2014 Greek Municipal Elections. *Journal of Universal Computer Science* 22: 375–93.

Lombana-Bermúdez, Andrés, Maryluz Vallejo Mejía, Liliana María Gómez Céspedes, and Juan Federico Pino Uribe. 2022. Cámaras de eco, desinformación y campañas de desprestigio en Colombia. Un estudio de Twitter y las elecciones locales de Medellín en 2019. *Política y Gobierno* 29: ePYG 1494.

López-de-Ayala-López, María Cruz, Beatriz Catalina-García, and José-Gabriel Fernández-Fernández. 2016. Spanish mayors' public communication on Twitter during local elections. *Revista Latina de Comunicacion Social* 71: 1280–300. [CrossRef]

López-López, Paulo Carlos, Pablo Oñate, and Álvaro Rocha. 2020. Social media mining, debate and feelings: Digital public opinion's reaction in five presidential elections in Latin America. *Cluster Computing* 23: 1875–86. [CrossRef]

Marcus, George E. 2002. *The Sentimental Citizen: Emotion in Democratic Politics*. University Park: Penn State University Press.

Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: The University of Chicago Press.

Marien, Sofie, Ruth Dassonneville, and Marc Hooghe. 2015. How Second Order Are Local Elections? Voting Motives and Party Preferences in Belgian Municipal Elections. *Local Government Studies* 41: 898–916. [CrossRef]

Marsh, Michael. 1998. Testing the Second-Order Election Model after Four European Elections. *Journal of Political Science* 28: 591–607. [CrossRef]

Martínez-Rolán, Xabier. 2016. Desigualdad en la participación en Twitter. Las elecciones municipales en España en 2015: El caso gallego. *Opción* 32: 169–86.

Moe, Hallvard, and Anders Olof Larsson. 2013. Untangling a complex media system: A comparative study of Twitter-linking practices during three Scandinavian election campaigns. *Information, Communication & Society* 16: 775–94. [CrossRef]

Montabes-Pereira, Juan, Francisco Javier Alarcón González, and José Manuel Trujillo. 2023. Las elecciones municipales de 2023 en España: La consolidación de una dinámica de bloques. *Más Poder Local* 53: 88–105. [CrossRef]

Nicasio-Varea, Blanca, and Marta Pérez-Galdón. 2021. Comunicación electoral 2.0: Presencia y actividad en Twitter de los candidatos a la alcaldía de Valencia en las elecciones del 26 de mayo de 2019. *Política y Sociedad* 58: e65475. [CrossRef]

Norris, Pippa. 1997. Second-order elections revisited. *European Journal of Political Research* 31: 109–24. [CrossRef]

Norris, Pippa, John Curtice, David Sanders, Margaret Scammell, and Holli A. Semetko. 1999. *On Message: Communicating the Campaign*. Thousand Oaks: SAGE Publications Ltd. [CrossRef]

Novelli, Edoardo, Bengt Johansson, and Dominic Wring, eds. 2022. *The 2019 European Electoral Campaign: In the Time of Populism and Social Media*. Palgrave Macmillan. Berlin/Heidelberg: Springer Nature. [CrossRef]

Ocaña, Francisco A., and Pablo Oñate. 2000. Las elecciones autonómicas de 1999 y las Españas electorales. *Revista Española de Investigaciones Sociológicas* 90: 183–228. [CrossRef]

Ortega, Carmen, and Fátima Recuero-López. 2020. Liderazgo político y elecciones municipales: ¿nacionalización, regionalización o localismo? *Revista Española de Investigaciones Sociológicas* 169: 123–41. [CrossRef]

Ortega, Carmen, and Juan Montabes-Pereira. 2011. Identificación partidista y voto: Las elecciones autonómicas en Andalucía (2004-2008). *Revista Española de Investigaciones Sociológicas* 134: 27–54. [CrossRef]

Pellegrino, Alfonso. 2023. Research Trends in Social Media Role in Political Campaigns: A Bibliometric Analysis. *Review of Communication Research* 11: 150–71. [CrossRef]

Pereira, María, Nieves Lagares, and Paulo Carlos López-López. 2021. Partidos y líderes en las elecciones generales de 2016 y 2019: Una visión emocional. *Revista de Estudios Políticos* 193: 213–49. [CrossRef]

Pérez-Castaños, Sergio, Javier Antón Merino, and Sandra García Santamaría. 2023. Emociones, liderazgo y redes sociales. Propuesta para su medición en materiales de campaña electoral. *Revista Española de Investigaciones Sociológicas* 184: 125–36.

Quevedo, Raquel, Marta Portalés Oliva, and Salomé Berrocal Gonzalo. 2016. El uso de la imagen en Twitter durante la campaña electoral municipal de 2015 en España. *Revista Latina de Comunicación Social* 71: 85–107. [CrossRef]

Ramírez-Esparza, Nairán, James W. Pennebaker, Florencia Andrea García, and Raquel Suriá. 2007. La psicología del uso de las palabras: Un programa de computadora que analiza textos en español. *Revista Mexicana de Psicología* 24: 85–99.

Raynauld, Vincent, and Josh Greenberg. 2014. Tweet, Click, Vote: Twitter and the 2010 Ottawa Municipal Election. *Journal of Information Technology & Politics* 11: 412–34. [CrossRef]

Reif, Karlheinz, and Hermann Schmitt. 1980. Nine second-order national elections. A conceptual framework for de analysis of European elections results. *European Journal of Political Research* 8: 3–44. [CrossRef]

Riera, Pedro, Raúl Gómez Martínez, Juan Antonio Mayoral Díaz-Asensio, Pablo Barbera Aranguena, and Jose Ramón Montero Gibert. 2017. Elecciones municipales en España. La personalización del voto. *Revista Internacional de Sociologia* 75: e062. [CrossRef]

Rivera-Otero, José Manuel, Nieves Lagares Diez, Erika Jaráiz Gulías, and Paulo Carlos López López. 2021a. Emociones y engagement en los mensajes digitales de los candidatos a las elecciones generales de 2019. *Cultura, Lenguaje y Representación* 26: 229–45. [CrossRef]

Rivera-Otero, José Manuel, Nieves Lagares Diez, María Pereira López, and Erika Jaráiz Gulías. 2021b. Relación entre diversos usos de las redes sociales Twitter y Facebook emociones, y voto en España. *Revista Latina de Comunicación Social* 79: 73–98. [CrossRef]

Rodon, Toni. 2020. The Spanish electoral cycle of 2019: A tale of two countries. *West European Politics* 43: 1490–512. [CrossRef]

Rúas-Araújo, José, Iván Puentes-Rivera, and María Isabel Míguez-González. 2016. Capacidad predictiva de Twitter, impacto electoral y actividad en las elecciones al Parlamento de Galicia: Un análisis con la herramienta LIWC. *Observatorio (OBS*)* 10: 55–87. [CrossRef]

Sharma, Ankita, and Udayan Ghose. 2020. Sentimental Analysis of Twitter Data with respect to General Elections in India. *Procedia Computer Science* 173: 325–34. [CrossRef]

Skogerbø, Eli, and Arne H. Krumsvik. 2015. Newspapers, facebook and twitter: Intermedial agenda setting in local election campaigns. *Journalism Practice* 9: 350–66. [CrossRef]

Sobaci, Mehmet Zahid, Kadir Yasin Eryiğit, and İbrahim Hatipoğlu. 2016. The net effect of social media on election results: The case of twitter in 2014 turkish local elections. In *Social Media and Local Governments: Theory and Practice*. Edited by En M. Zahid. Berlin/Heidelberg: Springer, pp. 265–79. [CrossRef]

Taecharungroj, Viriya. 2023. "What Can ChatGPT Do?" Analyzing Early Reactions to the Innovative AI Chatbot on Twitter. *Big Data and Cognitive Computing* 7: 35. [CrossRef]

Tausczik, Yla R., and James W. Pennebaker. 2010. The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology* 29: 24–54. [CrossRef]

Thakur, Nirmalya. 2022. MonkeyPox2022Tweets: A Large-Scale Twitter Dataset on the 2022 Monkeypox Outbreak, Findings from Analysis of Tweets, and Open Research Questions. *Infectious Disease Reports* 14: 855–83. [CrossRef] [PubMed]

The Social Media Family. 2022. *VIII Informe Sobre el Uso de Redes Sociales en España*. Available online: https://t.ly/EcJB- (accessed on 25 July 2023).

Towner, Terri, and Caroline Lego-Munoz. 2016. Boomers versus millennials: Online media influence on media performance and candidate evaluations. *Social Sciences* 5: 56. [CrossRef]

Trejos-Gil, Carlos Andrés. 2021. La campaña electoral a las alcaldías en Colombia: El papel de las redes sociales. *América Latina Hoy* 89: 81–104. [CrossRef]

Trujillo, José Manuel, and Giselle García-Hípola. 2020. Entre lo nacional y lo comunitario, de nuevo: Situando los resultados de las elecciones al Parlamento Europeo de 2019. In *Elecciones Europeas 2019: Campaña Electoral, Voto y Liderazgo*. Edited by Sergio Pérez-Castaños. Valencia: Tirant lo Blanch, pp. 37–69.

van der Eijk, Cees, Mark Franklin, and Michael Marsh. 1996. What Voters Teach Us about Europe-Wide Elections: What Europe-Wide Elections Teach Us about Voters. *Electoral Studies* 15: 149–66. [CrossRef]

van der Zee, Sophie, Ronald Poppe, Alice Havrileck, and Aurélien Baillon. 2021. A Personal Model of Trumpery: Linguistic Deception Detection in a Real-World High-Stakes Setting. *Psychological Science* 33: 3–17. [CrossRef]

Zimmer, Michael, and Nicholas John Proferes. 2014. A topology of Twitter research: Disciplines, methods, and ethics. *Aslib Journal of Information Management* 66: 250–61. [CrossRef]