The final publication is available at

https://doi.org/10.1080/21582041.2017.1367833

Political candidates on infotainment programmes and their emotional effects on Twitter:

An analysis of the 2015 Spanish general elections pre-campaign season (*)

Authors:

Tomás Baviera, PhD
Polytechnic University of Valencia

Álvar Peris, PhD
University of Valencia

Lorena Cano-Orón
University of Valencia

Political candidates in infotainment programs and their emotional effects on Twitter: An analysis of the 2015 Spanish general elections pre-campaign season

Tomás Baviera   (corresponding author)

Department of Economics and Social Sciences, Polytechnic University of Valencia, València, Spain

Postal address: Dpt. of Economics and Social Sciences, Polytechnic University of Valencia, Camino de Vera, s/n; 46022 Valencia, Spain
Telephone: +34 963877470
email: tobapui@upv.es
Twitter: @tomasbaviera
ORCID: 0000-0002-2331-6628

Tomás Baviera (1974) is professor of marketing at the Polytechnic University of Valencia. He holds a BA in Telecommunications Engineering from the same university, as well as a PhD in Communication from the University of Valencia. He is part of the University of Valencia's research group Mediaflows, which focuses on political communication. He is visiting professor in the Master's in Social Communication of Scientific Research at the Valencian International University. He has held various positions overseeing two *Colegios Mayores* (residential colleges) affiliated with the University of Valencia, through which he has promoted education in the liberal arts.

Àlvar Peris

Department of Theory of Languages and Communication Sciences, University of Valencia, València, Spain

Postal adress: Prof. Alvar Peris. Facultat de Filologia, Traducció i Comunicació. Avda. Blasco Ibañez, 32; 46010 – Valencia, Spain.
Telephone: +34 963864264
email: Alvar.Peris@uv.es
ORCID: 0000-0002-2323-2766

Àlvar Peris (1976) holds a PhD in Communication from the Universitat de València where he teaches in 2002 in the Degree in Audiovisual Communication and in the Official Master in Audiovisual Content and Formats His work is focused on the analysis of TV and other audiovisual contents, as well as on the media construction of identities. He is the author of several scientific papers published in academic journals, monographs and collective books on communication, Cultural Studies and history. He has been a visiting professor at Duke University (USA) and at The University of Nottingham (UK).

Lorena Cano-Orón

Department of Theory of Languages and Communication Sciences, University of Valencia, València, Spain

Postal adress: Prof. Alvar Peris. Facultat de Filologia, Traducció i Comunicació. Avda. Blasco Ibañez, 32; 46010 – Valencia, Spain.

Telephone: +34 963864264

email: Lorena.Cano@uv.es

ORCID: 0000-0003-4270-1924

Lorena Cano-Orón is currently undertaken her PhD research in the University of Valencia with a pre-doctoral fellowship of the Spanish Ministry of Economy and Competitiveness (FPI program grant). She is a member of the research groups Mediaflows and ScienceFlows. She holds a BA in Media Communication by the University of Valencia, qualification by which she received the Extraordinary Award. Also, she has completed a Master in Communication and Journalism Research from the Autonomous University of Barcelona and she earned a master's degree in Interculturality, Communication and European Studies from the University of Valencia.

Political candidates on infotainment programs and their emotional effects on Twitter: An analysis of the 2015 Spanish general elections pre-campaign season

Abstract

The infotainment format offers candidates an informal setting to show a more personal side of themselves to the electorate, opening themselves up to potential voters. An example of media hybridization, social networks users can immediately comment on infotainment television programs, a process known as *second screening*. These *second screeners* tend to be especially active in politics. This paper analyses the immediate emotional reaction of these users as they watch infotainment programs that air during the campaign or pre-campaign seasons and feature political candidates as guests. We have confirmed that second screeners react more emotionally towards the candidate when his or her party is mentioned, and less emotionally when the host displays an aggressive attitude through his or her non-verbal communication. When issues related to the candidate's personal lives are discussed, users' emotional reactions improve slightly. The relevance of this research stems from the fact that we are witnessing the consolidation of a politics that increasingly strays from ideological questions, and instead focuses on more emotional and personal issues.

Keywords: emotional public sphere; political infotainment; Twitter sentiment analysis; second screening; personalization of politics; 2015 Spanish general elections

Introduction

Political candidates' appearances on infotainment programs are leaving their mark on the public sphere (Lunt & Mervi, 2007). These programs are normally broadcast during prime time, and they garner a considerable TV audience share thanks to the variety of

topics and the clear entertainment value of the content therein. People who do not typically follow politics come in direct contact with candidates when the latter appear on popular infotainment programs (Baum & Jamison, 2006). Nonetheless, economic issues tend to dominate these programs, especially those broadcast on private TV channels, often shaping the programs' political debate (Thussu, 2007).

Infotainment programming is part and parcel of the wide-ranging transformation of political communication. Not only are formats mixed in a single TV genre, but the communication dynamics of digital media are also fusing with the logics of more established media. Chadwick (2013) considers second screening one of the most genuine manifestations of such media hybridization. While they watch a TV program, viewers simultaneously engage in conversation through social networks (Gil de Zúñiga, Garcia-Perdomo, & McGregor, 2015; Wohn & Na, 2011).

In this research, we focus on second screening during infotainment programs that feature a political candidate as guest. The increasing importance of infotainment programs in political marketing (Maarek, 2014), along with greater political engagement by the viewers of such shows (Vaccari, Chadwick, & O'Loughlin, 2015), makes our study relevant to political communication research. We analysed Spain's 2015 general elections because the political context leading up to election day was influenced by the emergence of political parties that dedicated a significant portion of their political strategy to managing emotions (Casero-Ripollés, Feenstra, & Tormey, 2016), and many infotainment programs featured politicians as guests during the pre-campaign season (Peris Blanes & López-Rico, 2017).

Literature review

Infotainment and politics

The defining characteristic of infotainment TV programs is the fusion of information and entertainment (Ferré, 2013). Brants and Neijens (1998) described the entertainment aspects when the guest is a politician: the topics generally revolve around their personality, their character, and their image, thus highlighting their most human facets; the audience tends to revere the host; the interviews generally take on an informal tone, thus eliciting empathy; the conversation seeks out common ground instead of confrontation; and lastly, the live audience usually participates in the program at some point. Delli, Caprini, and Williams (2001) discussed these programs' usefulness for highlighting politicians' non-political side. Electoral campaign strategies can leverage this opportunity, as it allows candidates to get closer to the electorate. In terms of political marketing, Maarek (2014) showed that by appearing on such programs, politicians garner important media attention.

However, the ubiquity of infotainment programs has subtly transformed the public sphere. *Rational critical discussion*, which contributed so much to the formation of modern public opinion (Habermas, 1989)*,* is usually tossed aside in the political conversations on infotainment programs, as spectacle and emotions win out. At the same time, people's political engagement takes a second seat to audience ratings (Lunt & Mervi, 2007), and soft news on personal issues is favoured over political news and public affairs (Thussu, 2007).

With the erosion of politicians' private lives, topics traditionally associated with one's family life or romantic relationships are discussed openly and publicly. This "privatization" of politicians' lives (Holtz-Bacha, 2003) stems from the "personalization of politics" (Bennet, 2012), in which personal aspects of candidates' lives replace

ideology and politics as the campaign's focal points, a more complex process than can be detailed here. For Casero-Ripollés (2011), this phenomenon is closely-linked to the end of the "opaqueness of power", due above all to the mediatisation of politics, and to the increasing political discontent in different societies.

Several studies have shown that politicians' appearances on infotainment programs have led social groups less likely to follow political affairs to become interested in politics (Baum & Jamison, 2006; Harrington, 2008). Nonetheless, it would seem the audience's reaction to these programs has not been sufficiently studied, especially around campaign season. It would be very useful to analyse the reactions of TV viewers to politicians being presented to them in a way that focuses more on expressive and emotional aspects than political or ideological questions. Second screening can be a reference point for examining the reactions of a sample of the audience.

Second Screening

Second screening is the real-time interaction among social network users while they watch a TV program (Anstead & O'Loughlin, 2011; Gil de Zúñiga et al., 2015; Vaccari et al., 2015). This exchange of messages among viewers is the result of the media convergence anticipated by Jenkins (2006), in which the TV audience would become more engaged thanks to digital media. In the field of political communication, Chadwick (2013) has described second screening as an example of the confluence of different media logics.

Twitter is a particularly apt social network for second screening. The 140-character limit allows users to send messages quickly without losing track of the TV program. Additionally, its tools for mentioning other users and following topics, the @ sign and the hashtag (#), respectively, allow people to follow the online conversation

easily. Anstead and O'Loughlin (2011) confirmed Twitter's prominent role in the online reaction of people who viewed a controversial 2009 episode of the BBC's *Question Time*. Their study revealed the plurality of second screeners, despite being a small percentage of the audience at large. Later research has shown other characteristics of such users, such as greater online engagement (Gil de Zúñiga et al., 2015) and several forms of political engagement (Vaccari et al., 2015). It would also seem the positive feedback received during second screening generates a greater sense of connection with the other participating users (Maruyama, Robertson, Douglas, Raine, & Semaan, 2017). Vergeer and Franses (2016) detected consistent effects of agenda setting within the Twitter conversation during televised candidate debates. Thus, the study of second screening can help better understand the behaviour of a type of viewer who is particularly relevant to political communication.

The emotional reactions of second screeners have also been studied. Wohn and Na (2011) identified four types of tweets, including an emotional type, within a framework of uses and gratifications. They found that the tweeted message's type correlated with the content broadcast on TV during a reality show and Barack Obama's Nobel Prize acceptance speech. Giglietto and Selva (2014) analysed the Twitter conversation revolving around an entire season of an Italian politics show. The program segments second screeners most paid attention to were the interviews and the group discussions. The study also detected the effects of the celebritisation of politics on Twitter.

The appearance of political candidates on infotainment programs leads to the discussion of more personal topics, but not at the expense of topics dealing with politics or the campaign. Given the context in which programs air today, it is useful to examine the audience's emotional reactions. Twitter sentiment analysis can help researchers

evaluate the emotional dynamics of second screeners' communication while they watch infotainment programs.

Sentiment analysis on Twitter

The emotional aspect of the Twitter conversation has interested researchers in communication (Bravo-Marquez, Mendoza, & Poblete, 2014; Saif, Fernandez, He, & Alani, 2012), as well as politics (Vilares & Alonso, 2016). Analysing sentiment on Twitter involves assigning to each message a value corresponding to the emotional weight it transmits. Medhat et al. (2014) divided the major sentiment analysis techniques into two large groups: those that use automatic learning algorithms and those based on dictionaries. For the first group, the process tends to be very complex, whereas in the second group the key task is linguistic in nature.

Among the dictionary-based analysis tools, SentiStrength stands out (Thelwall, Buckley, Paltoglou, & Cai, 2010). It was designed to determine sentiment intensity in short strings of text. SentiStrength provides two values for each string of text analysed: the string's negative strength and its positive strength. Both values range from one to five. Given the program's versatility, several researchers have employed SentiStrength to study political communication on Twitter (Dang-Xuan, Stieglitz, Wladarsch, & Neuberger, 2013; Guo & Vargo, 2015).

Shah et al. (2016) analysed the emotional effect on Twitter users of several non-discursive elements of the Obama-Romney debates. Their analysis suggested that the candidates' non-verbal facial expressions and body gestures were the best predictor of a tweet's emotional valence. In infotainment, Twitter sentiment analysis provides valuable information, due precisely to the strategic emotional component of such programs. Ceron and Splendore (2016) analysed the sentiment of tweets sent during several Italian talk shows to measure the shows' ideological plurality. Among other

9

things, the researchers found that the host has a significant effect on the Twitter users' emotional reaction.

In our study, we sought to measure second screeners' emotional reaction to the topics addressed on specific infotainment programs. To that end, we proposed the following research questions:

RQ1: What effect does it have on the second screeners' emotional reaction when the candidate's personal issues are discussed on an infotainment program?

RQ2: What effect does it have on the second screeners' emotional reaction when important, current political issues are discussed?

RQ3: What effect does it have on the second screeners' emotional reaction when the candidate's political party is discussed?

Non-verbal communication

In addition to these content-related factors, another factor in the second screeners' emotional reaction may be the candidate's and the host's behaviour, given that non-verbal communication on TV is important in political marketing (Maarek, 2014). Sullivan and Masters (1988) studied audiences' responses to politicians' facial expressions in public appearances. In keeping with ethnographic studies on social interaction, they proposed three basic emotional displays: *happiness/reassurance*, *anger/threat,* and *fear/evasion*. In their analysis of politicians' non-verbal communication, Grabe and Bucy (2009) considered two styles: *agonic*, when the sender shows a tendency to seek out conflict and to fight; and *hedonic*, when the sender seeks to transmit pleasure and form a bond.

Given the friendliness between the interviewee and the interviewer on infotainment programs, one would assume that aggressive gestures or expressions would affect the second screeners' emotional reaction. In this study, we seek to explore

the effect of these elements of non-verbal communication by posing the following research questions:

RQ4: What effect does it have on the second screeners' emotional reaction when the interviewee expresses himself or herself through aggressive non-verbal communication?

RQ5: What effect does it have on the second screeners' emotional reaction when the interviewer expresses himself or herself through aggressive non-verbal communication?

Delay effect

The interaction among second screeners revolves around the televised content. Their immediate reaction to what they have just seen is the focal point of our research. Nonetheless, this reaction cannot be registered exactly when the content is broadcast, as some time is required to tweet the message on the social network. Some studies have found consistent effects on second screeners' reactions with a delay interval (Shah et al., 2016; Vergeer & Franses, 2016). Our study employs two models: one which tests the *simultaneous* reaction, and one with a one-minute *delay* in the reaction.

Methodology

We chose Spain's 2015 General Elections as the context for testing our hypotheses. In previous years, researchers had identified an increasing number of infotainment programs on Spanish television channels (Berrocal Gonzalo, Redondo García, Martín Jiménez, & Campos Domínguez, 2014), and especially of political infotainment programs (Pérez, Oliva, & Pujadas, 2014). Additionally, after the 2014 European elections, Spain went from having two parties vying for power to four parties aspiring to achieve a significant number of votes (López García & Valera Ordaz, 2017). Alongside

the two traditional parties' leaders, Mariano Rajoy of the People's Party (PP) and Pedro Sánchez of the Spanish Socialist Workers' Party (PSOE), two other candidates emerged: Pablo Iglesias of the left-wing *Podemos* (We can) and Albert Rivera of the liberal *Ciudadanos* (Citizens). Moreover, part of Podemos's political strategy in the months leading up to the elections was for the party leader to appear on infotainment programs and focusing on the emotional dynamic of their messages (Casero-Ripollés et al., 2016). Amidst this uncertain electoral panorama, candidates' increased presence on infotainment programs is perhaps one of the most salient new features of the pre-campaign and campaign seasons (Peris Blanes & López-Rico, 2017).

Our study requires the use of two samples: one from our codification of infotainment programs, and another from our sentiment analysis of the tweets sent while the programs were on air.

Infotainment programs

We established three criteria for selecting the TV programs: 1. The program had to air during prime time; 2. It had to have a political candidate on as guest; 3. The airdate had to be near the 2015 general elections. Accordingly, we selected five episodes of two talk shows, *El Hormiguero 3.0* (The Anthill 3.0) and *En la tuya o en la mía* (My place or yours). The prior airs on the private channel Antena 3, whereas the 2015 season of the latter aired on La 1 (Spanish public television). In the show *El Hormiguero 3.0*, the host interviews a public figure, and then engages his guest in different segments revolving around performances, comedy, and science. The show *En la tuya o en la mía* features an in-depth interview that delves into personal and intimate aspects of the guest's lives. The candidates appearing on the selected episodes were: Pablo Iglesias (Motos, 2015a), Albert Rivera (Motos, 2015b), and Pedro Sánchez (Motos, 2015c), on *El Hormiguero 3.0,* and Pedro Sánchez (Osborne, 2015a) and Mariano Rajoy (Osborne, 2015b) on *En

la tuya o en la mía.

Twitter data collection

The tweets published during each program were extracted from a general corpus from the 2015 election pre-campaign and campaign seasons. To compile the general corpus, we used Twitter's application programming interface (API). We established three extraction criteria for data collection: two general terms related to the elections (#20D and "20-D"); the name and username of the four major political parties; and the name and username of the four candidates for prime minister. We only extracted tweets written in Spanish to better analyse the messages' content. From the general corpus of tweets, we built one for each episode. The two selection criteria were the air time of each program and the in-tweet reference to the candidate who appeared on the program. Lastly, we examine the emotional reaction to the candidate. Table 1 shows the program's broadcast schedule and the number of tweets in each corpus. Altogether, we analysed 115,992 tweets.

Table 1. Program broadcast schedule, program segments, and number of tweets for each program analysed.

Date	Program	Time slot	Candidate	Segments	Tweets
3 Nov 2015	El Hormiguero 3.0	22:47 – 00:00	Pablo Iglesias	36	16,472
24 Nov 2015	El Hormiguero 3.0	22:44 – 23:59	Albert Rivera	40	35.721
25 Nov 2015	En la tuya o en la mía	22:15 – 23:52	Pedro Sánchez	100	6.802
2 Dec 2015	En la tuya o en la mía	22:15 – 23:53	Mariano Rajoy	109	39,301

8 Dec 2015	El Hormiguero 3.0	22:40 – 23:58	Pedro Sánchez	35	17,696

Variables

Topics

To codify when the program's conversation dealt with the candidate or his party, we took the data from López-Rico and Peris Blanes (2017), a study on the infotainment programs from the 2015 election campaign. Among the episodes they studied are the five we chose for our research. The authors divided each episode into analysis segments in which the conversation revolved around a specific topic. The list of possible topics contained 70 items and was based on the taxonomy proposed by Paterson (1980). One of the topics was the candidate's personal issues. In addition to the topics, we also codified *whom* the interviewer and interviewee were talking about during the interview.

We designed two variables: *topic* and *party*. For the topics, we established five categories: one corresponding with personal issues; three with the issues that most concerned Spaniards according to the Centre for Sociological Research (CIS) barometer published nearest election day (Centro de Investigaciones Sociológicas, 2015), namely, unemployment, corruption, and the economy; while the last category contained the remaining topics. *Party* was a binary variable that indicated whether the candidate's party was discussed during the segment.

Non-verbal communication

The variables *aggressive guest* and *aggressive host* indicate the presence or absence of elements of aggressive non-verbal communication transmitted by the candidate and the host, respectively. In keeping with the work of Shah et al. (2016), we codified three

levels of aggressive communication: *verbal tone, facial display,* and *body gestures*. We analysed the levels for the show's host and guest. Then, using the results of this codification, we designed the variables for our study: if we detected any element of aggressive communication in the segment, we affirm that aggressive non-verbal communication is *present* in that segment.

Verbal tone was operationalized as follows: the guest or host raises his or her tone of voice to insist upon a statement or to rebuke the other person; the guest or host insists on repeatedly explaining something; and a sense of aggressiveness or anger dominates the guest's or host's voice. *Facial display* was operationalized as follows: eyes wide open; furrowed brow; fixed gaze; tense lips; facial rigidity, and a generally negative or hostile expression. Lastly, *body gestures* were operationalized as such: raising the index finger to make a statement; excessive hand movement to insist upon a statement; a tense exchange of gestures; and generally aggressive and defiant behaviour.

Two of this paper's authors codified the *El Hormiguero 3.0* episode with Pedro Sánchez. The codified segments made up 17% of the total corpus. There was disagreement in 9 of the 210 individual codifications. A Krippendorf alpha of 0.89 was obtained, considered high for intercoder reliability (Krippendorf, 2013). Discrepancies in codifications were put to debate between the two authors. Lastly, one of the authors codified the other programs.

Tweet sentiment analysis

We established two dependent variables: *positive sentiment* and *negative sentiment*. Each minute of the program represented a unit of analysis, and each variable indicated the sentiment intensity of the Twitter conversation. We chose SentiStrength to perform the analysis and adapted the program to fit our corpus. We based the analysis on Vilares, Thelwall, and Alonso (2015), who validated the program by extensively

15

renovating the Spanish lexicons. To adjust SentiStrength to suit our research, we extracted all the emoticons, hashtags, and words from our campaign corpus of 8.9 million tweets. We manually determined the emotional value of the most used tokens and incorporated it in the SentiStrength files. After this process, the dictionaries contained 35,549 words, 1.075 fixed expressions, and 329 emoticons.

SentiStrength allows the user to optimize a term's weight by using a gold standard. For this purpose, a team of codifiers manually codified two corpora. The first corpus of 1,200 tweets served as the gold standard, while the second, 500-tweet corpus, was used to validate the algorithm. Every tweet was collected at random. The codifiers assigned each tweet a positive sentiment intensity value between 1 and 5, as well as a negative sentiment intensity value, also between 1 and 5. Discrepancies in the coders' analysis were resolved with the help of one of this paper's authors. Our goal was for 80% of the machine-analysed tweets to match the manually reached value, with a margin of error of +/- 1 for both positive and negative sentiments. Upon testing the algorithm, we obtained 81% accuracy for positive sentiments and 84.8% for negative sentiments.

We performed aggregate calculations of the variables *positive sentiment* and *negative sentiment* for every minute of the episode using the values provided by SentiStrength for each tweet.

Results

Before performing the linear regression analyses, we had to adjust the two corpora for them to have the same unit of measurement. To do so, we rearranged the independent variables, initially measured based on the programs' thematic segments, to match the corresponding minute of the episode. Then, we created two tables: one in which the independent and the dependent variables were aligned in the same minute (Model 1);

and another in which there was a one-minute delay in the dependent variables (Model 2). Table 2 shows the standardized linear regression coefficients.

Personal issues and the public's greatest concerns had hardly any impact on immediate emotional reaction. For personal issues, we only detected a significant value at 10% in the delayed reaction model, as well as a slight reduction in negative emotional reaction ($\beta = -0.113$). Therefore, we cannot say anything with respect to RQ2, and in terms of RQ1, we can only confirm a moderate effect on emotional reaction when the candidate's personal issues are discussed.

The independent variable with the most significant effect on second screeners' emotional reaction is *party*, which corresponds with RQ3. In both models, we detected a significant effect both in terms of positive sentiment ($\beta\_simultaneous = 0.246$, $\beta\_delayed = 0.243$) and negative sentiment ($\beta\_simultaneous = 0.240$, $\beta\_delayed = 0.237$). Each of the four calculations shows an increase in the sentiment intensity of the users' reactions.

Aggressive non-verbal communication by the guest has no effect on the second screeners' simultaneous or one-minute delayed reactions. Therefore, we cannot answer RQ4. However, we can answer RQ5 given that we detected significant effects when the host displayed aggressive non-verbal communication. In both models, emotional reaction is reduced, both in terms of positive sentiment ($\beta\_simultaneous = -0.167$, $\beta\_delayed = -0.176$) and negative sentiment ($\beta\_simultaneous = -0.166$, $\beta\_delayed = -0.175$).

Table 2. Standardized regression coefficients for models 1 and 2.

	Model 1: Simultaneous reaction		Model 2: 1-minute delayed reaction	
	Positive sentiment on Twitter	Negative sentiment on Twitter	Positive sentiment on Twitter	Negative sentiment on Twitter
Topics				
Personal	-0.035	-0.099	-0.048	-0.113*
CIS1: Unemployment	-0.009	0.001	-0.012	-0.003
CIS2: Corruption	-0.010	-0.016	-0.012	-0.019
CIS3: Economy	-0.017	0.034	-0.021	0.030
Other Topics	0.014	0.022	0.009	0.017
Candidate's party	0.246***	0.240***	0.243***	0.237***
Aggressive non-verbal communication				
Guest	0.000	-0.022	0.001	-0.020
Host	-0.167**	-0.166**	-0.176**	-0.175**
N	401	401	396	396
R^2	0.056	0.072	0.056	0.074
F	2.894***	3.827***	2.880***	3.851***

Notes: Multicollinearity between independent variables was not detected.

* < 0.1; ** < 0.05; *** < 0.01.

Discussion and conclusion

This paper analysed the relationship between the content of infotainment programs featuring a political candidate as guest and the emotional reaction in the parallel Twitter conversation. To that end, we examined the content of several episodes in terms of two fundamental elements: the topic of conversation and the interviewee's and interviewer's non-verbal communication. To determine tweet sentiment, we used SentiStrength after having adjusted its dictionaries to the specific context of Spain's 2015 election campaign.

The results indicate an immediate positive emotional effect when the candidates' personal and intimate issues were discussed at the expense of other issues dealing with their ideology and platform, in keeping with Maarek (2014). The analysed data suggests that the audience views the programs with a sense of empathy and close proximity, and the candidates are able to reach voters typically unaccustomed to following politics (Baum & Jamison, 2006). This finding is in tune with the "personalization of politics" described by Bennet (2012) and would support politicians' and their teams' strategy of appearing on such programs, the candidates being attracted to them because their image receives a significant boost.

The data on issues of public interest (politics in general and the citizenry's concerns as seen in CIS polls) suggest that part of the second screeners' emotional reaction to politics is triggered when the conversation focuses on confrontation between parties, which is presented in a much more ideologizing and polarizing manner. Thus, although the media and the public had been focusing on corruption and unemployment for months, the programs favoured friendly conversation that revolved around Spain's political parties (Lunt & Mervi, 2007), which elicited the audience's immediate emotional reaction.

Turning to the candidate's non-verbal communication, we can confirm that, in large part, the scantly significant effect on the emotional reaction of second screeners may have arisen because the guests do not want to appear excessively forceful during the interviews, bearing in mind that the TV context favours friendly, relaxed conversation (Peris Blanes & López-Rico, 2017). However, the second screeners' emotional reaction to the host's aggressive non-verbal communication may be because they focus on the host and overlook the guest. In such a situation, one would also expect the viewer to lend more emotional support to the candidate. However, our analysis did not reveal any significant effect on the viewers' sense of empathy towards the candidates. That said, it would be reasonable to think that these emotional reactions could arise later in the episode.

This last idea shows one of this study's limitations, which, at the same time, opens the door to future lines of research. One of the most interesting limitations is that we measured the second screeners' immediate reaction, when it may also be appropriate to analyse their response after more time has elapsed. Additionally, having focused on the candidates and parties while compiling the tweet corpus, we excluded hashtags and mentions associated with the programs and hosts, an important issue in infotainment, where both program and host have a prominent digital brand. Lastly, intriguing elements such as the content of the hosts' questions and the social conversation on Twitter could also be explored. In any case, analysing the relationship between TV infotainment and the emotional reactions of second screeners opens an extremely productive field for media research that should be followed closely.

References

Anstead, N., & O'Loughlin, B. (2011). The Emerging Viewertariat and BBC Question Time: Television Debate and Real-Time Commenting Online. *The International*

Journal of Press/Politics, *16*(4), 440–462.
http://doi.org/10.1177/1940161211415519

Baum, M. A., & Jamison, A. S. (2006). The Oprah Effect: How soft news helps
inattentive citizens to vote consistently. *Journal of Politics*, *68*, 946–959.

Bennet, W. L. (2012). The Personalization of Politics: Political Identity, Social Media,
and Changing Patterns of Participation. *The Annals of the American Academy of
Political and Social Science*, *644*(1), 20–38.

Berrocal Gonzalo, S., Redondo García, M., Martín Jiménez, V., & Campos Domínguez,
E. (2014). Presence of infotainment in Spain's mainstream DTT channels. *Revista
Latina de Comunicación Social*, *69*, 85–103. http://doi.org/10.4185/RLCS-2014-
1002en

Brants, K., & Neijens, P. (1998). The Infotainment of Politics. *Political
Communication*, *15*(2), 149–164. http://doi.org/10.1080/10584609809342363

Bravo-Marquez, F., Mendoza, M., & Poblete, B. (2014). Meta-level sentiment models
for big social data analysis. *Knowledge-Based Systems*, *69*(1), 86–99.
http://doi.org/10.1016/j.knosys.2014.05.016

Casero-Ripollés, A. (2011). Vida privada en la esfera pública: La intimidad de los
actores políticos españoles en televisión. In A. Casero-Ripollés & J. Marzal (Eds.),
Periodismo en televisión. Nuevos horizontes, nuevas tendencias (pp. 170–196).
Sevilla: Comunicación Social.

Casero-Ripollés, A., Feenstra, R. A., & Tormey, S. (2016). Old and New Media Logics
in an Electoral Campaign: The Case of Podemos and the Two-Way Street
Mediatization of Politics. *The International Journal of Press/Politics*, *21*(3), 378–
397. http://doi.org/10.1177/1940161216645340

Centro de Investigaciones Sociológicas. (2015). *Barómetro de Diciembre de 2015*.
Madrid. Retrieved from http://datos.cis.es/pdf/Es3121mar_A.pdf

Ceron, A., & Splendore, S. (2016). From contents to comments: Social TV and
perceived pluralism in political talk shows. *New Media & Society*, First published:
12 Sep 2016. http://doi.org/10.1177/1461444816668187

Chadwick, A. (2013). *The Hybrid Media System: Politics and Power*. Oxford: Oxford
University Press.

Dang-Xuan, L., Stieglitz, S., Wladarsch, J., & Neuberger, C. (2013). An Investigation of Influentials and the Role of Sentiment in Political Communication on Twitter During Election Periods. *Information, Communication & Society*, *16*(5), 795–825. http://doi.org/10.1080/1369118X.2013.783608

Delli Caprini, M. X., & Williams, B. A. (2001). Let Us Infotain You: Politics in the New Media Age. In W. L. Bennet & R. M. Entman (Eds.), *Mediated politics: Communication in the future of democracy* (pp. 160–181). New York: Cambridge University Press.

Ferré, C. (Ed.). (2013). *Infoentretenimiento. El Formato Imparabla de la Era del Espectáculo*. Barcelona: Editorial UOC.

Giglietto, F., & Selva, D. (2014). Second Screen and Participation: A Content Analysis on a Full Season Dataset of Tweets. *Journal of Communication*, *64*(2), 260–277. http://doi.org/10.1111/jcom.12085

Gil de Zúñiga, H., Garcia-Perdomo, V., & McGregor, S. C. (2015). What Is Second Screening? Exploring Motivations of Second Screen Use and Its Effect on Online Political Participation. *Journal of Communication*, *65*(5), 793–815. http://doi.org/10.1111/jcom.12174

Grabe, M. E., & Bucy, E. P. (2009). *Image Bite Politics: News and the Visual Framing of Elections*. Oxford: Oxford University Press.

Guo, L., & Vargo, C. J. (2015). The Power of Message Networks: A Big-Data Analysis of the Network Agenda Setting Model and Issue Ownership. *Mass Communication and Society*, *18*(5), 557–576. http://doi.org/10.1080/15205436.2015.1045300

Habermas, J. (1989). *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, MA: The MIT Press.

Harrington, S. (2008). Popular News in the 21st Century. Time for a new critical approach? *Journalism*, *9*(3), 266–284.

Holtz-Bacha, C. (2003). Comunicación política: entre la privatización y la espectacularización. *Diálogo Político*, *1*, 137–154.

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.

Krippendorf, K. (2013). *Content Analysis: An Introduction to its Methodology* (3rd ed.). Thousand Oaks, CA: Sage Publications.

López-Rico, C., & Peris Blanes, À. (2017). Agenda e Imagen de los Candidatos en las Elecciones Generales de 2015 en España en Programas Televisivos de Infoentretenimiento. *El Profesional de La Información*, 26(4), 611–620.

López García, G., & Valera Ordaz, L. (Eds.). (2017). *Pantallas Electorales: El discurso de partido, medios y ciudadanos en la campaña de 2015*. Barcelona: Editorial UOC.

Lunt, P., & Mervi, P. (2007). The emotional public sphere: social currents of feeling in popular culture. In R. Butsch (Ed.), *Media and public spheres* (pp. 162–174). New York: Palgrave Macmillan.

Maarek, P. J. (2014). *Communication et marketing de l'homme politique* (4th ed.). Paris: LexisNexis.

Maruyama, M., Robertson, S. P., Douglas, S., Raine, R., & Semaan, B. (2017). "Social watching" a Civic Broadcast : Understanding the Effects of Positive Feedback and Other Users ' Opinions. *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17)*, 794–807. http://doi.org/10.1145/2998181.2998340

Medhat, W., Hassan, A., & Korashy, H. (2014). Sentiment analysis algorithms and applications: A survey. *Ain Shams Engineering Journal*, 5(4), 1093–1113. http://doi.org/10.1016/j.asej.2014.04.011

Motos, P. (2015a, November 3). El Hormiguero 3.0 / Pablo Iglesias [Television Broadcast]. *El Hormiguero 3.0*. Madrid, Spain: Antena 3.

Motos, P. (2015b, November 24). El Hormiguero 3.0 / Albert Rivera [Television Broadcast]. *El Hormiguero 3.0*. Madrid, Spain: Antena 3.

Motos, P. (2015c, December 8). El Hormiguero 3.0 / Pedro Sánchez [Television Broadcast]. *El Hormiguero 3.0*. Madrid, Spain: Antena 3.

Osborne, B. (2015a, November 25). En la tuya o en la mía - Pedro Sánchez, secretario general del PSOE [Television Broadcast]. *En la tuya o en la mía*. Madrid, Spain: TVE1.

Osborne, B. (2015b, December 2). En la tuya o en la mía - Mariano Rajoy [Television Broadcast]. *En la tuya o en la mía*. Madrid, Spain: TVE1.

Patterson, T. E. (1980). *The Mass Media Election: How Americans Choose Their President*. New York: Praeger Special Studies.

Pérez, Ó., Oliva, M., & Pujadas, E. (2014). La construcción televisiva de la deliberación política. Análisis comparativo de programas informativos y de infotainment. *Observatorio (OBS*) Journal*, *8*(2), 45–66.

Peris Blanes, À., & López-Rico, C. M. (2017). Los programas de entretenimiento: espectáculo y emoción en la comunicación política española. In G. López García & L. Valera Ordaz (Eds.), *Pantallas Electorales: El discurso de partidos, medios y ciudadanos en la campaña de 2015* (pp. 129–154). Barcelona: Editorial UOC.

Saif, H., Fernandez, M., He, Y., & Alani, H. (2012). Semantic sentiment analysis of Twitter. In *1th International Conference on the Semantic Web*. Boston, MA, Nov 11-15. http://doi.org/10.1007/978-3-642-35176-1_32

Shah, D. V., Hanna, A., Bucy, E. P., Lassen, D. S., Van Thomme, J., Bialik, K., … Pevehouse, J. C. W. (2016). Dual Screening During Presidential Debates. *American Behavioral Scientist*, *60*(14), 1816–1843. http://doi.org/10.1177/0002764216676245

Sullivan, D. G. ., & Masters, R. D. (1988). "Happy Warriors": Leaders' Facial Displays, Viewers' Emotions, and Political Support. *American Journal of Political Science*, *32*(2), 345–368.

Thelwall, M., Buckley, K., Paltoglou, G., & Cai, D. (2010). Sentiment Strength Detection in Short Informal Text. *Journal of the American Society for Information Science and Technology*, *61*(12), 2544–2558. http://doi.org/10.1002/asi.21416

Thussu, D. K. (2007). *News as Entertainment: The Rise of Global Infotainment*. London: Sage Publications.

Vaccari, C., Chadwick, A., & O'Loughlin, B. (2015). Dual Screening the Political: Media Events, Social Media, and Citizen Engagement. *Journal of Communication*, *65*(6), 1041–1061. http://doi.org/10.1111/jcom.12187

Vergeer, M., & Franses, P. H. (2016). Live audience responses to live televised election debates: time series analysis of issue salience and party salience on audience

behavior. *Information, Communication & Society*, *19*(10), 1390–1410. http://doi.org/10.1080/1369118X.2015.1093526

Vilares, D., & Alonso, M. A. (2016). A review on political analysis and social media. *Procesamiento Del Lenguaje Natural*, *56*, 13–23.

Vilares, D., Thelwall, M., & Alonso, M. A. (2015). The megaphone of the people? Spanish SentiStrength for real-time analysis of political tweets. *Journal of Information Science*, *41*(6), 799–813. http://doi.org/10.1177/0165551515598926

Wohn, Y., & Na, E.-K. (2011). Tweeting about TV: Sharing television viewing experiences via social media message streams. *First Monday*, *16*(3). http://doi.org/http://dx.doi.org/10.5210/fm.v16i3.3368