

The Peruvian campaign on Twitter. Analysis of affective polarization during the second round of the 2021 general elections

La campaña peruana en Twitter. Análisis de la polarización afectiva durante la segunda vuelta de las elecciones generales 2021

A campanha peruana no Twitter. Análise da polarização afetiva durante o segundo turno das eleições gerais de 2021

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ABSTRACT | Twitter is one of the digital spaces that generates great attraction for political candidates during elections due to its usefulness to disseminate proposals and generate conjunctural debates. This research aims to analyze the affective polarization in feelings and emotions generated by the mentions of the presidential candidates –Pedro Castillo and Keiko Fujimori– during the second round of the 2021 general elections in Peru. The data source prepared by the Monitoring of Social Networks of the National Directorate of Education and Citizen Civic Training of the National Elections Jury was used. A total of 1,202,297 tweets were analyzed with R statistical software. Results show that affective polarization occurs in the extreme feelings of users towards the candidates, and the emotional loads even tend to temporary instability of support or rejection.

KEYWORDS: electoral campaigns; Twitter; feelings; polarization; presidential elections.

HOW TO CITE

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RESUMEN | Twitter es uno de los espacios digitales que genera un gran atractivo para las candidaturas políticas en épocas de elecciones por su utilidad para difundir propuestas y generar debates coyunturales. Esta investigación analiza la polarización afectiva en los sentimientos y emociones contenidos en las menciones a las candidaturas presidenciales –Pedro Castillo y Keiko Fujimori – durante la segunda vuelta de las elecciones de 2021 en Perú. Se recurrió a la fuente de datos elaborada por el Monitoreo de Redes Sociales de la Dirección Nacional de Educación y Formación Cívica Ciudadana del Jurado Nacional de Elecciones. Se analizó un total de 1.202.297 tuits con el software estadístico R. Los resultados indican que la polarización afectiva se presenta en los sentimientos extremos de los usuarios hacia las candidaturas, e incluso que las cargas emocionales tienden a la inestabilidad temporal de apoyo o del rechazo.

PALABRAS CLAVE: campañas electorales; Twitter; sentimientos; polarización; elecciones presidenciales; Perú.

RESUMO | Twitter é um dos espaços digitais que gera grande atração para candidaturas políticas durante as eleições, por sua utilidade para divulgação de propostas, geração de debates conjunturais etc. Apresente investigação tem como objetivo analisar a polarização afetiva de sentimentos e emoções gerada pelas menções dos candidatos presidenciais – Pedro Castillo e Keiko Fujimori – durante o segundo turno das eleições gerais de 2021 no Peru. Foi utilizada a fonte de dados elaborada pela "Monitorização das Redes Sociais" da Direção Nacional de Educação e Formação Cívica Cidadã do Júri Nacional Eleitoral. Foram analisados um total de 1.202.297 tweets con software estadístico. Os resultados indicam que a polarização afetiva ocorre nos sentimentos extremos dos usuários em relação aos candidatos, mesmo as cargas emocionais tendem a instabilidade temporária de apoio ou rejeição.

PALAVRAS-CHAVE: campanhas eleitorais; Twitter; sentimentos; polarização; eleições presidenciais; Perú.

INTRODUCTION

Social networks allow the generation of constant information between candidates and the electorate, expanding the political debate and discussion to other areas. Including new technologies allows electoral competition to also have a non-traditional scenario. While digital platforms can contribute positively to positioning candidacies, they also promote the emergence of other phenomena, such as the nationalization of the vote (Jones & Mainwaring, 2003), as well as interaction with supporters or adversaries (Muñiz et al., 2016).

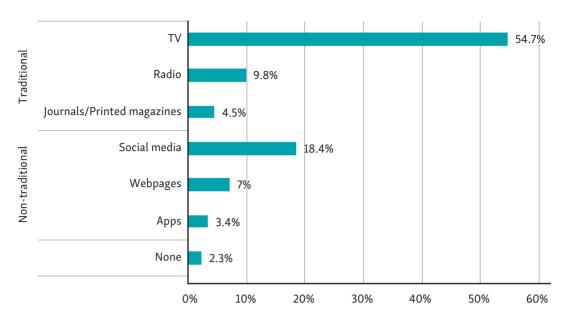
Within this framework, polarization constitutes a field of study for communication, linked to the concepts of echo chambers and homophily in digital networks. Thus, users of social networks such as Twitter tend to integrate the traditional dynamics of socialization, aiming to form groups with similar thoughts and conceptions. This can encourage a polarization environment, in which certain leaderships disqualify each other, promoting confrontation and violence (Romero-Rodríguez et al., 2015).

However, the political polarization phenomenon could be based on the characteristics of the political system, the weakness of political leadership and the inequality faced by Peruvian society (Tanaka, 2005). This research will focus specifically on studying affective polarization on Twitter through the mentions about the candidates who participated in the presidential runoff in Peru in June 2021. This type of polarization is linked to the predisposition to perceive opposing politicians negatively and co-partisans positively (Iyengar et al., 2019). Thus, rising anger and hatred in democratic politics represent an important study that deserves further attention in digital spaces, where polarization patterns can easily be reinforced (Aruguete & Calvo, 2020).

Studies on social networks linked to phenomena such as polarization are rare in Peru, even less so with automated extraction methodologies or classification using computational techniques to identify the feelings or emotions present in Twitter comments.

The electoral scenario of the presidential runoff

The 2021 Peruvian presidential election was settled in a runoff election, contested by Pedro Castillo and Keiko Fujimori, representing the political organizations Perú Libre and Fuerza Popular, respectively. The proportion of valid votes obtained did not represent a significant distance between the eighteen competitors. Castillo (18.92%) led the preferences, followed by Fujimori (14.4%), Rafael López Aliaga of Renovación Popular (11.75%), Hernando de Soto of Avanza País (11.63%), Yonhy Lescano of Acción Popular (9.07%), and Verónika Mendoza of Juntos por el Perú (7.87%). The other 12 candidacies reached around or less than 6% of the votes.



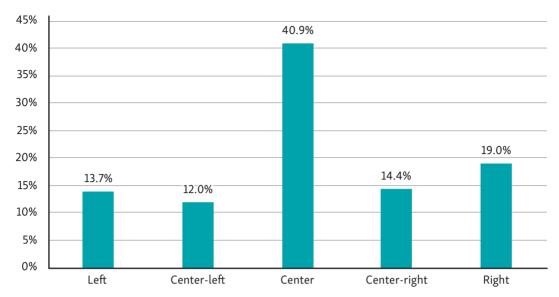
Note: N=2516, 95% representativity.

Figure 1. Media used to obtain information on politics (2021)

Source: Own elaboration based on Jurado Nacional de Elecciones (2021a).

Castillo won a close victory over Keiko Fujimori in the year of the Independence Bicentennial, with 50.13% of valid votes against 49.87% of her opponent. According to the National Bicentennial Citizenship Survey (Jurado Nacional de Elecciones, 2021a), citizens maintained a traditional preference for being informed about politics through television (54.7%), followed by social networks (18.4%), which surpassed radio and the press (Figure 1). Seven out of ten Peruvians consume political information in traditional media; however, non-traditional information channels such as social networks, webpages or applications reach a significant figure of 28.8%. The latter are an important alternative for generating digital citizenship and support the purpose of analyzing Twitter as a space for exchange.

While the technological, social and cultural transformation caused by social networks is undeniable, it is relevant to point out that political communication underwent a major change as a result of the crisis caused by the COVID-19 pandemic. The increase in digital media consumption is the result of the need for information in a scenario full of uncertainty, leading to information overexposure (Masip et al., 2020). Likewise, the restrictive measures taken by countries worldwide caused electoral campaigns to face limitations to conduct traditional rallies, meetings, and visits to neighborhoods, among others (Dauda, 2020).



Note: N=2516, 95% representativity.

Figure 2. Ideological self-identification of citizenship (2021)

Source: Own elaboration based on Jurado Nacional de Elecciones (2021a).

Two fundamental aspects that had an impact on the development of the electoral campaign should be pointed out in the Peruvian case. First, electoral regulations prohibited advertising on radio and television, with the purpose of regulating the financing of political candidacies and organizations (Jurado Nacional de Elecciones, 2021). Secondly, the Ministry of Health established a health security protocol that limited the development of a traditional electoral campaign (Ministry of Health, 2021). Thus, social networks assumed a leading role in political communication strategies and electoral debate within the digital sphere.

Polarization is also visible in the ideological self-identification of the citizens. Figure 2 indicates that around 32.7% of the electorate positioned themselves in one of the two ideological extremes –left (13.7%) and right (19%). Meanwhile, the non-extreme positions, but with a certain approach to a more marked ideology, concentrated 26.4%, although the majority of citizens (40.9%) avoided defining themselves by one of the positions.

THEORETICAL FRAMEWORK

Digital citizenship: spaces for discussion and participation

Information and communication technologies (ICTs) have made it possible to change the links between citizens, politicians and rulers, not only in terms of the

number of people who consume information, but also in terms of who controls it and how it is disseminated. It is precisely in these last aspects that social networks have had a significant impact on the circulation of political information.

With reference to the American context, Gainous and Wagner (2013) state that social networks changed the way of communication in politics and give users the opportunity to choose their own communication network. These grant citizens the possibility to select what contents are of interest to them, avoiding ideas and topics contrary to their beliefs (Aruguete & Calvo, 2018).

Social platforms such as Facebook and Twitter allow us to customize who we want to interact with and reduce the contacts we may not want. We become our own news editors or decide what kind of news and opinions to follow. However, the individual creation of our information network can take us away from a greater degree of freedom, turning us into subjects that can be influenced by those who generate the content of the network we create.

Thus, social networks are an important ally for participatory democracy, contributing to a less hierarchical public sphere, allowing it to expand and acquire other functionalities in addition to information consumption, such as discussion, contestation and organization (Kellner, 2000).

Regarding the generation of debate on Twitter and its repercussions, Muñiz and colleagues (2016) report a greater political sophistication by its users. In this regard, it is considered a tool that enables exchange and democratic discussion among citizens, as it weakens the information monopoly that fell mainly on traditional media (Ruiz, 2015).

Likewise, there is evidence that discussion or debate in digital media during electoral campaigns increases citizen participation in elections, specifically among youth (Aldrich et al., 2016; Effing, et al., 2016). However, the effect of using social networks on voting intention does not imply significant changes, as a result of the selective consumption of information that the electorate has about their political preferences (Flaxman et al., 2016). Thus, the organization of networks based on contacts with similar ideological positions predisposes to the formation of echo chambers, in which interactions simply serve to reaffirm the political identity of those involved (Barberá et al., 2015).

Whereas the public sphere was a scenario reserved for the media and a professional elite, now the design of digital infrastructure facilitates the access of diverse actors, the exchange of individual citizens, and even of anonymous agents who connect and exchange content, generating a hybrid networked public sphere, partly digital and partly analog (Benkler, 2006; Chadwick, 2013).

In Peru, social networks have also shown their relevance in fostering debate and moving from online to offline participation. The most recent case is related to the mobilizations against the presidential vacancy that took place in November 2020, where social networks had a positive influence on citizens' reaction, which was quickly articulated through the use of a series of digital resources (Villanueva, 2021).

Accordingly, digital platforms create opportunities for citizen participation in public affairs. Oversight of political power finds an enabling environment in the digital environment, in which activists and civil society have the opportunity to influence and incorporate new issues into the public debate (Casero-Ripollés, 2010; Feenstra & Casero-Ripollés, 2014).

Polarization in electoral campaigns and digital spaces

The concept of polarization in its broadest sense is described as "an increase in the political, ideological or affective distance that exists between two or more parties or between two or more candidates" (Aruguete & Calvo, 2020, p. 63). For Payne and colleagues (2006), polarization is established as an instrumental need to differentiate participants within the electoral competition. Although it is acknowledged that a percentage of the electorate in contemporary democracies tends to position itself in the center and avoid extremes, it is also necessary to differentiate between political options (Anduiza & Bosch, 2004; Goodin & Kingemann, 2001).

Thus, if political actors are unable to issue messages to distance themselves from their opponents in ideological-programmatic terms, the incentives to mobilize the electorate will be ineffective because citizens will not care who wins or loses. On the other hand, an extreme degree of polarization could generate difficulties for negotiation and dialogue between political organizations and representative institutions.

Although polarization implies the ideological distance perceived between political parties or candidates that represent them, this gap widens with the effects of assimilation and contrast. For Adams and colleagues (2005), the aforementioned terms explain the process by which we tend to symbolically accept those contents we like and reject what we do not support, respectively. In other words, communication processes pre-stimulate users and lead them to perceive political groupings with which they do not agree as more distant.

According to Lelkes (2016), it is possible to define political polarization in four ways: ideological consistency, ideological divergence, perceived polarization, and affective polarization. In countries such as the United States, where the two-party

system generates a traditionally polar and binary environment, Lelkes notes that –during the Trump administration– it was shown that polarization arises among the militants themselves, and not as part of the general population.

Bruns (2019) considers that polarization leads to political isolation by forming an echo chamber in which only users with similar thought patterns participate. Thus, individuals tend to integrate into communities in which they share similar values and opinions to avoid intellectual isolation, which now academically can be called homophily (Hanna et al., 2013; Bessi et al., 2016).

Such phenomena impact democracy as spaces become less tolerant (Tucker et al., 2018), although other work points out that the impact of networks on political polarization is part of reality and arises in response to contextual factors (Bakshy et al., 2015; Boxell et al. 2017).

The increase in the emotions levels in a political confrontation scenario, both in the public sector –conducted by the media, political elites and public institutions– and in the private sector –social networks, interpersonal relationships– leads to an affective polarization.

Affective polarization or the link of emotion with partisan identity (distinguished from other forms of polarization by its emotional origins) seems to accentuate political divisions in countries such as the United States (Garrett et al., 2014; Mason, 2015). This dimension within polarization focuses on the confrontation between opposing groups, generating an increase in distrust and disagreement rather than a rational rejection of proposals or policies (Iyengar et al., 2019).

For Ortellado (2019), the phenomenon can be defined as "movements of denial", where "each side sees in the other the denial of its own identity" (para. 4). In this context, the "anti-something" are cultivated and in Peru the most significant examples are found in the study by Meléndez (2019) and his description of the implications of antifujimorismo and antiaprismo.

In that regard, affective polarization is expected to increase when moments of high political conflict, information dissemination, and mobilization, such as electoral campaigns, persist. Additionally, the use of strategies framed in negative campaigns also reinforces these differences (Nai, 2018). In the case of social networks, the emotional charge of the contents is greater in the face of the final stretch of the elections (Aragon et al., 2013).

Regarding the concepts described above and their integration with social networks, there are some approaches implemented in previous studies. The first is related to the use of social networks to measure public opinion and predict electoral

results, and the second to the impact of social networks on news consumption and how information is disseminated through them.

Marozzo and Bessi (2018) analyze the polarization of social network users based on the impact of news during political campaigns characterized by the rivalry of different sides, concluding that social networks contribute significantly to polarize public opinion.

In that vein, Matuszewski and Szabó (2019) analyze whether individual users tend to exclusively follow the accounts of political content producers -among them, political parties, politicians and media outlets-. Based on the results, it is clear that the noted media outlets incentivize partisan segregation, although the standpoints can also be combined if the positions of political actors or the nature of the issue require it (Bodrunova et al., 2019).

Thus, it is clear that the analysis of Twitter users is complex and requires an understanding of the dynamics that shape follower networks. Generally speaking, it is believed that the emergence of social networks contributes to increase polarization in society, promote conspiracy theories and fake news, and even hate crimes (Allcott & Gentzkow, 2017; Lee et al., 2018). Other stances consider that social networks reduce polarization and the effects of partisanship (Barberá et al., 2015; Messing &Westwood, 2014). In this debate, Urman (2019) mentions that the phenomenon of polarization in social networks depends on differences in local contexts; i.e., polarization levels differ from one country to another.

METHODOLOGY

The analysis of the affective polarization in Twitter exchanges according to the mentions of the candidates during the runoff was based on the contextual data of the National Survey of Citizenship of the Bicentennial 2021 of the National Jury of Elections (Jurado Nacional de Elecciones, 2021a). This collects representative information on a series of questions related to perceptions about the country's situation, electoral processes, political participation, and the political-electoral behavior of Peruvian citizens.

User	Candidate	Political party	Followers	Followings	Tweets	Mentions
@PedroCastilloTe	Pedro Castillo	Perú Libre	99,769	41	119	519,200
@KeikoFujimori	Keiko Fujimori	Fuerza Popular	1,171,948	6556	114	683,097

Table 1. Accounts of the candidacies in the Peru 2021 presidential runoff election

Subsequently, we chose certain questions related mainly to ideological selfidentification to test the polarized scenario prior to the final competition for the presidency of Peru.

For the second part, we analyzed the total number of mentions of the candidates that made it to the runoff, under the framework of the Social Network Monitoring project developed by the Directorate of Citizen Civic Education (DNEF, by its Spanish acronym) of the JNE (2021b). The data were extracted with Twitter's official API (Application Programming Interface), by registering a standard developer user. Thus, we resorted to daily and systematic capture using the free statistical software R (version 4.1.1). Two R packages were used to automatically download and store the tweets: twitteR and rtweet.

Afterwards, we filtered the daily captures by the user ID of both candidacies for a more specific search. The monitoring period covers from April 12 to June 6, 2021, dates that correspond to the day after the first electoral stage and the end of the runoff, respectively. The number of mentions made by the different cybernauts reached a total of 1,202,297 tweets: 43.2% for the candidate Pedro Castillo and 56.8% for Keiko Fujimori.

Data classification

We used sentiment analysis to classify the messages and measure the polarization load during the digital campaign. This computational technique consists of analyzing natural language that facilitates the identification, processing, and categorization of considerable volumes of data in text format to obtain certain themes, opinions, or activities regarding certain topics.

The main objective of this technique is to automatically classify a dataset containing polarized opinions (positive, negative, or neutral) (Pang & Lee, 2008; Sobkowicz & Sobkowicz, 2012). It is useful as it significantly reduces the need to review a large number of documents to classify opinions (Yu et al., 2013). It also allows identifying sentiment trends and changes over time.

There are two main models for applying the technique: supervised learning and unsupervised learning. The former involves a manual classification or coding of a sample of the database, which would be called the training set. This allows the creation of patterns that will be used for an automatic classification of the entire dataset based on machine learning algorithms (Pang & Lee, 2009).

The second model uses a semantic base that gathers a set of words previously constructed and classified in positive and negative terms; i.e., they are word dictionaries. Thus, the automated categorization is determined by the number or frequency of words found in the text.

We opted for supervised learning, considering the advantage of developing a dictionary that contextualizes the database by incorporating specific Peruvian words. In this way, the classification is more accurate than the unsupervised learning model, in which the multiple meanings of the same word can be lost (Liu & Zhang, 2012).

Having determined the learning model, it is appropriate to focus on the categories related to the three levels of feelings: positive, neutral, and negative. Casermeiro de Pereson (2004) points out that the positive values associated with opinions about political leaders focus on honesty, trustworthiness, intelligence and goodness. On the other hand, the negative character is constituted by the values of dishonesty, lack of trustworthiness, lack of intelligence, and lack of goodness. The neutral aspect represents the undefined contents, those in which positive and negative values were not identified.

Based on the above, Twitter content or publications were assigned a value category to perceive the levels of polarization present in the users' comments during the electoral process.

ANALYSIS AND RESULTS

For the analysis, we briefly describe the most important metrics of the accounts registered by the candidates on Twitter, focusing on the number of publications, followers, followed, and mentions. From this information, we elaborated timelines to visualize the levels and behavior of the discussion on mentions of the candidates.

Subsequently, we analyze the users' approval or rejection of Pedro Castillo and Keiko Fujimori. The classification of each content allows us to temporarily evaluate the valuation of each politician, indicating the levels of affective polarization, which consists precisely in the political identity that generates positive or negative

feelings. Finally, there is a descriptive part of the analysis to frame the phrases or content discussed around the runoff election.

The runoff campaign on Twitter

At the end of the first election round, Pedro Castillo's official account registered only 8,314 followers compared to 1,077,724 for his opponent, Keiko Fujimori. Before the runoff, Castillo published 22 tweets, while the Fuerza Popular candidate posted 121.

After April 11, the situation changed substantially. While, at the beginning of the runoff, Castillo increased his number of supporters by around 100,000 –an increase of at least 11 times– Fujimori only grew by 8.7%.

It should be noted that the contrast in the percentage variations may be due to the surprise generated by Castillo's access to a decisive stage to reach the presidency, considering that it was his first nomination to a popularly elected position. On the other hand, the leader of *fujimorismo* was running for the third time for the position, after unsuccessfully trying in 2011 and 2016. Thus, the concept of a new face favored Pedro Castillo to obtain a greater capacity to attract users, while the fact of being a more worn-out figure and with digital campaigns activated in previous nominations would not allow Keiko Fujimori a great margin of growth.

Regarding the evidence of affective polarization on Twitter, figure 3 shows the number of followers that joined the candidacies during the second round. In both cases, the number of daily registrations reached similar values, evidencing a great dispute to obtain users. Despite the difference in the proportion of followers, the figures are not significantly different during the campaign days.

Likewise, figure 4 shows another view of the scenario faced on Twitter. On the one hand, approaching the third week of April, there is a closing of the debate gap in the networks: Castillo registered between 10% and 30% of the total mentions and Fujimori reached a higher proportion of presence in the digital space. On the other hand, by the end of April and until the end of the electoral process, there were similar proportions of mentions between both candidates. The figures shown provide some indications of the marked division that the campaign registered.

Thus, we found that electoral processes do indeed generate an atmosphere of constant discussion, whose debate can be charged with positive or negative emotions. Likewise, the contrast with the theory indicates that, after the elections, the heated situation diminishes. Precisely, the results of the first round found two candidates distanced in terms of mentions; however, in the runoff process, the discussion of Twitter users was more rooted.

User	Candidate	Followers	Followings	Tweets	Mentions
@PedroCastilloTe	Pedro Castillo	99,769	41	119	519,200
@KeikoFujimori	Keiko Fujimori	1,171,948	6556	114	683,097

Table 2. Accounts of the candidacies in the 2021 presidential runoff election

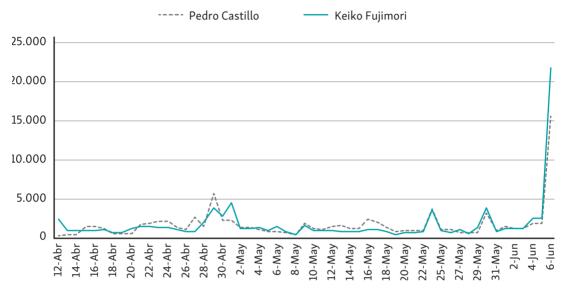


Figure 3. Evolution of followers of the 2021 presidential candidacies

Source: Own elaboration based on Jurado Nacional de Elecciones (2021b).

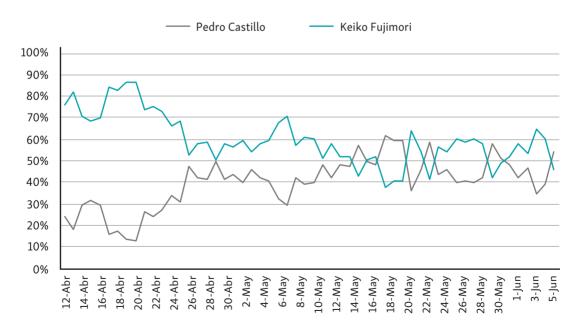


Figure 4. Evolution of mentions of the 2021 presidential candidacies

Source: Own elaboration based on Jurado Nacional de Elecciones (2021b).

Me declaró abiertamente un simpatizante d

@PedroCastilloTe y por lo mismo, este 6 marcare por el

d @PERU_LIBRE1 la clase obrera con el profesor y
es la razón que ganara! Nunca mas un cas pobre en un
pais rico #NuncaMasSenoraK

#nuncamasuncaspobresenunpaisrico entiend

@willaxty

12:19 a. m. · 4 jun. 2021 · Twitter for Android

 $Image \ {\bf 1.} \ Publication \ on \ Pedro \ Castillo \ with \ positive \ sentimental \ evaluation$

Source: Twitter user (2021)1.

As part of the political polarization, it is convenient to review the sentimental position (positive or negative) that users transmit through publications in relation to the presidential candidates. The classification of the messages ranges between -1 and 1; i.e., when the proportion of publications of the day is close to the first value, it means a load of negative tweets towards the candidate and when it is close to the second value, it will be assumed that the contents indicate a positive position.

To exemplify the classification of sentiment, some publications are shown in which the sentimental charge is determined based on the dictionaries of positive and negative words implemented. Image 1 shows the tweet of a user who supports Pedro Castillo with words such as "openly", "sympathizer", or "will win", which determine the positive nature of the message.

Figure 5 reflects the sentimental orientation of users towards the candidate Pedro Castillo. The distribution of sentiments during the first two weeks after the first round indicates that the type of messages does not have a stability towards positive or negative content. However, the third week shows a downward trend, approaching negative values and with a greater rejection of users towards the candidate.

In that regard, the lowest point is related to the media situation surrounding the massacre of a group of people in the Valley of the Apurimac, Ene, and Mantaro rivers (VRAEM), of which the Shining Path accused of being guilty. Thus, different political actors and users in general chose to link the Shining Path group with Pedro Castillo, generating a discussion between those who support and those who reject the leftist candidate. The idea of a possible relationship between the mentioned actors works to establish a distance between users, showing a scenario of polarization between positions.

^{1.} For reasons of confidentiality in the study, the tweeters of the tweets will not be referenced.

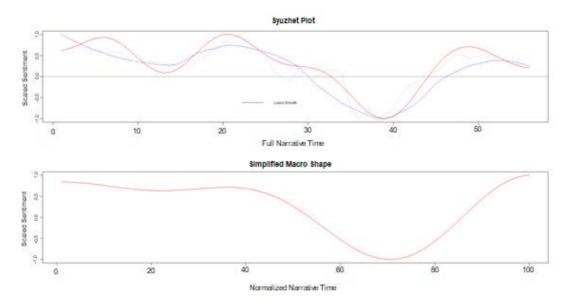


Figure 5. Sentiments of the mentions of Pedro Castillo 2021

Odio decirlo pero la CORRUPTA de @KeikoFujimori va a ganar, todo está orquestado.

7:18 p. m. · 4 jun. 2021 · Twitter for Android

Image 2. Publication about Keiko Fujimori with negative sentimental evaluation

Source: Twitter user (2021).

Likewise, the sentimental stance on the representative of Perú Libre remained between the scenarios of rejection or acceptance; in other words, the digital campaign on Twitter was stable in terms of continuous confrontation throughout the runoff. It is worth noting that there were some ups and downs for the sentimental positions of the tweets. In the last two weeks, the sentiment indicator leans towards more positivity in the content posted by users.

On the other hand, the standardized narrative is interpreted as having evident high and low levels of valuation. With this, we verified that the publications did not contemplate permanently neutral feelings. Thus, affective polarization is contrasted to the extent that users are predisposed to perceive positively the candidate they support, although such scenario encounters a setback that implies a negative visualization in which a greater negativity is shown coming from opposing followers.

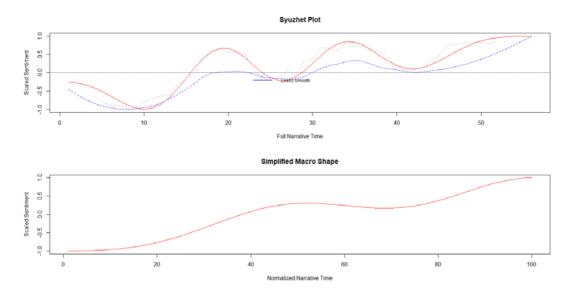


Figure 6. Sentiments of mentions about Keiko Fujimori 2021

As in the previous case, to exemplify the sentiments we present a publication to define the negative sentimental load based on the implemented word dictionaries. Image 2 shows the tweet of a user who rejects Keiko Fujimori using terms such as hate and corrupt.

The messages were categorized in terms of the number of positive and negative terms that make up their statements. Based on this, we obtained the sentimental orientation of users towards Keiko Fujimori during the runoff. During the first two weeks, the emotional charge is framed in a scenario of majority rejection or negative messages towards the candidate. However, the proportion would reverse over the course of the weeks, with an increase in positive messages that surpassed the negative tweets towards the end of the campaign.

Unlike those about Castillo, the tone of the publications about Fujimori reached a positive rating after the first 14 days of the runoff campaign. In the second half of the electoral contest, messages of approval for the candidate were more frequent. These results may respond to the context in which the electoral process took place. According to the Institute of Peruvian Studies (Instituto de Estudios Peruanos, 2021), 59% of the electorate considered that the media favored a candidate and within this group, 79% affirmed that Keiko Fujimori was more favored than Pedro Castillo (9%). Thus, the consumption of information is also a conditioning factor for the environment of rejection or support for a candidacy in social networks.

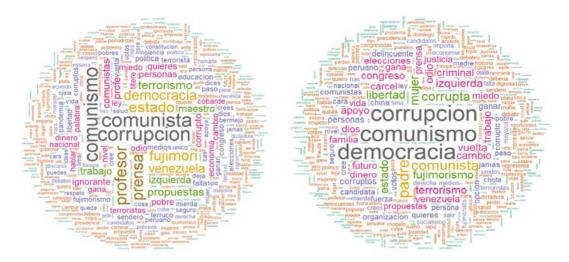


Figure 7. Word cloud of mentions of Pedro Castillo and Keiko Fujimori (2021)

In summary, there are two candidacies that generate opposite and polarized feelings on Twitter. The representative of Perú Libre benefits from positive messages during the initial stage of the second round, although this scenario is reversed at the end of the campaign, reaching a sustained rejection for some weeks. In the case of the leader of Fuerza Popular, the first weeks of the campaign were framed in a context of negativity, which was overcome as the campaign progressed and with positive contents in the last days before the election. Additionally, the figure with the normalized time series shows a constant increase of positive messages towards the end of the elections. Thus, we found that the publications did not express permanently neutral or negative sentiments.

Keiko Fujimori received greater rejection during the first weeks of the runoff, while Pedro Castillo had a positive evaluation during that stage. The aforementioned context demonstrates the affective polarization, since users may show greater animosity for the candidate of Perú Libre, while for the leader of Fuerza Popular the situation is adverse.

As for the words most frequently used by each sector, figure 7 shows on the left side those referring to Pedro Castillo and, on the right, those corresponding to candidate Keiko Fujimori.

The most frequent words are related to the idea of communism that the candidate of Perú Libre would represent. In previous analyses, reference was made to the negativity contained in the publications that mentioned Castillo, and now it can be specified that it would reflect the rejection of a communist government.

Habla de confrontación entre clases, los pobres vs los emprendedores y la clase media que ahora tiene plata, no se expresa bien de las mujeres, etc un caos el Teacher dios nos libre de caer en las manos del comunismo!

10:25 p. m. · 30 may. 2021 · Twitter for iPhone

Image 3. Publication with mention about Pedro Castillo

Source: Twitter user (2021).

Vamos @KeikoFujimori con todo contra el COMUNISMO y TERRORISMO... Estamos en la recta final y hay que pisar acelerador..

10:41 a.m. · 3 jun. 2021 · Twitter for Android

Image 4. Publication with mention about Keiko Fujimori

Source: Twitter user (2021).

Image 3 shows the publication of a user who alludes to the use of terms such as terrorism or class struggle, which are part of the type of content usually used to attack or reject candidates who pretend to adopt a leftist discourse. In summary, the discourse associated with the mentions of Pedro Castillo concentrates negative campaign content that increases the levels of polarization and bets on the sensation of fear, danger, and threat (Crespo-Martínez et al., 2022).

Regarding Fujimori, image 4 shows how the word communism is used by users who support the candidate from the perspective of rejecting a government that represents communism and terrorism affecting democracy. Likewise, the term democracy was used with the purpose of summoning citizens to save the political system that governs the country in the face of the possibility of a leftist government.

Likewise, the word corruption has a similar use, but counterproductive for the fujimorismo due to the legal processes faced by its leader. Users used it to attack the candidate and adopt the idea that fujimorismo embodies corruption in the country.

Both the sentimental classification and the frequent use of certain words in the posts point us to certain levels of political polarization as part of the runoff campaign on Twitter. This is demonstrated in the frequent instability in the type of messages (positive or negative) received by candidate Castillo and the reorientation of the distribution of messages (from negative to positive) in the case of Fujimori. Finally, the specific use of certain words alludes to polarization in the network considering the rejection or acceptance of messages with the purpose of marking distance between users and with respect to their political options.

CONCLUSIONS

To conclude, we can present some general ideas as part of the findings of the study. In the first place, the polarization scenario on Twitter is a reflection of the political situation that frames the presidential election campaign. Thus, it is worth noting that Twitter functions as a space for channeling and expressing the emotional charge of the public in relation to the political scenario.

Secondly, the number of followers gained and the proportion of mentions in the runoff shows an atmosphere of debate derived from the constant references to the candidacies. The publications contained an emotional charge of acceptance and rejection that reflects the behavior of followers in the digital space. Pedro Castillo generated a debate that oscillated between positive messages at the beginning of April, rejection in mid-May, and support again in the first week of June. Meanwhile, Keiko Fujimori showed a greater presence of positive messages with a growing trend since the first week of April.

Furthermore, the words most frequently harbor a discourse focused on generating fear and increasing the feeling of danger or threat among followers, as was seen in the publications with reference to communism, the return of terrorism or that pose a scenario of uncertainty in which Peru becomes Venezuela. This type of discourse increases the atmosphere of polarization in which candidates seek to activate fear and rejection against their opponent, using their network of followers to spread these statements.

Based on the results, it is considered that Twitter was a space of affective polarization during the presidential runoff in Peru. The messages described positive and negative feelings in greater proportion than neutral ones and, as election day approached, the emotional charge polarized towards one and the other candidacy increased. In other words, emotional expressions function as an engine of interaction, propagating and consolidating affective polarization.

This raises new questions about the potential impact of this phenomenon on democracy. This type of polarization generates distrust and rejection among political adversaries, promoting an environment suitable for bad governance. Precisely, the runoff defined the winner of the electoral contest in an environment of polarization that inherits a climate of instability and conflict in the government.

Further studies on the use of social networks as spaces for political discussion during electoral campaigns are recommended. Although polarization allows differentiating political options, it also represents negative aspects, such as the lack of conciliation or agreements that can be generated during the exercise of government.

Regarding future lines of research, discourses and debates in social networks also hide dangers for democracy and issues related to citizenship, and publications that promote messages of hate, discrimination, harassment, fake news, among others, are relevant. The type of content, media consumption and its level of influence are also worth investigating from the perspective of political communication. Finally, it is recommended to approach quantitative methodologies to classify mass content, betting on innovating in the topics related to the political participation of citizens in digital media.

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