The Programmatic Dimension of Political Communication on Twitter: The Case of Costa Rica's 2022 General Elections

Ronald Sáenz Leandro, Ximena Alvarenga Fournier, Laura Reyes-Restrepo

The Programmatic Dimension of Political Communication on Twitter: The Case of Costa Rica's 2022 General Elections

Ronald Sáenz Leandro[1], Ximena Alvarenga Fournier[2], Laura C. Reyes-Restrepo[3]

Abstract

This research seeks to analyze the use of the social network Twitter by presidential candidacies in the context of the first round of the 2022 electoral campaign in Costa Rica. This is a proposal that is articulated under an exploratory and descriptive scope, so that in the first place it tries to understand the characteristics under which politicians exercise a presence in digital environments and make general use of Twitter in the context of an electoral campaign, Secondly, it seeks to identify the programmatic dimension in the publications shared by the profiles of the candidacies with the highest voting intentions. The work makes a contribution based on the methodological background of the Manifesto Research on Political Representation (MARPOR), to inquire about electoral communication exercised through a social network, from a multimodal approach. The findings prove the existence of a clear programmatic dimension within the activity of the candidacies on the platform that is articulated not only with government plans, but also with conjunctural elements of the campaign such as debates. Likewise, the work explores some non-programmatic uses and offers new lines of research within the field of political communication in Costa Rica.
Keywords: Presidential Elections, Costa Rica, MARPOR, Electoral Programs, Twitter.

[1]School of Political Science, University of Costa Rica, ORCID: https://orcid.org/0000-0001-8717-1870, ronald.saenz@ucr.ac.cr

[2]School of Political Science, University of Costa Rica, ORCID: https://orcid.org/0000-0002-9348-0853, ximena.alvarenga@ucr.ac.cr

[3]School of Political Science, University of Costa Rica, ORCID: https://orcid.org/0000-0002-0113-5818, laura.reyesrestrepo@ucr.ac.cr

1. Introduction

The 2022 National Elections in Costa Rica presented several particularities, including the critical juncture in which they were held in economic, social and educational terms exacerbated by the COVID-19 pandemic, corruption scandals in the public service, the high fragmentation of the party offer in dispute for the presidency, the exorbitant defeat of the ruling party in the Executive and Legislative branches, as well as the definition in the second round with two openly questioned candidates, such as José María Figueres and Rodrigo Chaves (Ovares 2022). If one starts from the fact that the pandemic moment also meant an unprecedented process of migration of sociability towards digital environments for a large number of the population, it was to be expected that social networks would acquire a central role in terms of public discussion, dissemination of propaganda and space for political dispute during the electoral campaign (Treminio 2022).

The extensive use of social networks in electoral contexts in Costa Rica, however, dated back at least two campaigns (Cruz 2015, 2017a, 2017b), that is, the study of the link between digital environments and the work of politics. It is just an incipient field and in the process of development in the country. Similarly, recent are the specialized studies that have sought to locate the importance acquired by some specific sociodigital platforms and their role in the Costa Rican political contest (see Carazo 2021; Carazo et al. 2021; Gómez and Durán 2021; Molina et al. 2021; Siles 2020; Siles et al. 2019, 2021). This occurs at the same time that the Internet, and social networks in general, increasingly represent one of the main means of finding out about the situation and political issues in the country (CIEP 2021; Tristán et al. 2021; Vergara and Valverde 2020).

Despite the above, it is interesting how little attention has been given to the Twitter platform in Costa Rican political research to date. This can respond to at least two reasons, namely: that this social network does not have the popularity and usage rates in Costa Rica that other social or messaging platforms such as WhatsApp, Facebook, Instagram or YouTube have (Alexa 2021); in addition, that Twitter welcomes a very specific sector of the population, given that close to 80% of its users correspond to people between the ages of 15 and 40 (Latinobarómetro 2021).

This particularity has probably meant that it is not a social network that has been widely taken into account to date, although this does not mean that it ceases to be a platform of lesser interest for the analysis of electoral campaigns. On the contrary, Twitter has acquired real relevance in Costa Rica as it is a space in which the spread of cyber troops and the circulation of disinformation have been evidenced at least since the 2018 presidential campaign (Bunse 2021), well, in a recently, while cases of identity theft on Twitter for the dissemination of hate messages and harassment of human rights activists or politicians in opposition to the government of Rodrigo Chaves have been reported (Bolaños 2023). On the other hand, the recent innovations incorporated into this social network also meant that during the 2022 electoral campaign the "Twitter Spaces" function became an innovative space for political debate simultaneously, this among active citizens on the platform but also facilitating direct contact with

2

some candidates.

Similarly, what is interesting about studying this social network also lies in the fact that the different platforms also have divergent dynamics, especially in the ways in which discussions and conversations about political issues are conveyed in digital environments (Boczkowski and Mitchelstein 2022), so it should not be assumed a priori that both the strategic use and the content that politicians share on Facebook (the most studied platform in Costa Rica), for example, is the same in the rest of the networks. social. In short, there is a relationship between the platform studied and the particular dynamics and phenomena that must be observed (Mitchelstein et al. 2021).

For the 2022 National Elections, at least 21 of the 25 registered presidential candidacies had a personal Twitter profile through which they carried out their political communication strategies during the electoral period. Therefore, it is necessary to conceive Twitter as a social network of increasing relevance for political communication both in electoral and government contexts (Jungherr 2015), as has been mentioned in national research on the subject (Bunse 2021).

Thus, under the previous precedents, the present work seeks to carry out an exploratory-descriptive study to answer one of the classic questions in the study of political approaches to Twitter (Graham et al. 2013; Jungherr 2016), but focused on the Costa Rican case, namely: what is the use that politicians give to this social network in electoral contexts? More specifically, it seeks to complement or transcend the approaches focused on political parties and electoral programs within political science, to try to reveal the programmatic dimension of political communication exercised in other less institutional spaces, such as social networks. In this line, it is intended to articulate an unprecedented approach in the country in order to analyze the use of Twitter by presidential candidacies during the first round of the 2022 electoral campaign in Costa Rica.

2. Political communication, electoral programs and Twitter: an analytical proposal

2.1. Continuities and changes of political communication in the digital era

Political communication has changed significantly in the last 15 years, especially thanks to the arrival and implementation of social networks in the context of governments and electoral campaigns. Politicians previously relied in part on traditional mass media such as television, radio and print to reach their voters, which meant they had limited control over the dissemination of messages and how they were presented. to citizenship.

With the rise of social networks, platforms such as Twitter, Facebook, Instagram and TikTok have opened up new spaces for the transmission of ideas, content and actions to a broader audience. In the same way, social platforms have come to give greater weight to the role of public image, by allowing politicians to develop a more personal side outside of their political activity, while allowing interactions to be developed in real time, such as respond to questions and concerns, as well as issue opinions on current issues quickly and effectively

(Perloff 2018), that is, they have promoted the advancement of the culture of connectivity (van Dijck 2013) in the exercise of politics.

The previous assertions present their variants according to the context of digital political communication, either in the exercise of government, in the framework of a crisis or within an electoral campaign. However, within the specific field of elections and campaigns, since the mid-20th century this field has been evolving in order to promote political party candidacies through the transmission of ideas that normally come in the form of speeches, electoral programs, advertisements advertising, rallies and other types of practices included in the so-called electoral marketing (Riorda and Farré 2012).

2.2. The programmatic dimension of political communication

Within the field of political communication in electoral campaigns, the government electoral programs (known in the Anglo-Saxon sphere as manifestos) have had a particular interest for political science as they constitute official documents that contain a decalogue of the proposals of policy offered to the electorate within the framework of an election (Volkens et al. 2013). Perhaps the best-known project in this line within the discipline at an international level is the Manifesto Research on Political Representation (MARPOR), also known in the political sphere as the Manifesto Project (see Volkens et al. 2020).

This is an initiative that dates back at least forty years and has sought to study political-electoral programs (manifests) between families of parties and/or parliamentary groups on a comparative scale in different regions of the world, mainly Europe, North America and recently some Latin American countries (Ares and Volkens 2017).

In the analysis of manifestos, however, the political party has traditionally been privileged as the observation unit for the so-called programmatic communication. Consequently, the programmatic dimension of communication can be understood as all those political preferences or ideas expressed mainly in text, but also in other types of data, during an electoral campaign (Volkens et al. 2013). These are traditionally operationalized as the specific proposals that a political party presents as part of its electoral platform (Lowe et al 2011).

In this sense, the manifestos would be "the substance of the programmatic agenda", since their objective is to outline the actions and initiatives that a party plans to undertake and they normally include proposals on a wide range of issues, such as economic policy, social policy , foreign policy and environmental policy, among others. The latter refers to the theory of relevance, which states that political parties define their programmatic actions by emphasizing specific issues more than others, especially in debates and documents of a political nature (Budge 2015).

For these reasons, the content of electoral programs has been widely valued in comparative political science because it has made it possible to differentiate between parties over time, as well as to study the ideological shifts of certain families of parties at a regional and international level. (Ares and Volkens 2017).

2.3. Programmatic communication and Twitter

Within the programmatic discussion, social networks have had a significant impact on the way in which political parties and candidacies communicate their content, this is due to the fact that the same characteristics of speed in the dissemination of information on digital platforms have allowed to politicians, among other things, to present their proposals through alternative channels to the traditional media (which, even depending on the electoral regulations, tend to reproduce inequalities in the competition), but also complementing the traditional document that constitutes the manifesto, which is usually more bureaucratic, institutional and, in principle, invariable (Perloff 2018).[4]

Thus, programmatic communication in social networks marks some fundamental differences with respect to manifestos, for example in the format, length and effectiveness in the dissemination of proposals. While electoral programs are usually longer documents that offer a detailed summary of a party's policies and proposals, social media posts are usually shorter and more concise, forcing politicians to be more selective in content. of the messages they share, since they must be able to communicate their ideas clearly and effectively in the spaces made available by the same platforms, as in the case of the 280-character limit in Twitter posts (Murthy 2018).

Likewise, it has been argued that the manifestos, as documents of a more institutional, bureaucratic or even specialized nature, are not usually read by the majority of voters (BMG 2017), while social networks have allowed the transmission of the same campaign proposals. in more flexible and attractive formats, such as question-and-answer sessions via streaming, "virtual agoras" and other interactive events, such as the recent case of Twitter Spaces.[5]

For these reasons, the proposal of this paper to study campaign communication in digital culture entails at least two theoretical-methodological consequences: the first is the partial abandonment of the party-centric approach that has characterized the MARPOR tradition, favoring the role of the candidate; while the second is the assumption that in the era of platformization, the communication of programmatic content transcends traditional media (Nieborg and Poell 2018),

---

[4]This supposed rigidity, however, can begin to be questioned as the recent study by Chavarría-Mora and Angell (2022) shows how in the 2018 Elections the National Restoration Party (PRN), considered a "niche party" by His closeness to neo-Pentecostal groups substantially changed the content of his political program for the second round of elections. A similar case occurred with the candidate Rodrigo Chaves and the Social Democratic Progress Party (PSD) in the 2022 Elections, who, in order to face the ballot in April 2022, published a second version of their government program different from the one presented for the registration of the candidacy before the TSE in October 2021. In this regard, see Gómez (2022).

[5]Twitter Spaces is a feature of this social network launched towards the end of 2020 and enabled for any user as of 2021. This allows opening public discussion spaces between multiple participants in audio format, as well as establishing moderation rules in conversations . Due to its growing relevance for political discussion in third spaces, its uses are only recently beginning to be studied (see Maringira 2022; Tesfamicael et al 2022). Although it is not the main objective of this work, since this was an important Twitter novelty for the 2022 electoral campaign, a compilation of the Spaces organized for the first electoral round was made (see Appendix 1).

which in this case would be mainly the traditional mass media and electoral programs. . The foregoing naturally requires giving significant analytical weight to the personalization of politics and the central role of presidential figures and candidacies, as has been the trend in contemporary democratic processes (Mair 2014).

Accordingly, the personalization of politics has become more prominent in recent years and has been driven in part by the increasing use of social networks and other forms of digital communication (Nusselder 2013), this in both platforms as well as Offering politicians the opportunity to connect with voters on a more personal level, to share thoughts, experiences and opinions in a more informal and accessible way, they also work to frame issues and programmatic discussions in real time (Bauer et al. 2023).

Political framing, understood as the particular way in which a public problem is understood, the way in which it is evaluated and the selection of an action mechanism (proposal) accordingly (Entman 1993), is of vital importance for programmatic communication in Therefore, the same campaign strategies usually associate relevant proposals with the very figure of the candidacies, especially when they tend to position a predominant niche, for example, "the candidate who defends traditional values", "the anti-corruption candidacy", among others. (Nusselder 2013).

Starting from the previous understandings, here it will be understood that the social network Twitter can be used, by politicians and politicians, to communicate policies, ideas and electoral proposals that are part of the platform or general agenda of a political party or individual of a candidacy within the context of a campaign (Murthy 2018).

This analytical shift is not intended to promote an abandonment in the study of electoral programs of political parties today, however, although necessary, the manifesto has ceased to be a sufficient element, or rather, the most effective channel of programmatic communication in the campaigns of the digital age (Breeze 2010).

In short, manifestos may continue to play an important role in outlining a party's policies and proposals and in offering a deeper insight into its vision and program, but it is undeniable that social media has changed the way in which the political parties and the candidacies have been transmitting their ideas during the last time. Therefore, it is necessary to pay attention to these new avenues for political research, something that has already begun to be explored as will be seen in the next section.

3. Methods

3.1. Methodological Background

In methodological terms, the empirical study of political communication in social networks has advanced rapidly during the last decade, especially thanks to the most innovative computational analyzes such as those of networks, which seek to examine the connections and relationships between politicians and users

or the polarization about of certain current issues (Calvo and Aruguete 2020), or, thanks to natural language processing (NLP) techniques such as sentiment analysis or other forms of automated classification of long textual corpora (Li 2018).

Within this myriad of sophistications currently debated within the so-called computational social sciences, the content analysis of political texts has been seen as a more classic method, but one that nevertheless continues to maintain its relevance in more specific and situated tasks that do not require necessarily the assistance of automated procedures. Thus, content analysis makes it possible to focus on context-specific issues and dynamics that are more difficult to capture by other means despite the challenges imposed by the volume of data with which one is going to work (John Johnson, 2000).

In this line, the present work has the MARPOR as its main methodological background, which has generally promoted the content analysis of electoral programs (Alonso et al. 2012) using the technique of human coding of programmatic political texts from the decomposition technique into "core-phrases" and "quasi-phrases" as a means to thematically capture the proposals or axes of a certain political program within an electoral context.

This means that, in contrast to some computational techniques focused on the automated classification of content within a textual corpus of interest based on word frequency counting, such as the so-called "bags of words" approaches (Grimmer and Stewart, 2013), the MARPOR methodology, in contrast, has argued that full-sense programmatic arguments (known in the jargon as "core-phrases" and "quasi-phrases") are the core for contextual, positional, and programmatic placement. of the coding units, thus endowing the content analysis process with greater reflexivity than approaches that analyze "single words" (Lowe et al. 2011; Benoit et al. 2012).[6]

Thus, the novelty of this research lies in the fact that it starts from the previous methodological tradition to seek to inquire about programmatic communication but exercised through a less studied source, such as the social network. This shift naturally implies a methodological adaptation to the dynamics of digital environments, which, although they predominantly use text, also convey content through other formats that can potentially acquire programmatic meaning.

Hence, a multimodal approach (Norris 2019) is taken into account for the study of the textual, audiovisual and interactive elements present in a social network. This, in combination with the traditional text-focused approach, is useful for considering the multimodal material posted on Twitter by the candidates as the unit of analysis.

These adaptations, however, resume part of the spirit of updating and the search for new sources of triangulation that has historically characterized

---

[6]The most recent advances in the field of NLP from the so-called language models known as "Transformers" are already generating quite satisfactory results in terms of automated text classification with contextual sense. In this regard, see Terechshenko et al. (2020).

MARPOR.[7] In fact, the very extension of the project to Latin America has involved a long process of consultation and reformulation around the theoretical and methodological starting terms that, in principle, respond more to the dynamics of the political systems of the Global North (Ares and Volkens 2017). ; Miranda et al. 2022).

Thus, far from remaining an inert methodology, the content analysis of programmatic political texts has been acquiring inputs that have allowed it to be sensitive to particular cases, contexts, and regions, despite the fact that the original claim of MARPOR has an emphasis comparative. Part of these innovations have to do with the world of possibilities that social networks have opened up as empirical material for political research and social sciences in the digital age (Salganik 2020).

This interdisciplinary and methodological dialogue strategy, however, has a couple of quite recent referents in regards to the social network Twitter: the combination of approaches has been used to analyze the communication mediated by this platform at a comparative level between European parliamentarians in the framework of the Twitter Parliamentarian Database project (van Vliet et al. 2020); but innovation has also been made in specific case studies, such as the one developed by Cristina Ares (2015) to explore the programmatic framework of the European Union in the tweets of candidates for the Presidency of the Government during the General Elections in Spain in 2011.

In order to capture the programmatic dimension of the tweets, then, we start from a hybrid proposal that brings into dialogue the most classic approaches of political science for the study of political parties and electoral campaigns, with more recent perspectives for the study. of digital culture, which from the outset supposes a methodological contribution in itself, as developed below.

3.2. Research Design

The present investigation is a case study whose main objective is to analyze the use of the social network Twitter by presidential candidacies in the context of the 2022 Costa Rican National Elections. This is a proposal that is articulated under an exploratory scope. and descriptive, so it specifically aims to understand the characteristics under which politicians exercise a presence in a particular digital environment and the general uses that are given to the platform in the middle of an electoral campaign, but also seeks to identify the frames politicians with programmatic content present in the tweets of those candidacies with the greatest intention to vote. [8]

For such purposes, it uses as a primary source the data extracted by consulting the Twitter API, with which an extensive corpus was formed that contains the digital traces (data such as tweets and related metadata) of the presidential

---

[7]The most common combinations have been with public opinion studies, expert surveys and parliamentary elites. In this regard, see the work of Ares and Volkens (2017).

[8]For this delimitation, the "CIEP-UCR Survey Results Report" (2022a), published on January 19, 2022, two weeks before election day, was used.

candidacies with a Twitter profile for the delimited spatial and temporal period, namely, the first round of the 2022 Costa Rican National Elections. The following subsections specify the sampling strategy, the data extraction protocol, and the techniques for analyzing the platform material.

3.3. Population and sampling

The population is made up of all presidential candidacies officially registered and ratified by the Supreme Electoral Tribunal (TSE) with an active profile on the social network Twitter. This verification was carried out from October 6, 2021, with the official call for elections stipulated by article 147 of the Electoral Code, until October 22, the expiration day of the term for political parties to submit applications for the registration of candidacies.

With this information, as of October 22, a manual review was carried out with the Twitter search engine based on the TSE registration resolutions, with which it was possible to find 21 profiles out of 25 possible and associated with personal accounts of the candidacies. . Table 1 details the above from the profile tracing exercise, and also specifies the inclusion and exclusion criteria for the analysis. As can be seen, in the vast majority of cases it is possible to validate that the creation of these accounts on Twitter exceeds electoral immediacy, since they were opened prior to the year 2021.

From the identification of the candidacies with active personal accounts as observation units, a qualitative sampling strategy directed by convenience was followed, prioritizing the extraction of data through the web scraping technique, which allows capturing, extracting and examining data from social media platforms (Dawson 2020), this in accordance with the established methodological criteria and with the availability of access to the profiles.

With a view to equalizing the sample, some candidacies were excluded according to the following criteria: those that did not have a personal or political party profile at all (Luis Alberto Cordero and Maricela Morales); those that did not have a personal profile and channeled the campaign communication strategy through a party profile (Carmen Quesada and Greivin Moya); those who had no registered Twitter posts during the observation period (Eduardo Cruickshank, Óscar Campos and Rodolfo Hernández); and those whose profiles presented data access problems (this situation of blocking by the Twitter application programming interface (API) occurred only in the case of Rolando Araya's profile). With the above parameters, the data corresponding to 17 Twitter profiles was extracted, as detailed in the last column of the summary table.

3.4. Data collection, data cleaning and processing

For the conformation of the general dataset, the research team established a monthly data collection plan from October 22, 2021 to February 7, 2022, the day after the first round of elections. When working with public profiles of presidential candidacies and not with user-generated data, it was considered more convenient to work with the "NCapture" tool of the NVivo qualitative data analysis software (CAQDAS) (QSR International, 2020). "NCapture" is a plugin

N	Candidatura	Partido Político	Usuario de Twitter	Cuenta desde	Se incluye
1	Carmen Quesada	Justicia Social	N.A. **	-	No
2	Christian Rivera	Alianza Demócrata Cristiana	@criverapaniagua	sep-09	Sí
3	Eduardo Cruickshank	Restauración Nacional	@Cruickshankedu	jul-20	No ***
4	Eli Feinzaig	Liberal Progresista	@elifeinzaig	ago-17	Sí
5	Fabricio Alvarado	Nueva República	@FabriAlvarado7	jul-13	Sí
6	Federico Malavassi	Unión Liberal	@FedeMalavassiC	feb-21	Sí
7	Greivin Moya	Fuerza Nacional	N.A. **	-	No
8	Jhon Vega	De los Trabajadores	@jvega_cr	ene-15	Sí
9	José María Figueres	Liberación Nacional	@figuerescr	mar-09	Sí
10	José María Villalta	Frente Amplio	@josemvillalta	sep-09	Sí
11	Lineth Saborío	Unidad Social Cristiana	@LinethSaborio	mar-21	Sí
12	Luis Alberto Cordero	Movimiento Libertario	N.A. *	-	No
13	Maricela Morales	Unión Costarricense Democrática	N.A. *	-	No
14	Martín Chinchilla	Pueblo Unido	@MartinChCastro	oct-13	Sí
15	Natalia Díaz	Unidos Podemos	@Natdiaquin	mar-13	Sí
16	Óscar Campos	Encuentro Nacional	@OscarCa39428044	ago-17	No ***
17	Óscar López	Accesibilidad sin Exclusión	@oscarlopez_cr	jul-10	Sí
18	Rodolfo Hernández	Republicano Social Cristiano	@drhernandezcr	oct-17	No ***
19	Rodolfo Piza	Nuestro Pueblo	@Piza2022	oct-13	Sí
20	Rodrigo Chaves	Progreso Social Democrático	@RodrigoChavesR	feb-20	Sí
21	Rolando Araya	Costa Rica Justa	@RolandoArayaCRJ	abr-20	No ****
22	Roulan Jiménez	Movimiento Socialdemócrata Costarricense	@DrRoulan	oct-21	Sí
23	Sergio Mena	Nueva Generación	@SergioMenaPNG	nov-13	Sí
24	Walter Muñoz	Integración Nacional	@diputado_dr	abr-19	Sí
25	Welmer Ramos	Acción Ciudadana	@WelmerRamos	feb-17	Sí

Notas:
* Sin perfil de candidatura o de partido político.
** Sin perfil de candidatura, solo de partido político.
*** Perfil sin publicaciones registradas durante el periodo de estudio.
**** Perfil con bloqueo de Web scraping.
Fuente: elaboración propia a partir de los datos del TSE y de la red social Twitter, a febrero de 2022.

Figure 1: Presidential candidacies registered with the TSE, Twitter profile and inclusion in the study

developed for Google's "Chrome" browser, which facilitates connection to the Twitter API, capturing data and metadata and converting them to a specific format that can be analyzed with NVivo (Bazeley and Jackson 2013). .

In order to ensure the usefulness of the plugin, preliminary tests were carried out with profiles of random candidates to verify that the tool is reliable and works "with all the data", instead of random or limited samples of tweets generated by the platform itself. , as is often the case when the analysis focuses, for example, on the public conversation around a hashtag (Sued 2020). From this exercise it was possible to verify that the tool is useful for capturing tweets from up to 3 years ago in time, for some of the accounts.

In the same way, in order to avoid possible mishaps with the extraction based on the differences in the frequency of publications between the candidacies, the research team designed a monthly plan of three rounds of extraction (one in November, another in December 2021 and the last one in February 2022) that made it possible to ensure the survey of all the tweets published during the first

electoral round.[9]

Once the data of the 17 candidacies had been imported into NVivo, after the last round of extraction, they were exported to a freely manipulated format, such as CSV, to form a general dataset and start the filtering and cleaning process based on the variables of interest, as well as to be able to make a panoramic reading of the trends during the first electoral round. Likewise, a second dataset was generated only with information on the 6 candidates with the highest voting intentions, namely: Eliécer Feinzaig, Fabricio Alvarado, José María Figueres, José María Villalta, Lineth Saborío and Rodrigo Chaves.

3.5. Data analysis

Partially attending to the previous methodical background, the second dataset was taken as the basis for carrying out the analysis of programmatic content. This was carried out following a deductive manual coding strategy, using the multimodal material present in the tweets based on the dimensions and subcategories stipulated in the official MARPOR coding book.[10] Here it is important to emphasize that during the coding phase, only the contents present in the organic tweets of the candidacy accounts that were openly visible on the platform were taken into account, that is, mainly text, images and videos. Links to pages outside of Twitter were omitted as coding material. Likewise, possible retweets or replies to tweets from third-party users were not coded.

However, adaptations or supplements were made to the original MARPOR code book inductively, that is, some ad hoc subcategories were built for the specific case. This was done with the objective of being able to work with multimodal material (images and videos), but also to address some contextual thematic axes of the Costa Rican electoral campaign that could not necessarily be located within the available subcategories.

The inductive contribution was made based on the textual material itself, but also in line with current relevance criteria from the review of public opinion studies released during the first electoral round (see CIEP 2021a, 2012b, 2022a). . The dimensions and subcategories used in the final coding guide can be reviewed in Appendix 2.

In addition, with the aim of being able to keep track of the non-programmatic dimension of political communication on Twitter, which is also part of political communication in electoral campaigns, "tweets without a proposal" were also coded, which served to the realization of an exploratory analysis towards the end

---

[9]These are examples of good practice when working with interface methods (Marres and Gerlitz 2016), which involve queries to platform APIs and can sometimes give unpredictable results due to algorithmic processing and random selection mechanisms.

[10]It has been decided to use the MARPOR code book, and not an ad hoc one as the State of the Nation Program does (see Gómez et al. 2022), due to its proven ability to adapt to the contexts of electoral competition in Latin America. (Miranda et al 2022), also with the hope that this methodological approach can be replicated in similar studies for future case or comparative studies in the region.

of the results section, as well as for the opening of new questions and research suggestions.

Finally, to guarantee the validity and reliability of the analysis process, preliminary familiarization sessions and review of the categories of the MARPOR coding book were carried out, as well as subsequent cross-coding rounds among the members of the research team.

In the following section of results, a brief panoramic reading is first carried out around the general trends of the first electoral round, while in a second moment it is deepened around the candidacies with the greatest intention to vote with the aim of exploring and describe and characterize the programmatic dimension of electoral communication Twitter. The presentation of the findings is made from a narrative synthesis complemented with examples taken from Twitter, descriptive statistics, data visualizations and NLP exploratory exercises carried out with the R software.

4. Findings and discussion

4.1. Between visibility and popularity: general trends of presidential candidacies on Twitter during the first round of elections

The general dataset that contains the information extracted from Twitter for the 17 candidacies included in the data extraction contains a total of 3894 tweets, of which 98.7% constitute organic publications, that is, they were posted directly by users on follow-up, while only 1.3% were retweets. However, as anticipated, for the specific case of the 2022 National Elections in Costa Rica, it is worth highlighting the fact that 23 of the 25 candidacies officially registered with the TSE had an active Twitter profile, well outside of the presidential candidacy or his political party.

This fact, in the first place, speaks of the active role that social networks have within an electoral campaign where the same logic of the platforms promotes the generation of content to gain visibility (van Dijck and Poell 2013), while on the other hand suggests that, despite the fact that Twitter in Costa Rica is not a social network with the same massive reach as Facebook (Latinobarómetro 2021), political parties and their respective presidential candidacies consider the presence on various platforms as an important part of political communication. during electoral campaigns (Carazo et al., 2021).

Figure 2 shows the absolute distribution of tweets made by each of the 17 candidacies followed between October 22, 2021 and February 7, 2022. The successive line graphs not only show which candidacies were more or less active on Twitter, but also that it gives clues about the cycles of attention and exposure in electoral contexts, which are frequently associated with work and holiday calendars, as in the case of the drop in activity during the month of December, or the events and moments typical of the campaigns in Costa Rica.

Regarding the latter, it can be identified that at least 63% of the total tweets issued in the campaign were published during the months of January and February 2022, a time when traditionally there is an intensification of the

electoral contest, the greater number of televised or streaming debates in Costa Rica due to the proximity of election day (Castro and Sáenz 2019; Picado 2020).

Figure 2: Tweets by presidential candidacy account during the electoral campaign, October 2021 - February 2022 (Absolute)

As can be seen, these elements, the active role and the presence in the networks, are not a general characteristic for the total number of people participating in an electoral campaign, but may differ with respect to factors such as the weight of the figure competing for the presidency, the size of the party, the economic resources, or the support of a specialized team that develops a strategy in accordance with audience segmentation criteria. This is despite the fact that social networks themselves allow cheaper ways of publicizing political messages (Carazo et al. 2021).

In this way, the continuity of the publications, the monitoring of the interaction and the visibility on the platforms are often achieved through the professionalization of the campaign teams and the formation of units dedicated to network management (Bauer et al. . 2023), which again refers to the everlasting discussion of public and private electoral financing in the country, characterized by evident disparities in access to campaign resources (Robles et al. 2022).

However, although this can be evidenced in the fact that the most active

13

profiles coincide with candidacies of parties with a presence in the Legislative Assembly or with access to political debt due to their electoral volume in the 2018 Elections, as in the cases of Fabricio Alvarado , José María Figueres, José María Villalta, Lineth Saborío or Welmer Ramos), highly active profiles that do not meet the previous characteristic are also presented, such as those of the candidates Óscar López and Jhon Vega.

In the rest of the users, a rather low activity, or almost none, is observed throughout the time series. These dynamics suggest the development of new qualitative or ethnographic approaches that allow us to understand from a situated perspective, and "in the words of the candidates" (Carazo et al. 2021), the way in which an electoral campaign is experienced when they are presented. candidacies from new parties, with low electoral flow or with limited resources within the electoral competition (see Calvo et al. 2018).

On the other hand, as van Dijck and Poell (2013) point out, another of the principles that govern the logic of social networks such as Twitter is that of popularity, which is commonly operationalized through engagement metrics such as "likes". , "favorites", or in the specific case of Twitter, retweets. Although visibility management tends to be largely conditioned by aspects of platformization related to algorithmic processes (Nieborg and Poell 2018), retweets can be considered a good approximation of the popularity levels of users within a social network like Twitter. (Jungherr, 2016).

Figure 3 seeks to illustrate this criterion through a comparison between the frequency with which a candidacy tweeted during the electoral campaign, versus the resonance that their messages had in terms of retweets. Prioritizing this last criterion, the candidacies are presented in descending order by number of retweets received during the study period. From the visualization, the candidacies of Eliécer Feinzaig and José María Villalta stand out, as the candidates with the greatest amplification of their messages during the campaign, followed by Lineth Saborío and José María Figueres, all these profiles with more than 3,000 retweets.

Especially if we start from the fact that Feinzaig and Villalta are candidates who continuously figured within the voting intention among the youngest age groups (CIEP 2022a), which coincide with the population that uses this social network the most in Costa Rica.

In short, this preliminary analysis allows us to observe some general trends in the campaign, but it also opens questions and lines of investigation that require further investigation, mainly taking into account that this is just one of the first approaches to Twitter in the context Costa Rican politician. Thus, one of the most interesting observations that can also be derived from Figure 2 is the fact that the presence or popularity of the candidacies in these social networks does not necessarily translate into voting intention, or rather, they help to relativize the general scope. of the approaches that claim to predict electoral results from digital traces (Tumasjan et al. 2011).

In the case of the 2022 National Elections in Costa Rica, the second electoral round was contested between a candidate with a relatively high presence and popularity on Twitter, such as José María Figueres, and another with almost no presence (and not programmatic, as will be seen). in the next section) as
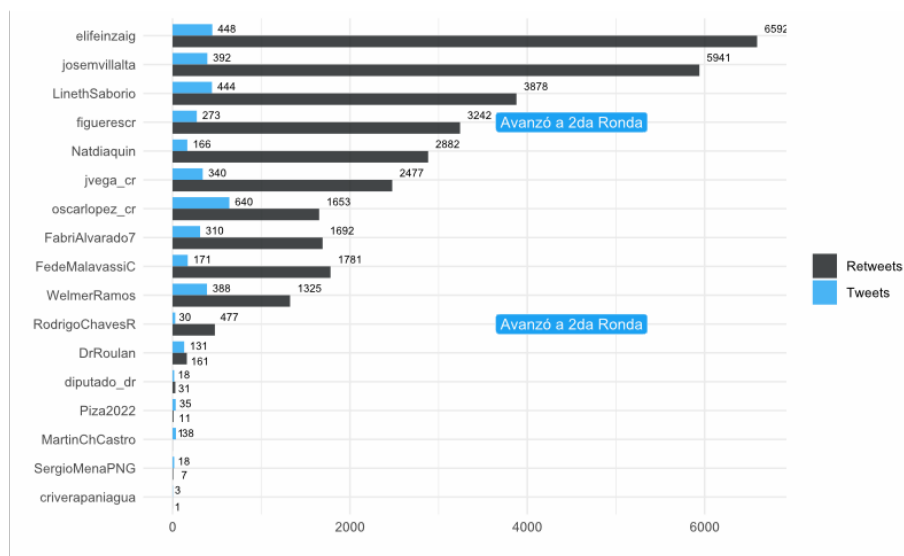
Figure 3: Tweets vs. retweets received by presidential candidacy account during the electoral campaign, October 2021 - February 2022 (Absolute)

Rodrigo Chaves, who ultimately turned out to be the winner in April 2022, with a total of 52.8% of valid votes.

4.2. Exploring the programmatic dimension of electoral communication

As previously mentioned, this subsection focuses on the review and analysis of the programmatic axes located in the Twitter posts in 5 of the 6 candidacies with the highest voting intentions for the first round of elections in February 2022.[11] For this For this work, a dataset with a total of 1,574 tweets was used, of which 616 (39.1%) were coded as campaign proposals, while the remaining 958 (60.9%) were classified as "tweets without a proposal". .

With this, it first stands out that the general trend points towards the predominance of the use of Twitter in the campaign as a multipurpose communication channel that far transcends the programmatic dimension, although it does include it to a certain extent and in a differentiated way among the candidacies that are part of it. of the observation units.

Despite the foregoing, close to 40% of the tweets, images, and videos that were coded did contain core phrases that could either be directly associated with MARPOR categories, or that were inductively coded with reference to current issues relevant to the period. the electoral campaign.

---

[11]This exception is made from the outset, since for this section the information on Rodrigo Chaves' candidacy has been omitted from the programmatic analysis, since none of his 30 organic tweets (see Figure 2) could be classified in terms of campaign proposals. .

This is especially relevant in a country like Costa Rica, where in recent decades the ideal of a programmatic political party with good representation capacity (Diamond and Gunther, 2001) has been gradually weakening, giving way to personalist electoral machines favored by the figure of double nomination (Cortés 2019), where the same candidacy is presented both to the presidency and to the Legislative Assembly, as was the case in more than half of the presidential candidacies for the 2022 Elections in Costa Rica (Ovares 2022: 258-259). Hence, it is also relevant to review how these programmatic transformations take place beyond a party-focused approach.

In order to illustrate these discussions, as well as the methodological novelty that this work introduces, Figure 4 shows the three types of Twitter materials with programmatic content that were taken into account for this phase.
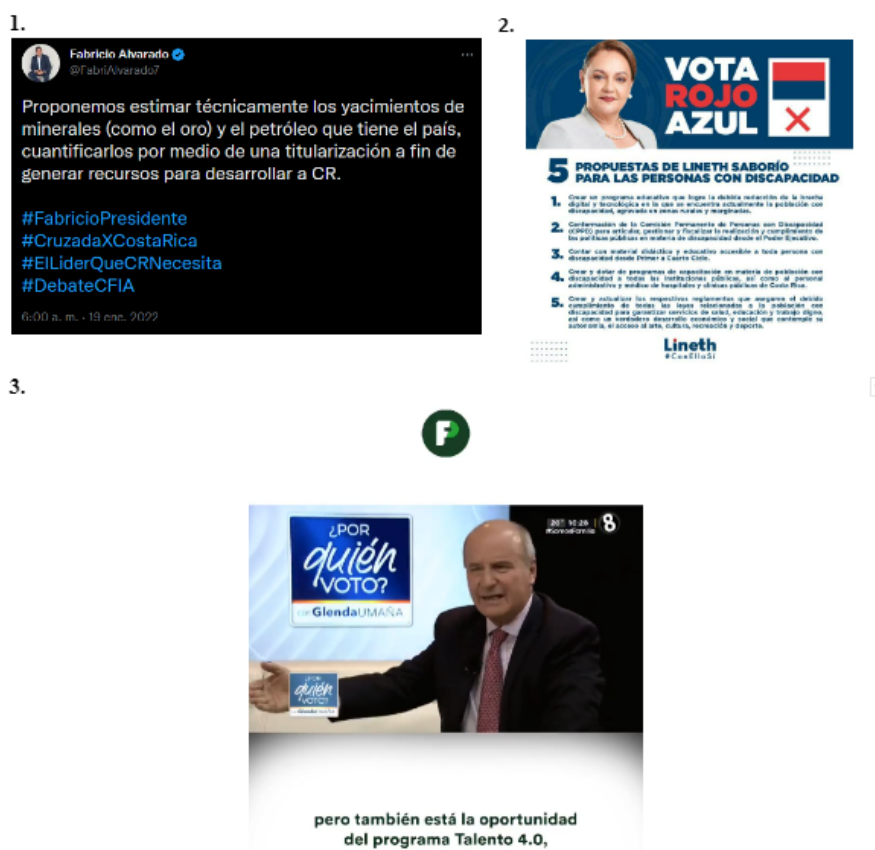
Figure 4: "More than words": examples of multimodal programmatic content

In quadrant 1, the most classic example of a proposal in text can be observed, such as the tweet of the candidate Fabricio Alvarado on January 19, 2022, where a campaign proposal is specified that could be concatenated with a category

present in the guide of encoding (per805). For their part, quadrants 2 and 3 present multimodal variants of programmatic content: here, while the first is a campaign infographic posted on the profile of the candidate Lineth Saborío with proposals related to the sector of people with disabilities, the second refers to a video shared on Twitter by candidate José María Figueres, where he talks about a specific action in his government plan (the "4.0 Program") aimed at developing skills to stimulate employability.

As the example highlights, the coding process has allowed us to observe what Paatelainen et al. (2022) stand out about social networks, as they understand them as an ideal place to create synergies between media and communication mechanisms in general, old and new, that go beyond the search for visibility, forming part of a hybrid media ecosystem. that favors the strategic uses of electoral or campaign communication, but also encourages the processes of personalization of politics. This hybrid characteristic is well illustrated here, insofar as the encoded video constitutes a fragment of an interview originally broadcast on a television program. Throughout the categorization process, videos of this type appear alongside others specifically designed for social media.

However, following the previous logic for the entire corpus of analysis, an aggregate visualization could be generated such as the one observed in Figure 5, which summarizes the percentage distribution of each programmatic axis for the candidacies included in the examination.
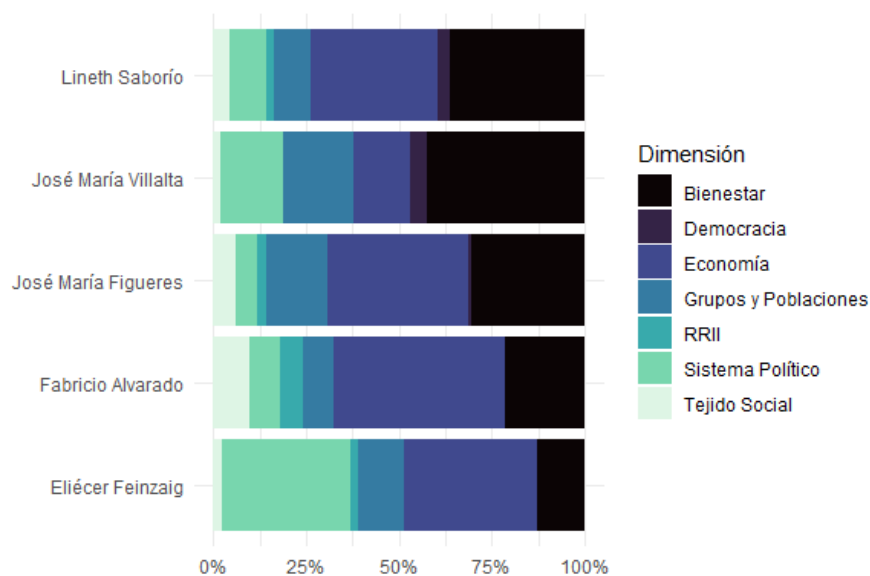

Figure 5: Saliency of the programmatic dimensions on Twitter according to presidential candidacy (Percentage)

In the first place, it is concluded that the dimensions corresponding to

proposals related to Economy, as well as Well-being and quality of life, are among the most relevant for Fabricio Alvarado, José María Figueres and Lineth Saborío. For the previous candidacies, these axes together correspond to almost 70

This finding is important in the sense that it is in dialogue with some previous interpretations of the 2022 presidential campaign, where it has been stated that this, among other things, was characterized because the "electoral strategies did not offer adequate differentiation, but rather, due to the On the contrary, they tended towards artificial moderation" (Treminio 2022: 2). A variation of this trend can only be observed in José María Villalta and Eliécer Feinzaig, where the dimensions Groups and Populations and Political System have a particular relevance for these candidates, respectively.

The latter is to be expected since these two candidacies represented the most differentiable party options on the State-Market scale, with the Broad Front (FA) being the only political party among those notable in terms of voting intention located to the left of the ideological spectrum (Treminio 2022), while the Progressive Liberal Party (PLP) presented itself as an emerging party, made up of young militants with higher education, managing to bring together a new ideological project in favor of the idea of "market freedom and the role [limited] of the State in front of it" (Beltrán and Mora 2022: 8).

In the same way, the low weight of proposals in the lines of Liberty and Democracy and International Relations is striking, constituting issues of little relevance within the campaign in general (CIEP 2022b). This can be read as a result of the socioeconomic situation under which these elections took place, marked by the political wear and tear suffered by the administration of the Partido Acción Ciudadana (PAC), especially in relation to the attention to the health crisis caused by the COVID-19 for two years, this added to the adverse effects of the economic crisis and the increase in unemployment indicators, which brought with them high levels of social discontent during much of the 2018-2022 government period (Cortés et al. 2022). Under this critical context, it is to be expected that programmatic dimensions that seek to address or frame these current problems more directly (such as Economy / Well-being and quality of life) have reflected a central relevance within the programmatic communication of most of the candidacies.

However, if the foregoing allows us to present a general panorama as a result of the predominant programmatic dimensions for each candidacy, it is necessary to make the caveat that this distant reading does not necessarily allow us to see the substantial differences between the candidacies that coincide on an axis of relevance. This refers to the issue of political framing: under this idea, if two candidacies give equal importance to economic or environmental issues, this does not necessarily imply that they basically talk about the same thing or agree on the terms and scope of political proposals. related to addressing a problem. Specifying these dissimilarities is only possible if the analysis is supplemented with close readings of the data (Sued 2019).

For this reason, Figure 6 allows us to elucidate in greater detail the aspects discussed above, but now taking as a point of comparison the relevance at the

level of coding subcategories: the table is responsible for breaking down the main axes of programmatic discussion in terms of the specific framing of the proposals, in accordance with the relative relevance for each candidacy.

Candidatura	Ejes más relevantes (subcategorías de la guía)	Enmarcado de las propuestas	Frases-núcleo (%)
Eliécer Feinzaig	1. Eficiencia gubernamental y administrativa	Fusión de instituciones públicas	28.3
	2. Tecnología e infraestructura	"Hubs" de innovación	15.2
	3. Corrupción política	Transparencia en contrataciones públicas	6.5
Fabricio Alvarado	1. Tecnología e infraestructura	Explotación petrolera y Canal Interoceánico	19.7
	2. Incentivos a la economía: positivo	Atracción de Zonas Francas fuera del GAM	13.6
	3. Expansión educativa	Educación financiera y habilidades blandas	9.8
José María Figueres	1. Tecnología e infraestructura	Conectividad 5G	16.4
	2. Protección del medio ambiente	Energías renovables y descarbonización	11.2
	3. Expansión educativa	Bilingüismo y competencias tecnológicas	11.2
José María Villalta	1. Expansión del Estado de Bienestar	Aseguramiento universal, atención en salud	17.0
	2. Protección del medio ambiente	Energías renovables y descarbonización	13.2
	3. Corrupción política	Política Nacional de Transparencia	10.4
Lineth Saborío	1. Tecnología e infraestructura	Transportes (tren, puertos, ciclovías)	13.8
	2. Expansión educativa	Actualización del currículo e infraestructura	9.2
	3. Protección del medio ambiente	Bienestar animal, promoción de marca país	9.2

Figure 6: Main axes of programmatic discussion and framing of the proposals, according to candidacy

The detail provided by this analysis also allows us to delve into some previously mentioned aspects, but also new ones. Regarding the first, if it has already been pointed out that the 2022 elections were characterized by a low degree of ideological polarization, another aspect to highlight is that:

> [...] the ideas of defense of an economic policy of austerity dominated, speeches of reduction and reordering of State institutions [...] The discussion and opposition of issues such as oil exploration or the expansion of energies was also recurrent in the public debate. renewables, the construction of a tram, an electric train or a more efficient bus system for public transport in the large metropolitan area, as well as the revitalization of the economy that has been hit hard by the COVID-19 pandemic; however, in all these issues the different candidacies presented pragmatic positions, which made it difficult to know the ideological background of the main forces through their campaign messages (Treminio 2022: 2).

Under the terms raised by the author, it is possible to observe that the previous general appreciation of the campaign coincides to a great extent with the results of the content analysis carried out. From the count carried out on Twitter, for example, it is possible to discern those frames of austerity and reduction of the state size in the most relevant axis promoted by the candidate Eliécer Feinzaig (28.3%). However, going into the other aspects, it also allows us to observe the differences in framing even in coincident thematic axes.

Thus, the empirical analysis confirms some of the reflections indicated by Treminio (2022) regarding the discussion around the environment, public transport and the revitalization of the economy. In this way, it can be seen how while

the proposals of José María Figueres and José María Villalta coincide on the environmental axis, around investment in renewable energies and progress in decarbonization policies, for the candidate Lineth Saborío, on the other hand, this is about proposals that have to do with animal welfare initiatives and the promotion of the "green brand" of Costa Rica abroad. As a counterpart, Fabricio Alvarado represents the extractivist pole insofar as he openly promoted the exploitation of oil fields and the construction of a road and port infrastructure megaproject called the "Interoceanic Green Canal" in his tweets.

In the same way with the different routes of "economic reactivation" promulgated by each candidacy: while some identified in their proposals the challenges of advancing towards digital connectivity (Figueres), others opted for the promotion of innovation (Feinzaig), or else , the attraction of foreign direct investment (Alvarado).

In short, from the comparative detail it is possible to extract findings that not only show the existence of a programmatic dimension of political communication on Twitter, but also how many of these discussion topics are related to the contexts of the campaign and the discussion. that is articulated in the middle of it, something that is more difficult to obtain from a classic analysis focused on electoral programs.

Likewise, although some of the results presented coincide with these more traditional approaches (see Gómez et al. 2022) in relation to the relevance given to certain issues according to the political party of each candidacy, the door remains open for future approaches that delve into around the comparison between both approaches and their contribution to electoral studies in the country.

4.3. When and how do they say it?: particularities of context and format in programmatic tweets

Another aspect to highlight in terms of the programmatic dimension is the role of debates. If Figure 2 shows how the absolute frequency of tweets increases during the month prior to election day, it has also been found that the candidacies analyzed used the exposure window that opens the string of debates held during the month of January to turn their interactions towards the field of proposals.

To illustrate the above, Figure 7 shows the most used hashtags for each candidacy in relation to tweets coded with programmatic content. In this sense, the visualization of frequencies not only allows observing the consistency in the positioning of a campaign slogan in social networks (for example, , costaricamere-ceganar, conellasí, fabriciopresidente, hayesperanza), but also suggests how a good part of the tweets with programmatic proposals occur in synchrony with the holding of debates regularly organized by recognized press, radio and television media, or by institutional organizations such as the TSE. This is especially evident in the cases of Eliécer Feinzaig (#debateextra, #eleccionescrtse, #debatetd-más), Lineth Saborío (#debatetn7, #debatecfia, #debateuhnoticiascolumbia, #debatrepretel) and José María Villalta (#debatenacional, #debaterepretel, #debatemonumental).
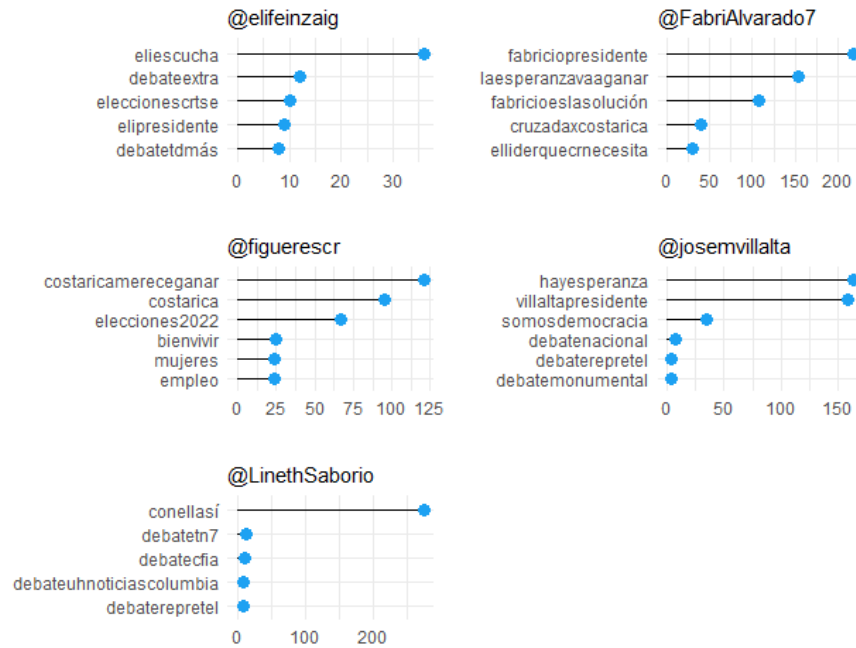
Figure 7: Top hashtags used in the tweets of the presidential candidacy accounts during the electoral campaign, October 2021 - February 2022 (Absolute)

The only exception to the above is Fabricio Alvarado, who rather denotes a lack of consistency in his campaign slogan, using several at the same time interchangeably, but he also does not show that he is taking advantage of the debates for the transmission of programmatic content. Likewise, although the profile of José María Figueres does not follow this trend either, it can be seen that he made use of hashtags as thematic markers, such as #bienvivir, related to tweets with proposals associated with the environment, as well as women and employment, alluding to two relevant sectors for his government plan.

In addition, in terms of format, it is also noteworthy how the studied social network allows the implementation of mechanisms that are distinctive to the platform and that have a function of emphasis or relevance around the communication of political messages, such as the "threads " (threads) on Twitter (Jungherr 2015).

As Figure 8 illustrates, threads are not only strategies that allow a user to extend the exposure of a topic beyond the 240-character limit, but also in electoral campaigns they are used as strategies for the transmission of programmatic content multimodal.

Here we are faced with the hybridization of formats that manage to complement the mere textual enunciation of a proposal. In the case of Lineth Saborío's

21
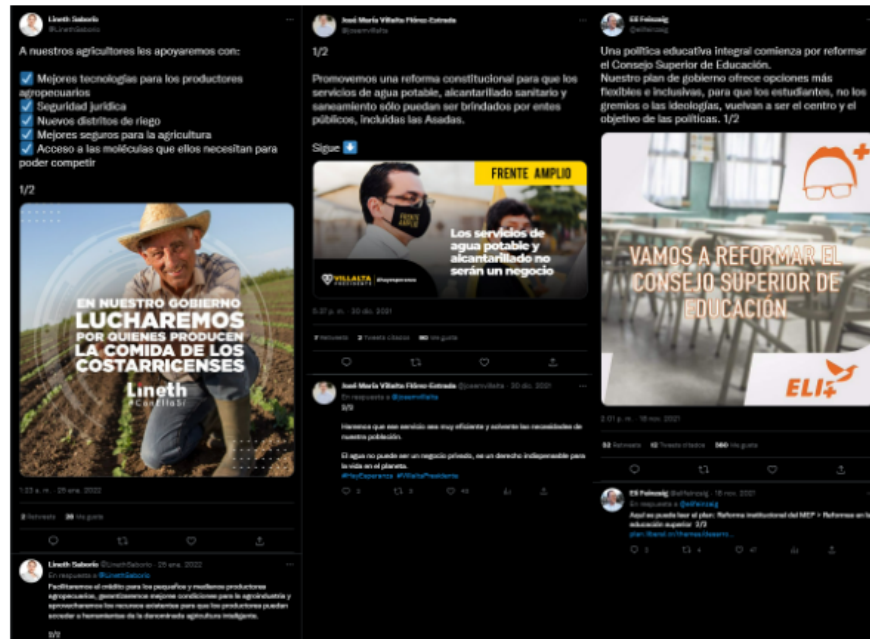
Figure 8: Examples of programmatic Twitter threads

first thread, you can see the way in which he combines an image alluding to the agriculture sector with five specific programmatic proposals, closing the publication by expanding more on the subject. José María Villalta's thread goes in a similar direction, while Eliécer Feinzaig's ends with a direct link to the government plan.

Although these characteristics that can be read as "form", fulfill a specific function in programmatic communication in digital environments, and in the case of Twitter, they show some particularities that the platform allows compared to other similar ones within the social media ecosystem.

4.4. The non-programmatic dimension: Twitter beyond proposals

As indicated at the beginning of the section, the programmatic dimension is not the only component of electoral communication, but it is a fundamental one in that it constitutes the bulk of the empirical material that was coded as "tweets without proposals" (60.9%) throughout the 2022 electoral campaign in Costa Rica.

Under this categorization were included all those participations in which the content does not refer to the specific policies, ideas and proposals that the candidacy of a political party presents as part of its platform in reference to a government plan. Although it is not the main objective of this work, since it is an exploratory study, it is important to finish the analysis of the results by characterizing some trends related to this other dimension.

As it is a much broader textual corpus than the programmatic one, an exploratory sentiment analysis[12] was used as a gateway to the data for the general approach. The result of this procedure can be seen in Figure 9, where the automated processing of the non-programmatic corpus classified 67% of the material within a positive polarity of the conversation, while the remaining 33% placed it within a negative polarity.
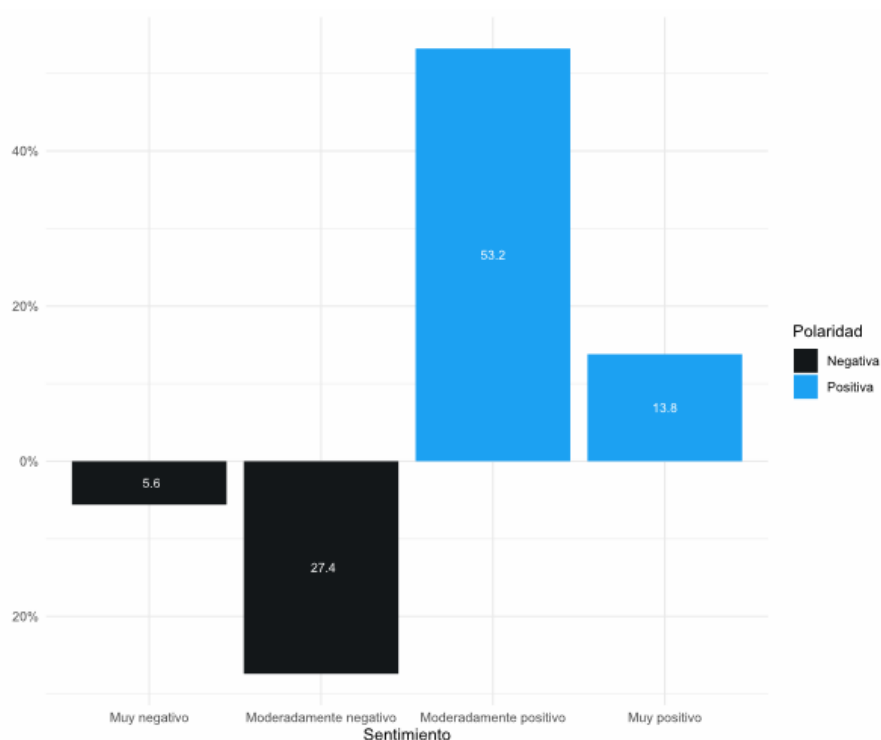

Figure 9: Sentiment analysis: non-programmatic tweets and classification according to polarity (Percentage)

Here it is possible to argue that a procedure such as the one used can help locate campaign communication styles within large corpora such as those of social networks. For example, the polarity classification carried out on the non-programmatic tweets made it possible to easily locate what, following García Beaudoux et al. (2013) would be good examples of discursive strategies typical of presidential campaigns, such as thank you messages, or negative communication tactics, focused on attacking the opponent.

---

[12]Sentiment analysis is a fairly popular and recently used NLP technique in political science for the automated classification of texts according to dictionaries trained with negative, neutral, or positive polarity metrics (Li, 2018). Salience6, developed by Lexalytics, is used here among the diversity of algorithms to perform this function.

Although these trends have been observable throughout the history of modern electoral campaigns, they can also be read from the way in which the personalization of politics has affected electoral campaigns through social networks in the last decade (Nusselder 2013). This is especially relevant for the electoral campaign under study, as the post-electoral survey carried out by CIEP (2022c) revealed that 58.5% identified the personality of the candidacy as the factor with the greatest weight for the decision to vote.

With these issues in mind, a close reading of the paragraphs classified by the algorithm brings up on the positive side those tweets in which the candidates referred to activities in which they participated or would be participating as part of the campaign agenda, as well as such as messages of gratitude to various sectors (shows of support, positive reception in communities, replication of opinion poll results, electorate in general, among others) or exhortation to electoral participation.

On the contrary, the negative polarity is associated with multimodal material and allusions to rival candidacies, criticisms or direct attacks, but also responses to political scandals of the electoral campaign, as well as rebukes to the work of the outgoing government, among others. This is observed in Figure 10, taking examples classified by sentiment analysis.

While quadrants 1 and 3 show messages with a positive polarity, such as the multimodal tweet published by José María Figures regarding the Christmas and New Year recess, or Lineth Saborío's on election day itself, quadrants 2 and 4 constitute evidence of the "negative campaign" exercise García Beaudoux et al. (2013), where in the case of Rodrigo Chaves he makes use of the multimodal resource to publish a fragment of a radio interview in which he attacks the PAC and the current president, disassociating himself from any association with them. Fabricio Alvarado's tweet, accordingly, is an example of a negative campaign in the context of an electoral debate, where the direct quote of a personal statement made in this space is used.

In conclusion, social media platforms such as Twitter, Facebook, Instagram, or more recently WhatsApp and Telegram messaging services, have come to offer an opportunity for politicians to share their thoughts, experiences and opinions with voters in a way more informal and personal, which has helped transform the sense of connection and exchange within electoral campaigns in recent years (Perloff 2018). Several avenues of analysis open up here that can even be explored in subsequent work on other types of communication that take place in digital environments during electoral times, but that have nothing to do with programmatic communication per se.

5. Final remarks

This analysis allows us to observe some general trends in the 2022 electoral campaign and reveals the importance of social networks as spaces for programmatic discussion in electoral campaign contexts, which transcend the government program as an end in itself insofar as they are a source valuable empirical evidence for political science. The results also help to gauge that a platform like
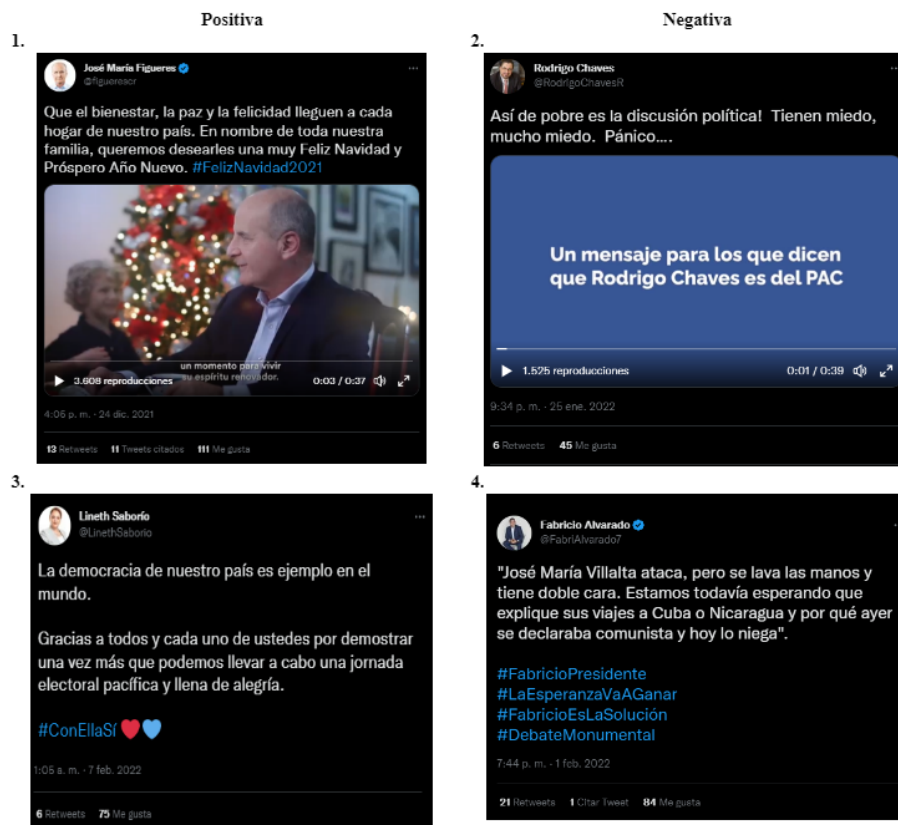
Figure 10: Non-programmatic political communication styles on Twitter, according to positive or negative polarity

Twitter is fertile ground for exploring that same programmatic dimension from an interactive perspective in which not only multimodal resources intervene, but also format issues that allow political proposals to be taken a step further. I went beyond the electoral programs, in principle characterized by their rigidity.

After this first exploratory approach, which constitutes one of the first approaches to Twitter in the Costa Rican political context, more questions and lines of investigation are opened on which it is possible to deepen within the future political research. In the first place, to the extent that the MARPOR methodology stands out for its proven reliability and validity in the study of programmatic positioning in different contexts, it can continue to be expanded for methodological approaches that focus on the content analysis of political texts also in other digital environments and in other countries. This goes hand in hand with the proposal of Matassi and Boczkowski (2023), who have recently come to affirm that social research in digital environments can go beyond its exclusive emphasis on a single platform, or on a single national case, with the aim of to move towards comparative knowledge.

In this sense, to the extent that the delimitation of cases in the studies expands, so will the textual and multimodal corpora, so that, as proposed in this work, the complement of qualitative approaches with NLP techniques can help to shed more light when the analysis material extends beyond the capabilities of manual coding. However, this will unfortunately depend a lot on the commercial fluctuations of social platforms such as Twitter, which at the beginning of 2023 announced the closure of free access to its API for academic research (Mehta 2023).

Therefore, this study concludes by joining the call of Flores-Márquez and González (2021), appealing to the "methodological imagination" that has characterized the study of digital culture from the social sciences for the last 30 years.

Author's Contribution Statement

Author 1: Have made a substantial contribution to the concept or design of the article; or the acquisition, analysis, or interpretation of data for the article. Author 2: Drafted the article or revised it critically for important intellectual content. Author 3: Drafted the article or revised it critically for important intellectual content.

Conflicts of Interest Statement

The authors certify that they have NO affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

References

Alexa. 2021. "Top Sites in Costa Rica". Acceso el 10 de febrero de 2022, https://www.alexa.com/topsites/countries/CR

Alonso, Sonia, Andrea Volkens, y Braulio Gómez. 2012. Análisis de contenido de textos políticos: un enfoque cuantitativo. Madrid: Centro de Investigaciones Sociológicas.

Alvarenga, Ximena, y Ronald Sáenz. 2022. «Lecturas metodológicas desde el NLP: estudiando YouTube como espacio de recepción de la protesta social en Costa Rica en tiempos de COVID-19». Anuario del Centro de Investigación y Estudios Políticos, n.o 13: 233-79. https://doi.org/10.15517/aciep.v0i13.47564

Ares, Cristina, y Andrea Volkens. 2017. «¿Por qué y cómo se está extendiendo el Manifesto Project a América Latina?» Revista Española de Ciencia Política, n.o 43 (marzo): 115-35. https://doi.org/10.21308/recp.43.05.

Ares, Cristina. 2016. «¿A quién le importa Europa? La UE en las elecciones generales españolas de 2011». Política y Sociedad 53 (1): 217-58. https://doi.org/10.5209/rev$_P OSO$.2016.v53.n1.47750.

Bauer, Paul C., Alejandro Ecker, Michael Imre, Camille Landesvatter, y Sonja Malich. 2023. «Who Tweets, and How Freely? Evidence from an Elite Survey Among German Politicians». Research Politics 10 (1): 205316802211442. https://doi.org/10.1177/20531680221144237.

Bazeley, Patricia, y Kristi Jackson. 2013. Qualitative Data Analysis with NVivo. Second edition. Los Angeles, California: SAGE Publications.

Beltrán, Vanessa, y Kevin Mora. 2022. «Organización y desafíos de los partidos emergentes en Costa Rica: los casos de Nueva República, Progreso Social Democrático, Unidos Podemos, Liberal Progresista y Costa Rica Justa». Informe Estado de la Nación en Desarrollo Humano Sostenible 2022. Investigación de base. San José, Costa Rica: CONARE-PEN. https://repositorio.conare.ac.cr/handle/20.500.12337/8372.

Benoit, Kenneth, Michael Laver, y Slava Mikhaylov. 2009. «Treating Words as Data with Error: Uncertainty in Text Statements of Policy Positions». American Journal of Political Science 53 (2): 495-513. https://doi.org/10.1111/j.1540-5907.2009.00383.x.

BMG. 2017. «Bmg Research Poll: Two-Thirds of People Don't Read Political Manifestos». BMG Research (blog). 16 de mayo de 2017. https://www.bmgresearch.co.uk/bmg-research-poll-10-people-dont-know-manifesto/.

Boczkowski, Pablo J., y Eugenia Mitchelstein. 2022. El entorno digital: breve manual para entender cómo vivimos, aprendemos, trabajamos y pasamos el tiempo libre hoy. Buenos Aires: Siglo XXI.

Bolaños, Roger. 2023. «Trol se camufla con fotos de colombiana para difundir homofobia en Costa Rica». La Nación, 16 de enero de 2023. https://www.nacion.com/el-pais/politica/trol-se-camufla-con-fotos-de-colombiana-para/WVY76EM3TRA6VIKI4NYG4TBQUU/story/.

Breeze, Ruth. 2010. «Variations on a Theme: Party Manifesto Discourses in the UK 2010 Election». Cultura, Lenguaje y Representación 9 (9): 9-30.

Budge, Ian. 2015. «Issue Emphases, Saliency Theory and Issue Ownership: A Historical and Conceptual Analysis». West European Politics 38 (4): 761-77. https://doi.org/10.1080/01402382.2015.1039374.

Bunse, Simone. 2021. «Las tropas cibernéticas y la manipulación política en línea en Costa Rica». LOGOS 2 (1): 160-77.

Calvo, Ernesto, y Natalia Aruguete. 2020. Fake news, trolls y otros encantos: cómo funcionan (para bien y para mal) las redes sociales. Sociología y política. Serie Rumbos teóricos. Buenos Aires: Siglo XXI Editores.

Calvo, Ernesto. 2015. Anatomía política de Twitter en Argentina: tuiteando Nisman. Ciudad Autónoma de Buenos Aires: Capital Intelectual.

Calvo, Gonzalo, Óscar Gutiérrez, Miriam Pérez, Ronald Sáenz, Karol Valverde, y Joselyn Vargas. 2018. «Partidos políticos locales: ¿legitimadores o perdedores de la democracia?» Revista de Derecho Electoral, n.o 25: 83-104.

Carazo, Carolina, Ignacio Siles, y Larissa Tristán. 2021. «En palabras de los candidatos: la comunicación en redes sociales durante la campaña electoral costarricense de 2018». Anuario del Centro de Investigación y Estudios Políticos, n.o 12: 1-33. https://doi.org/10.15517/aciep.v0i12.43489.

Carazo, Carolina. 2021. «Agenda-Setting in a Social Media Age: Exploring New Methodological Approaches». The Agenda Setting Journal 5 (1): 31-55. https://doi.org/10.1075/asj.20006.car.

Castro, Mariela, y Ronald Sáenz. 2019. ¿Cómo se organiza un debate político-electoral? Vol. 6. Serie Para Entender. San José, Costa Rica: TSE-IFED.

Chavarría-Mora, Elías, y Katie Angell. 2022. «Shifting Positions: Party Positions and Political Manifestos in Costa Rica». Latin American Politics and Society, diciembre, 1-21. https://doi.org/10.1017/lap.2022.34.

CIEP. 2021a. «Informe de Resultados del Estudio de Opinión Sociopolítica. Abril 2021». San José, Costa Rica: CIEP-UCR. https://ciep.ucr.ac.cr/wp-content/uploads/2021/05/Informe-de-Resultados-del-Estudio-de-Opinio

———. 2021b. «Informe de Resultados del Estudio de Opinión Sociopolítica. Diciembre 2021». San José, Costa Rica: CIEP-UCR. https://ciep.ucr.ac.cr/wp-content/uploads/2021/12/INFORME-DE-RESULTADOS-DE-LA-ENCUESTA-CIEP-UCR-DICIEMBRE-2021.html.

———. 2022a. «Informe de Resultados del Estudio de Opinión Sociopolítica. Enero

2022». San José, Costa Rica: CIEP-UCR. https://ciep.ucr.ac.cr/wp-content/uploads/2022/01/INFORME-DE-RESULTADOS-DE-LA-ENCUESTA-CIEP-UCR-ENERO-2-2022.html.

———. 2022b. «Informe de Resultados del Estudio de Opinión Sociopolítica. Marzo 2022». San José, Costa Rica: CIEP-UCR. https://ciep.ucr.ac.cr/wp-content/uploads/2022/03/INFORME-DE-RESULTADOS-DE-LA-ENCUESTA-CIEP-UCR-FEBRERO-2022-1.html.

———. 2022c. «Informe de Resultados del Estudio de Opinión Sociopolítica. Mayo 2022». San José, Costa Rica: CIEP-UCR. https://ciep.ucr.ac.cr/wp-content/uploads/2022/05/Encuesta-Postelectoral-2022.html.

Corporación Latinobarómetro. 2021. «Informe Latinobarómetro 2021». Santiago de Chile. https://www.latinobarometro.org/lat.jsp?Idioma=0.

Cortés, Alberto. 2019. «Trayectoria y coyuntura: cambios en la dinámica electoral en Costa Rica (1998-2018)». En Tiempos de travesía. Análisis de las elecciones del 2018 en Costa Rica, editado por Manuel Rojas y Ilka Treminio, 19-52. San José, Costa Rica: FLACSO.

Cortés, Sofía, Ronald Sáenz, Roberto Sánchez, Stuart Chavarría y Daniel Fernández. 2022. «Un año de Protestas en Costa Rica: cambios, continuidades e incertidumbres durante la última administración del Partido Acción Ciudadana. Informe Parcial de Resultados Junio 2021-Junio 2022». San José, Costa Rica: IIS-UCR. https://protestas.iis.ucr.ac.cr/publicaciones/231

Cruz, Roberto. 2015. «Politics 2.0 ICTs in Costa Rica's 2014 Presidential Campaign». En 2015 International Conference on Information Society (i-Society), 115-20. London, United Kingdom: IEEE. https://doi.org/10.1109/i-Society.2015.7366870.

———. 2017a. «Política Digital: el uso de Facebook en política electoral en Costa Rica (I)». Revista de Derecho Electoral, n.o 23: 133-51.

———. 2017b. «Política Digital: el uso de Facebook en política electoral en Costa Rica (II)». Revista de Derecho Electoral, n.o 24: 83-104.

———. 2018. «TIC y Democracia: las Elecciones Presidenciales de 2018 en Costa Rica». En Informe Cacia la Sociedad de la Información y el Conocimiento, editado por PROSIC, 237-84. San José, Costa Rica: Universidad de Costa Rica. http://www.prosic.ucr.ac.cr/informe-hacia-la-sociedad-de-la-informacion-y-el-conocimiento-2018.

Dawson, Catherine. 2020. A-Z of Digital Research Methods. London; New York, NY: Routledge, Taylor Francis Group.

Diamond, Larry Jay, y Richard Gunther, eds. 2001. Political Parties and Democracy. Journal of democracy book. Baltimore, MD: Johns Hopkins University Press.

Dijck, Jose van. 2013. The Culture of Connectivity: A Critical History of Social Media. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199970773.001.0001.

Entman, Robert M. 1993. «Framing: Toward Clarification of a Fractured Paradigm». Journal of Communication 43 (4): 51-58. https://doi.org/10.1111/j.1460-2466.1993.tb01304.x.

Flores-Márquez, Dorismilda, y Rodrigo González, eds. 2021. La imaginación metodológica: coordenadas, rutas y apuestas para el estudio de la cultura digital. México: Editorial Tintable.

García Beaudoux, Virginia, Orlando D'Adamo, y Gabriel Slavinsky. 2013. Comunicación política y campañas electorales. Estrategias en elecciones presidenciales. Barcelona: Editorial Gedisa.

Gómez, Steffan, Camila Aguilar, y Daniela Chacón. 2022. «Elecciones 2022 e identidades políticas en Costa Rica». Informe Estado de la Nación en Desarrollo Humano Sostenible 2022. Investigación de base. San José, Costa Rica: CONARE-PEN. https://repositorio.conare.ac.cr/handle/20.500.12337/8382.

Gómez, Steffan, y Esteban Durán. 2020. «Construcción de la imagen pública en redes sociales (campaña electoral 2017-2018)». En Elecciones 2018 en Costa Rica: retrato de una democracia amenazada, editado por Ronald Alfaro y Felipe Alpízar, 109-49. San José, Costa Rica: CONARE - PEN.

Gómez, Steffan. 2022. «Análisis programático del PSD v2». VotemosCR (blog). 29 de marzo de 2022. https://votemoscr.com/blog/analisis-programatico-del-psd-v2/.

Graham, Todd, Marcel Broersma, Karin Hazelhoff, y Guido van 't Haar. 2013. «Between Broadcasting Political Messages and Interacting with Voters: The Use of Twitter During the 2010 UK General Election Campaign». Information, Communication Society 16 (5): 692-716. https://doi.org/10.1080/1369118X.2013.785581.

Grimmer, Justin, y Brandon M. Stewart. 2013. «Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts». Political Analysis 21 (3): 267-97. https://doi.org/10.1093/pan/mps028.

John, Winsome St, y Patricia Johnson. 2000. «The Pros and Cons of Data Analysis Software for Qualitative Research». Journal of Nursing Scholarship 32 (4): 393-97. https://doi.org/10.1111/j.1547-5069.2000.00393.x.

Jungherr, Andreas. 2015. Analyzing Political Communication with Digital Trace Data: The Role of Twitter Messages in Social Science Research. Contributions to Political Science. Cham, Heidelberg: Springer.

———. 2016. «Twitter Use in Election Campaigns: A Systematic Literature Review». Journal of Information Technology Politics 13 (1): 72-91. https://doi.org/10.1080/19331681.2015.1132401.

Li, Quan. 2018. «Natural Language Processing for Innovating Behavioral Political Science Research». En The Oxford Handbook of Behavioral Political Science, editado por Alex Mintz y Lesley G. Terris. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190634131.001.000

Lowe, Will, Kenneth Benoit, Slava Mikhaylov, y Michael Laver. 2011. «Scaling Policy Preferences from Coded Political Texts». Legislative Studies Quarterly 36 (1): 123-55. https://doi.org/10.1111/j.1939-9162.2010.00006.x.

Mair, Peter. 2014. Ruling the Void: The Hollowing of Western Democracy. New York; London: Verso. http://search.ebscohost.com/login.aspx?direct=truescope=sitedb=nlebkdb=nlabkAN=729878.

Maringira, Godfrey. 2022. «Youth and Politics on Twitter: Crisis in Zimbabwe». En The Palgrave Handbook of Global Social Change, editado por Rajendra Baikady, S.M. Sajid, Varoshini Nadesan, Jaroslaw Przeperski, M. Rezaul Islam, y Jianguo Gao, 1-19. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-87624-1$_2$93 − 1.

Marres, Noortje, y Carolin Gerlitz. 2016. «Interface Methods: Renegotiating Relations between Digital Social Research, STS and Sociology». The Sociological Review 64 (1): 21-46. https://doi.org/10.1111/1467-954X.12314.

Matassi, Mora, y Pablo J. Boczkowski. 2023. To Know Is to Compare: Studying Social Media Across Nations, Media, and Platforms. Cambridge, Massachusetts: The MIT Press.

Mehta, Ivan. 2023. «Twitter's restrictive API may leave researchers out in the cold». TechCrunch. 14 de febrero de 2023. https://techcrunch.com/2023/02/14/twitters-restrictive-api-may-leave-researchers-out-in-the-cold/?guccounter=1.

Miranda, Nicolás Rodrigo, Francisco Olucha, y Carolina Plaza-Colodro. 2022. «Competición electoral en contextos críticos: una aproximación hacia América Latina con el Manifesto Project». Estudios Internacionales 54 (202): 37-62. https://doi.org/10.5354/0719-3769.2022.67655.

Mitchelstein, Eugenia, Pablo Boczkowski, y Camila Giuliano. 2021. «Platform Matters: Political Opinion Expression on Social Media». Weizenbaum Journal of the Digital Society 1 (1): 1-26. https://doi.org/10.34669/WI.WJDS/1.1.5.

Molina, Natalia, Adrián Vergara Heidke, y Emmanuel Quesada. 2019. «Descortesía en comentarios de Facebook relativos a noticias electorales de CRHoy.com y La Nación durante el proceso electoral del 2018 en Costa Rica». Pragmalinguistica, n.o 27: 233-55. https://doi.org/10.25267/Pragmalinguistica.2019.i27.12.

Murthy, Dhiraj. 2018. Twitter: Social Communication in the Twitter Age. Second Edition. Digital media and society. Cambridge, UK; Medford, MA: Polity.

Nieborg, David B, y Thomas Poell. 2018. «The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity». New Media Society 20 (11): 4275-92. https://doi.org/10.1177/1461444818769694.

Norris, Sigrid. 2019. Systematically Working with Multimodal Data: Research Methods in Multimodal Discourse Analysis. Hoboken, NJ: Wiley Blackwell.

Nusselder, André. 2013. «Twitter and the Personalization of Politics». Psychoanalysis, Culture Society 18 (1): 91-100. https://doi.org/10.1057/pcs.2012.45.

Ovares, Carolina. 2022. «Elecciones Nacionales Costa Rica 2022: entre fuerzas políticas tradicionales y fuerzas emergentes». Revista Elecciones 21 (23): 253-66. https://doi.org/10.53557/Elecciones.2022.v21n23.09.

Paatelainen, Laura, Elisa Kannasto, y Pekka Isotalus. 2022. «Functions of Hybrid Media: How Parties and Their Leaders Use Traditional Media in Their Social Media Campaign Communication». Frontiers in Communication 6 (enero): 1-10. https://doi.org/10.3389/fcomm.2021.817285.

Perloff, Richard M. 2018. The Dynamics of Political Communication: Media and Politics in a Digital Age. Second edition. New York, NY: Routledge, Taylor Francis Group.

Picado, Hugo. 2020. «Electoral Debates Organised by the Electoral Management Body». En Routledge International Handbook On Electoral Debates, editado por Julio Juárez-Gámiz, Christina Holtz-Bacha, y Alan Schroeder, 1.a ed. Routledge. https://doi.org/10.4324/9780429331824.

QSR International Pty Ltd. 2020. «NVivo». https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home.

Riorda, Mario, y Marcela Farré, eds. 2012. ¡Ey, las ideologías existen! comunicación política y campañas electorales en América Latina. Electronic resource. Politeia. Buenos Aires: Editorial Biblos.

Robles, Francisco, Fátima Ruiz, y Ronald Sáenz. 2022. «Grandes donantes: dinero, élites y partidos políticos en Costa Rica (2010-2018)». Política. Revista de Ciencia Política 60 (1): 57-85. https://doi.org/10.5354/0719-5338.2022.66279.

Salganik, Matthew J. 2018. Bit by Bit: Social Research in the Digital Age. Princeton: Princeton University Press.

Siles, Ignacio, Carolina Carazo, y Larissa Tristán. 2019. «Comunicación y política en clave digital: las redes sociales y el proceso electoral 2017-2018». En Tiempos de travesía. Análisis de las elecciones del 2018 en Costa Rica, editado por Manuel Rojas Bolaños y Ilka Treminio, 175-96. San José, Costa Rica: FLACSO Costa Rica.

Siles, Ignacio, ed. 2020. Democracia en digital: Facebook, comunicación y política en Costa Rica. San José: Universidad de Costa Rica, Centro de Investigación en Comunicación, Espacio Universitario de Estudios Avanzados.

Siles, Ignacio, Erica Guevara, Larissa Tristán-Jiménez, y Carolina Carazo. 2021. «Populism, Religion, and Social Media in Central America». The International Journal of Press/Politics 28 (1): 138-159. https://doi.org/10.1177/19401612211032884.

Siles, Ignacio, y Larissa Tristán. 2021. «Facebook as "Third Space": Triggers of Political Talk in News about Nonpublic Affairs». Journal of Information Technology Politics 18 (2): 164-79. https://doi.org/10.1080/19331681.2020.1835780.

Sued, Gabriela. 2019. «Para una traducción de los métodos digitales a los estudios latinoamericanos de la comunicación». Virtualis 10 (19): 20-41.

Sued, Gabriela. 2020. «Repertorio de técnicas digitales para la investigación con contenidos generados en redes sociodigitales». Paakat: Revista de Tecnología y Sociedad 10 (19): 1-22. http://dx.doi.org/10.32870/Pk.a10n19.498.

Terechshenko, Zhanna, Fridolin Linder, Vishakh Padmakumar, Fengyuan Liu, Jonathan Nagler, Joshua Aaron Tucker, y Richard Bonneau. 2020. «A Comparison of Methods in Political Science Text Classification: Transfer Learning Language Models for Politics». SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3724644.

Tesfamicael, Solomon A., Desalegn Chala, Liyew A. Desta, y Sikunder Ali. 2022. «Politics of Meaning About Quality of Education in Ethiopia». African Journal of Teacher Education and Development 1 (1). https://doi.org/10.4102/ajoted.v1i1.3.

Treminio, Ilka. 2022. «Elecciones presidenciales y legislativas Costa Rica 2022». 5. Análisis Carolina. Madrid: Fundación Carolina. https://doi.org/10.33960/AC$_0$5.2022.

Tristán, Larissa, Ana Cristina Gamboa, y Estefany Jiménez. 2021. «¿Cómo se informaron las personas votantes primerizas en 2018?» En Participación y política electoral: nuevas miradas a las elecciones 2018 en Costa Rica, editado por Ronald Alfaro, 116-38. San José, Costa Rica: IFED-TSE.

Tumasjan, Andranik, Timm O. Sprenger, Philipp G. Sandner, y Isabell M. Welpe. 2011. «Election Forecasts With Twitter: How 140 Characters Reflect the Political Landscape». Social Science Computer Review 29 (4): 402-18. https://doi.org/10.1177/0894439310386557.

Vergara, Adrián, y Kendy Valverde. 2020. «Espacios de comunicación: esfera política costarricense en la Campaña Electoral 2018». Anuario del Centro de Investigación y Estudios Políticos, n.o 11: 288-321. https://doi.org/10.15517/aciep.v0i11.43320.

Vliet, Livia van, Petter Törnberg, y Justus Uitermark. 2020. «The Twitter Parliamentarian Database: Analyzing Twitter Politics Across 26 Countries». Editado por Sergi Lozano. PLOS ONE 15 (9): e0237073. https://doi.org/10.1371/journal.pone.0237073.

Volkens, Andrea, Judith Bara, Ian Budge, Michael D. McDonald, y Hans-Dieter Klingemann, eds. 2013. Mapping Policy Preferences from Texts: Statistical Solutions for Manifesto Analysts. Oxford: Oxford University Press.

Volkens, Andrea, Tobias Burst, Werner Krause, Pola Lehmann, Theres Matthieß, Nicolas Merz, Sven Regel, Bernhard Weßels y Lisa Zehnter. 2020. «The Manifesto Data Collection». Manifesto Project. (MRG / CMP / MARPOR). Version 2020b. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB). https://doi.org/10.25522/manifesto.mpds.2020b

This preprint was submitted under the following conditions: