

Article

Information Pluralism and Political Pluralism: Study of the Digital Ecosystem from the Perspective of a New Constitution in Chile

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Abstract: There is evidence of constitutional rank in Chile, and not only a sectoral rank, to estimate that the regulation of digital media is in an initial and insufficient phase to properly protect information pluralism as political pluralism. The study aims to investigate the forms of concentration, such as the communicational flow of digital media, to determine the opportunities and information defects of these media due to regulatory deficiencies in this sector. Data collection will be carried out through a qualitative and quantitative methodology. The prospect of the imminent constituent process in Chile provides the opportunity to evaluate the possibilities to propose changes not only at the legislative level but also at the constitutional level, which are likely to benefit freedom of expression with greater guarantees to such as the pluralism of digital media. The latter also means assessing the relevance of enshrining the right to communication in the future.

Keywords: Digital media; Pluralism; Freedom of expression; New Constitution; web scrapping; Sentiment Analysis

1. Introduction

Political pluralism is in solidarity with information pluralism, essential for fully exercising the right to freedom of expression and the existence of a democratic society. For this purpose, the specialized literature [1] distinguishes three types of information pluralism. On the one hand, internal pluralism relates to the information offered by a particular medium, which must ensure all voices are incorporated when informing. On the other, external pluralism promotes the diversity of sources of information, and a plurality of actors related to the media. This category includes state subsidies to promote the creation of new media or strengthen existing ones. Finally, structural pluralism refers to the pluralism of information associated with organizing a diversity of events in the market. It includes the prohibition of the state monopoly and the mechanisms for promoting competition in the information market to avoid concentration in the ownership of news companies.

Although the Chilean legal system, which has internal and structural pluralism elements, has recently been perfected with new legislative initiatives, severe criticism remains regarding the concentration of the media in the country [2]. The emergence of digital media undoubtedly offers a relevant opportunity to break media concentration in Chile. However, we hypothesize that these new technologies still have regulatory difficulties that hinder a proper pluralism of information, and, consequently, a political pluralism typical of a democratic society. In this context, this article seeks to reflect on the emergence of a digital media ecosystem in Chile and its constitutional and legal guarantees to achieve a greater presence of internal, external, and structural pluralism in a space of permanent adaptations to technological changes.

To this end, this project is based on an interdisciplinary and mixed methodology (qualitative and quantitative). In the first chapter, we will examine the current state of

Chilean legislation to determine the types of information pluralism the country adheres to. In the second chapter, we will explore the relationship between information pluralism and the right to communicate as an expression of a democratic society of law. The third chapter will examine the opportunity offered by digital media to achieve greater information pluralism. For this purpose, we will review the methodology applied and the results obtained. The conclusion will shed light on whether the emergence of a digital media ecosystem, together with the existing regulatory guarantees, effectively guarantees greater information pluralism when shaping a public political opinion in the country.

2. Information pluralism in current Chilean legislation

The Chilean legislation is framed by the Constitution of 1980, which is committed to a model of internal pluralism. Indeed, article 19 No. 12, while guaranteeing the freedom to express an opinion, enshrines editorial freedom by explicitly stating that freedom is "to inform, without prior censorship, in any form, and in any media." However, it also contains elements of structural pluralism, establishing the prohibition of state monopoly over the media in the second paragraph of article 19 No. 12 of the Constitution. Although it specifically enshrines a modality of informative pluralism, its version of structural pluralism is solidary of social pluralism, which is recognized in article 1, third paragraph, of the Constitution: "The State recognizes and protects the intermediate groups through which society is organized, and structured, and guarantees them adequate autonomy to fulfill their own specific purposes" (Zúñiga, 2014). Consistent with this premise, article 19 No. 12, in the fourth paragraph of the Constitution, enshrines the right of every person to "found, edit, and maintain newspapers, magazines, and newspapers, under the conditions established by law." The impulse of information pluralism then falls on individuals consistent with the principle of constitutional subsidiarity.

Although in the 70s radio and the emerging television were presented as an opportunity to increase structural pluralism, the Constitution originally opted for a more conservative statute against the "cultural industry" that television could be [3,4] by establishing that only "The State, those universities, and other persons or entities that the law determines, may establish, operate, and maintain television stations".

With the return to democracy, various normative texts advanced in specifically enshrining information pluralism. However, these normative innovations did not abandon the premise of internal pluralism based on editorial freedom. Based on the above, a series of authors argued the need to discipline the concentration of the media, subjecting them to democratic control through state intervention [5]. For this purpose, the draft of the current law No. 19,733 (Press Law) discussed the possibility of establishing maximum quotas in the ownership of the media, thus forcing a fragmentation of the owners as a way to attack concentration. This resulted in the intervention of the Constitutional Court, which by ruling No. No. 226 of 30 October 1995 declared such provision unconstitutional, stating that the phrase contained in the draft that established the state's legal obligation to ensure "the effective expression of the various currents of opinion, as well as the social, cultural, and economic variety of the regions" interfered with the autonomy of those intermediate bodies or associative groups which are the means of social communication, violating article 1, third paragraph, of the Constitution. Thus, despite legislative attempts, Chile maintains a high media concentration. Historically, the problem was referred to the existing antitrust legislation, so the premise for ensuring pluralism of information is no different from the one that operates to ensure a perfect market for any good or service.

Thirteen years later, while maintaining its defense of editorial freedom, the Constitutional Court opened up to endorse the constitutionality of broadcasting information defined by the state and to preserve portions of the radio electric space for communities, and/or regional and local organizations. This decision was made by articulating the right to information with the right of people to participate with equal opportunities in national life (article 1, paragraph 5 of the Constitution). Along with the above, Law No. 20,433 creates citizen community broadcasting services. It establishes in Article 9 – compared to

radio stations with maximum coverage – that only non-profit private legal persons may hold a concession if their essential purposes include promoting the general interest through the pursuit of specific objectives of a civic, social, cultural, or spiritual nature. Such persons must be constituted in and reside in Chile. The same applies to Law No. 20,750 on Digital Television, which establishes a mechanism for reserving broadcast frequencies of regional, and local range while limiting the number of concessions, and the duration of television concessions. On the other hand, Article 13 of the General Telecommunications Law limits the accumulation of frequencies by the same company or economic group for the same location, which precisely seeks to avoid media concentration.

3. Digital media: An opportunity for information pluralism?

In line with structural pluralism, digitalization undoubtedly offers a significant opportunity to break media concentration in Chile. The Chilean Supreme Court itself, hearing an appeal for protection (case No. 450-2018), has understood that social networks such as Twitter, Facebook or YouTube are social media under the broad definition of social media in Article 2 of Law No. 19,733.

However, the existence of these new technological media does not necessarily ensure information pluralism [6]. Many observations and policy recommendations for Chile have been made by international organizations to ensure that new technologies can consolidate information pluralism. The UN Special Rapporteur, in conjunction with the Representative on Freedom of the Media of the Organization for Security, and Cooperation in Europe (OSCE); the Special Rapporteur for Freedom of Expression of the Inter-American Commission on Human Rights of the OAS; and the Special Rapporteur on Freedom of Expression, and Access to Information of the African Commission on Human, and Peoples' Rights (ACHPR), expressed in a joint statement that, "to the extent necessary, actions should be implemented to prevent the terrestrial digital transition from leading to further or undue concentration of ownership or control of media. Some possible measures are the adoption of regulatory provisions relating to the operation of multiplexers, clear rules of competition, and pricing for multiplexers, and distribution networks, and differentiation between distribution, and content production operations within the same company, among others."

On the other hand, as pointed out by [7], although the electronic media of press, radio, and television conglomerates adopt a digital pluralism and a market vision of their work, due to their structure they can both put issues on the agenda, expand, and preserve the presence of official and ideologically close sources, while having a greater number of publications. In contrast, the periphery and/or community media place other issues on the agenda, but with a smaller thematic breadth.

Similarly, in an exploration of key cases, [7] highlight the positive action of digital media, presenting smaller agendas that contribute to diversity:

"(...) the digital media belonging to the large press conglomerates have very similar political agendas, and they address the issues in a critical, and somewhat aggressive way; on the other hand, alternative digital written media, despite concentrating on a few topics—although they address more of them in absolute terms—and presenting less diversity, verify agendas different from those carried out by more traditional media. This suggests that these new media incorporate different themes that would bring diversity to the media system." [7].

[8] however, found less diversity in the media, including those outside the commercial circuit, pointing to the speed or immediacy of traditional media and the lack of resources of peripheral media:

"The study results also show that online media are not clearly linked to a greater diversity of sources or perspectives. (...) The low level of diversity found in online media can be explained by several elements that characterize how digital media work is done in Chile. In general, the journalistic teams are small, have few resources, live under immense pressure to publish their content as quickly as possible, and make many decisions to maximize readership (number of clicks),

Table 1. Orientaciones políticas de los medios

Most Extreme Left
 Hyper-partisan Left
 Skews Left
 Neutral or Center Skews Right
 Hyper-partisan Right
 Most Extreme Right

source: Otero (2020) <https://wefunder.com/ad.fontes.media>

all of which might prevent the performance of journalistic work that features
 diverse representations of the social world daily. This is even more evident in
 media outlets that form part of non-traditional media and have scarce resources.
 In the case of Chile, this group includes media that are exclusively digital (as El
 Mostrador and El Dinamo) and have websites with fewer interactive elements
 and capabilities such as videos, animations, and live streaming." [8]

In this search for pluralism, scientific literature has focused on digital media due to
 their ability to address issues other than the media agenda (with another perspective).
 However, their professional and financial shortcomings do not allow them to tackle a broad
 agenda: "They address fewer topics, but in a more concentrated way, that is, they focus on
 some specific topics. On the other hand, the agendas of the big media, although similar,
 treat the issues more evenly and do not concentrate only on a handful of topics" [7]. In
 other words, conglomerates' digital media show homogeneity of content. Conversely, with
 their thematic limitation, independent electronic media can accompany communities with
 their demands, exercising—in practice—the right to communication [9]

Faced with the above, quantitative and qualitative evidence is necessary to elucidate a
 series of issues related to the emergence of commercial, peripheral or community digital
 media to guarantee greater pluralism in Chile.

4. Methodology and results

This proposal uses a mixed interdisciplinary methodological strategy (researchers in
 communication sciences for the qualitative approach and legal sciences for the quantitative
 one). To register the digital media ecosystems and their interaction mechanisms with
 the traditional information system in shaping of Chilean public opinion, semi-structured
 interviews with key stakeholders were conducted. Those findings were complemented
 with quantitative data obtained from a social network (Twitter) so as to confirm, reinforce,
 and complement the qualitative results.

4.1. Quantitative methodology

To describe Chile's traditional and digital ecosystem in terms of its external and
 structural pluralism, a data classification instrument by independent judges to experts is
 applied (N=30). "Experts" are journalists with a track record of editorial responsibility in
 media (editors) and academics (journalism) who voluntarily attend the activity and carry
 out the ad-hoc classification of the political orientations of the media based on the partisan
 categories proposed by Otero(2020) (See Table 1). The final location of a medium will be
 given by the average of the scores awarded by the judges [10].

Currently, no dataset can have data on media posts, which generates the need to create
 one through a web scraping system. These systems have proven reliable for obtaining
 unstructured data [11,12]. For unstructured data collection, an Amazon Web Services
 (AWS) called Elastic Compute Cloud (EC2) virtual machine will be created to host the data
 crawler system [13]. This Python-based system consists of spiders that will run through the
 accounts of 450 Chilean media, which pour content into social networks such as Facebook
 and Twitter [14,15]. This data will be downloaded to be processed offline in the AWS virtual
 machine, reducing the amount of data processed in the cloud. To avoid being blocked

Table 2. Source Topology

State or Political Party
Business or Company
Police, and Security
Legal, and Court
Military or Defense
Health
Educational
Civil Society
Religion/Church
Citizen
Media
Sports
Performer, Artist, or Celebrity
Anonymous
Other sources.

Source: [8] <https://www.journalisticperformance.org/>

(banned), an IP pool is used to make the website think that we are users [16]. Once the shape data is obtained, a machine learning machine will be applied where the data obtained from the crawler is analyzed and classified. Some NLP (Natural Language Processing) techniques will also be used that will allow us to perform an analysis of feelings, contexts, and others. The search period runs from January 1, 2021, to March 31, 2022. The resulting dataset is approximately 2 million pieces of data and comprises a heterogeneous media covering national, regional, and local trends with minor and significant owners.

This corpus was subjected to an automated analysis of entities allowing the identification of the actors mentioned above. After that, it was possible to categorize these actors based on the sources typology proposed by [8] (See table 2

Semi-structured interviews were conducted to propose elements of discussion for a constitutional debate that facilitates the definition of a plural media ecosystem from a legal point of view. These interviews were applied to constitutional experts, communicators, and media directors were applied to discuss the normative reality of the digital media ecosystem.

4.1.1. Data Collection Techniques

In this case, the proposed qualitative component considered the design, application, and analysis of semi-structured individual interviews. The semi-structured interview corresponds to a primary data collection technique that seeks to obtain information from the perspective of the actors whose life experiences and knowledge are relevant to observe and understanding the phenomenon under study. The use of this technique provides contextualized and comprehensive information through the answers and stories of the interviewees themselves. The characteristics of this technique enable each of the answers of the guideline to be explored in an unstructured way (not prepared in advance, but systematic). Also, it allows to look into aspects derived from the answers provided by the interviewee in an environment of trust. By delving into the interviewee's strongest ideas, meaning can be given to their behavior.

4.1.2. Sample

The selected sample is as follows:

- Two constitutional experts.
- Two experts in the area of communication.
- Two traditional commercial media directors.
- Two traditional independent digital media directors

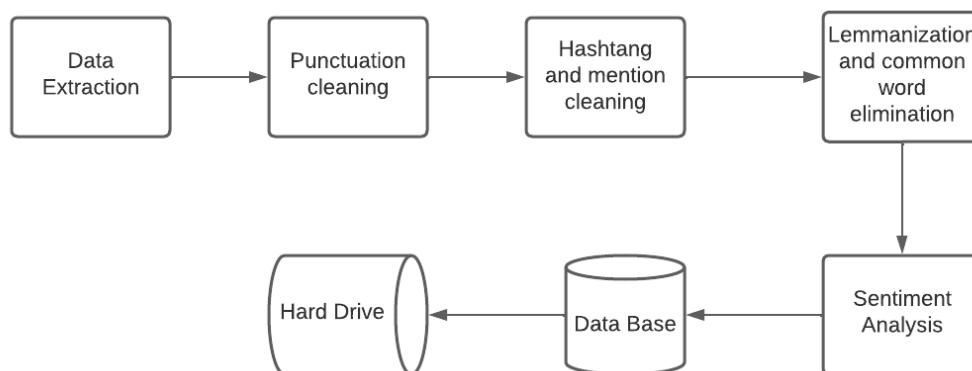


Figure 1. Number of tweets per month shows total in thousands of posts

The interview schedule includes the following items:

- Pluralism: understanding and exercise
- Communication law: understanding and clarity/confusion concept
- Ideology of the environment and other media: political orientation
- Agenda construction: information selection method
- Method of collecting information and sources on constituent process

4.2. Quantitative evidence

The process of analyzing the content of the tweets concerning the country's constitutional discussion was carried out through the following flow of data processes (see Figure 1):

As noted, the first step was to use a web scraping tool. The twarc tool was used along with the academic twitter API. This combination allows us to do up to 10 million tweet extractions per month without being blocked. This tool has been previously used in social science studies similar to this one [17,18]. The advantage of the twarc tool is allowing researchers to obtain all the information of the tweet, the author, whether or not it was reposted, and if it could be sensitive quickly and accurately. For each hashtag, a CSV file was created that contained all the information of the tweets for later text preprocessing. First, punctuation marks, hashtags, mentions, and common words such as articles and pronouns were eliminated for better analysis of repetition and feeling. Then a sentiment analysis was done using PySentimiento [19]. One of the greatest difficulties for sentiment analysis is that few tools work natively in Spanish. The most used sentiment analysis tools are Vader and Textblob; however, these require the original text be translated, and, therefore, a degree of precision is lost when performing sentiment analysis. Finally, a union of all the files was made to create a database for reference and verification.

4.3. Data description

A universe of 122 hashtags and a list of digital and traditional media were defined. Subsequently, we searched for posts related to those hashtags from January 1, 2021 to March 31, 2022. The result was a total of 8,549,245 tweets for the defined period. Figure 2 shows the distribution per month of all posts related to hashtags. Results show that from July 2021 to February 2022 had the largest number of posts (82%), with February 2022 concentrating the largest number of posts (22.9% of total posts).

Figure 3 shows the distribution of posts made only by the selected media, totaling unique tweets for the defined period. Results show that the distribution is very similar to that of the general sample. However, there is a difference during the first quarter of 2022, where a greater proportional number of posts is exposed compared to the general sample.

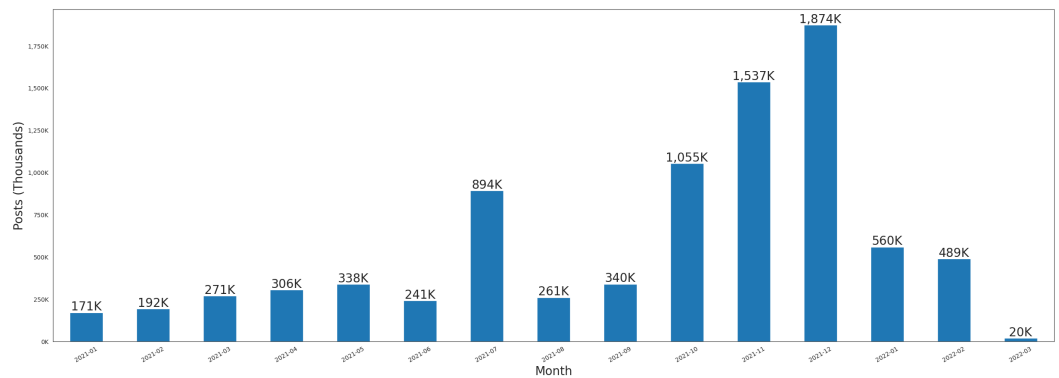


Figure 2. Number of tweets per month shows total in thousands of posts

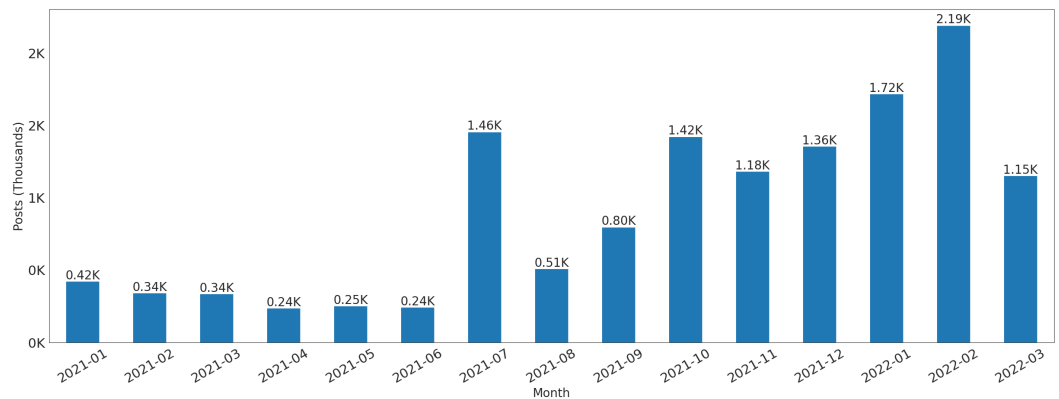


Figure 3. Number of tweets per month for media. In thousands of posts

Figure 4 shows the distribution of hashtags for the overall sample. It can be seen that "Constitutional Convention" only occupies the fourth place, and "Constitutional Convention" (with and without accent) in fifth, and sixth place respectively, and "New Constitution" in the tenth place. On the other hand, the presidential candidates "Boric" and "Kast", and the hashtag "Chile" cover a significant proportion of posts (41% of the total).

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Figure 5 shows the distribution of hashtags for the formal and informal media sample. Unlike the general sample, in the digital media sample the hashtags related to the "Constitutional Convention" are positioned in the first three places. It should be noted that "New constitution" does not appear as in the general total, but the concept of "social outbreak" does appear, which was not in the ten most recurrent hashtags.

Next, a word cloud (Word Cloud) was made to present a series of words or labels graphically with different colors and sizes depending on the word's relevance. A maximum of 25 words were taken for each sample (total and medium). Figure 6 shows the case of the

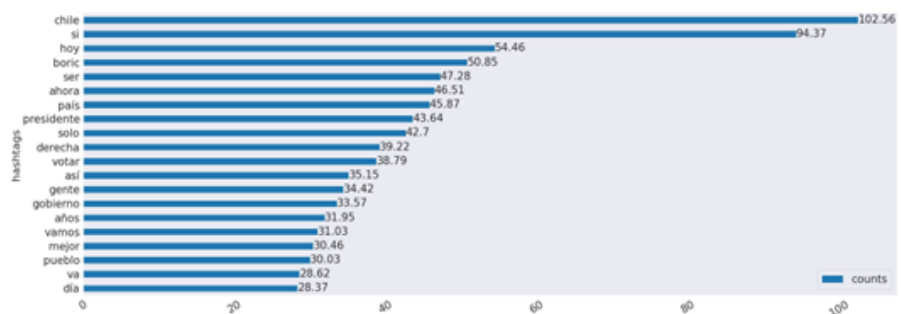


Figure 4. Most popular hashtags total sample January 2021 - March 2022 in thousands of tweets

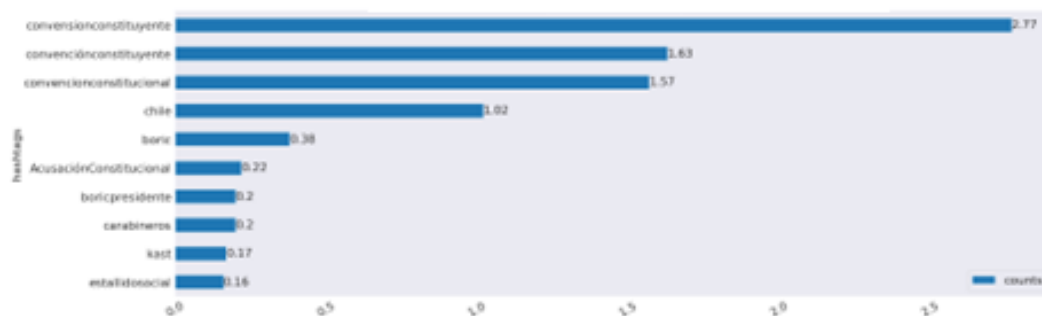


Figure 5. Most popular hashtags for media January 2021 - March 2022 in thousands of tweets



Figure 6. Cloud Top Words for the total sample

general sample, where it can be seen that words such as “government”, “people”, “vote”, and “better” are repeated in greater quantity, agreeing with the most recurrent hashtags. These concepts were closely related to the electoral process taking place in Chile. It should be noted that the word "right" appears as repetitive.

As for the amount of repetition per word, it can be observed that both "Chile", and "Sí" ("Yes") have an important weight with respect to the total number of words. "Right," "Government," and "People," which are concepts associated with politics show considerable interest (see Figure 7).

In the case of the media, it can be seen that the words showing the greatest number of appearances are "abstention," "conventional", "constituent", "right", and "carabineros". The first 3 are consistent with the process of drafting the new Constitution, and the latter is related to the social outbreak that occurred in Chile before the constituent process (see Figure 8).

Regarding the amount of repetition per word, it can be seen that the most frequent words in the general sample do not have the same distribution in the media sample. "Minute," "Alive," "Convention," "Constitutional," and "Constituent" are among those with the greatest representation. "Chile" appears at number six compared to the first place obtained in the overall sample (see Figure 9).

4.4. Sentiment analysis

Sentiment analysis, also known as opinion mining, is a task of mass classification of documents automatically, which focuses on cataloging documents according to the positive or negative language connotation in them. As mentioned in the previous section, it was

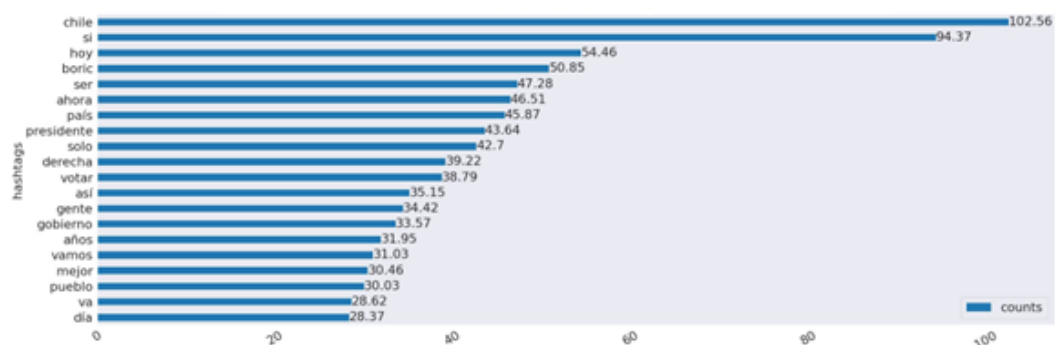


Figure 7. Top 20 Popular Words during the period January 2021 - March 2022 in thousands of Tweets



Figure 8. Cloud Top Words for the total sample

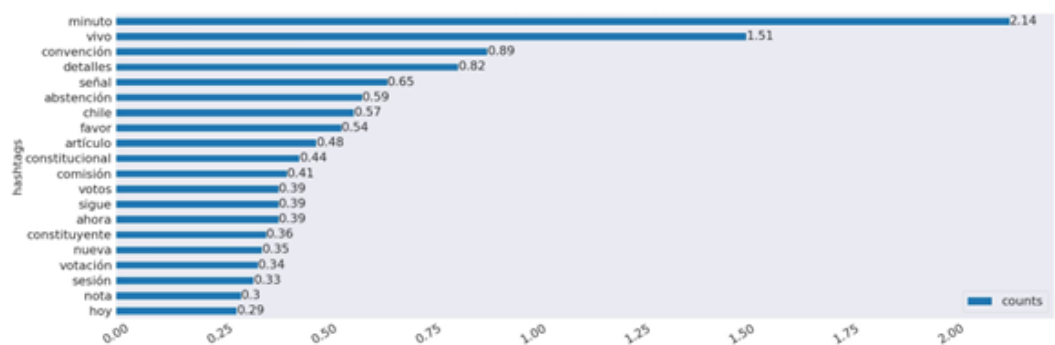


Figure 9. Top 20 Popular Words during the period January 2021 - March 2022 in thousands of Tweets

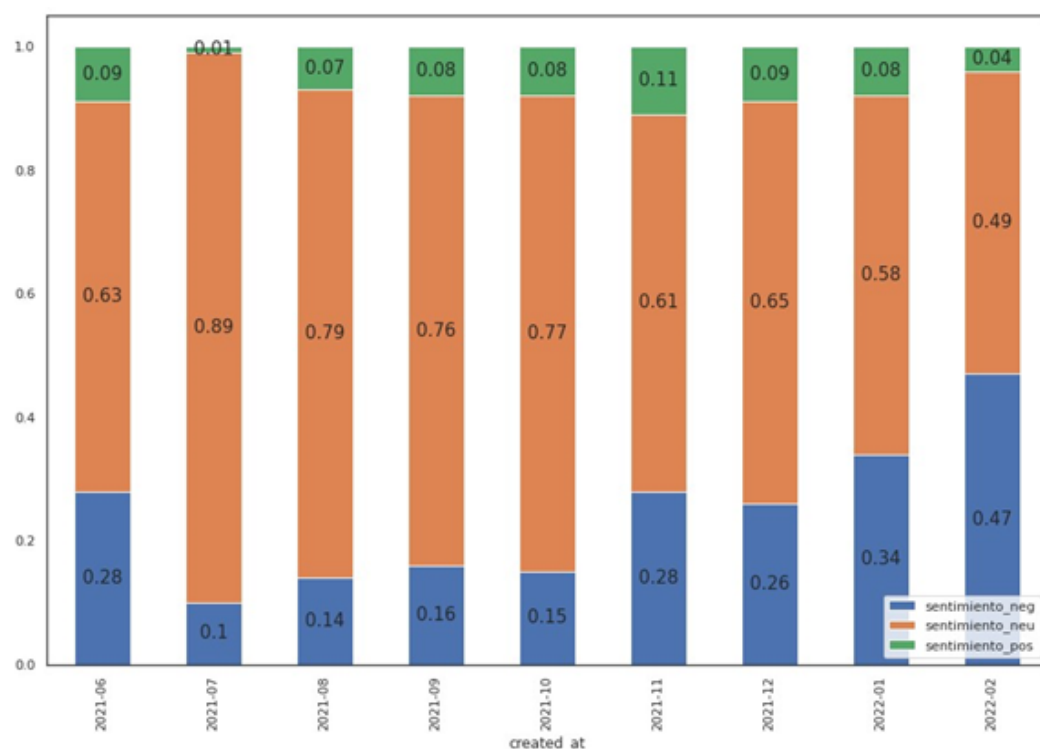


Figure 10. Sentiment Distribution per month

difficult to do it through a tool that had a Spanish corpus in order to predict the feeling of the text more accurately. Media-related tweets were sentimentally analyzed and classified as positive, neutral, and negative.

Figure 10 shows that as the date of the elections approached, negative sentiment grew from 10% in July 2021 to 47% in February 2022, representing a 370% growth. As for neutral sentiment, it decreased from 63% to 49%, representing a decrease of 22%. Finally, in general, this sample does not have a high positive feeling; however, it decreased by more than half, going from 9% to 4%. Similarly, Figure ?? illustrates the percentage change in the sentiment level. The positive sentiment had the greatest fluctuation from month to month, with the largest fluctuations close to the election and close to the first drafts. In the case of negative sentiment, during the elections it did not change much; however, negative growth had its highest level in March 2022, similar to the rejection it had at the beginning of the constituent process. In the case of neutral sentiment, it had a low variability.

4.4.1. Media sentiment

Each of the media outlets analyzed the type of sentiment their tweets had. Overall, the level of negativity was 25%, neutrality 65%, and positive 10% (see Figure 12).

Traditional television channels (C13, TVN, MEGA, CHV, RedTV, CNNChile) show levels of negativity, neutrality, and positivity of tweets of 16%, 64.4%, and 19.6%, respectively. RedTV showed the highest level of negativity of the group (24% vs 16%). At the other extreme, CHV had the lowest level of negative sentiment in its tweets (3.5%). Canal 13 was the medium that had the highest level of neutrality of traditional television channels (86%), while RedTV only had 39.8%. In the case of positive tweets, RedTV and Canal 13 had the highest number and similar levels (36.5% each).

Traditional radios (ADN Radio, Duna, Biobío, Cooperativa, and Agricultura) had a level of negativism, neutralism, and positivity of 34.2%, 56.5%, and 9.3%, respectively. The level of negative tweets was higher than the media average (34.2% vs 25%). The medium with the highest level of negative tweets ADN Radio with 65.97%, followed by Radio Biobío

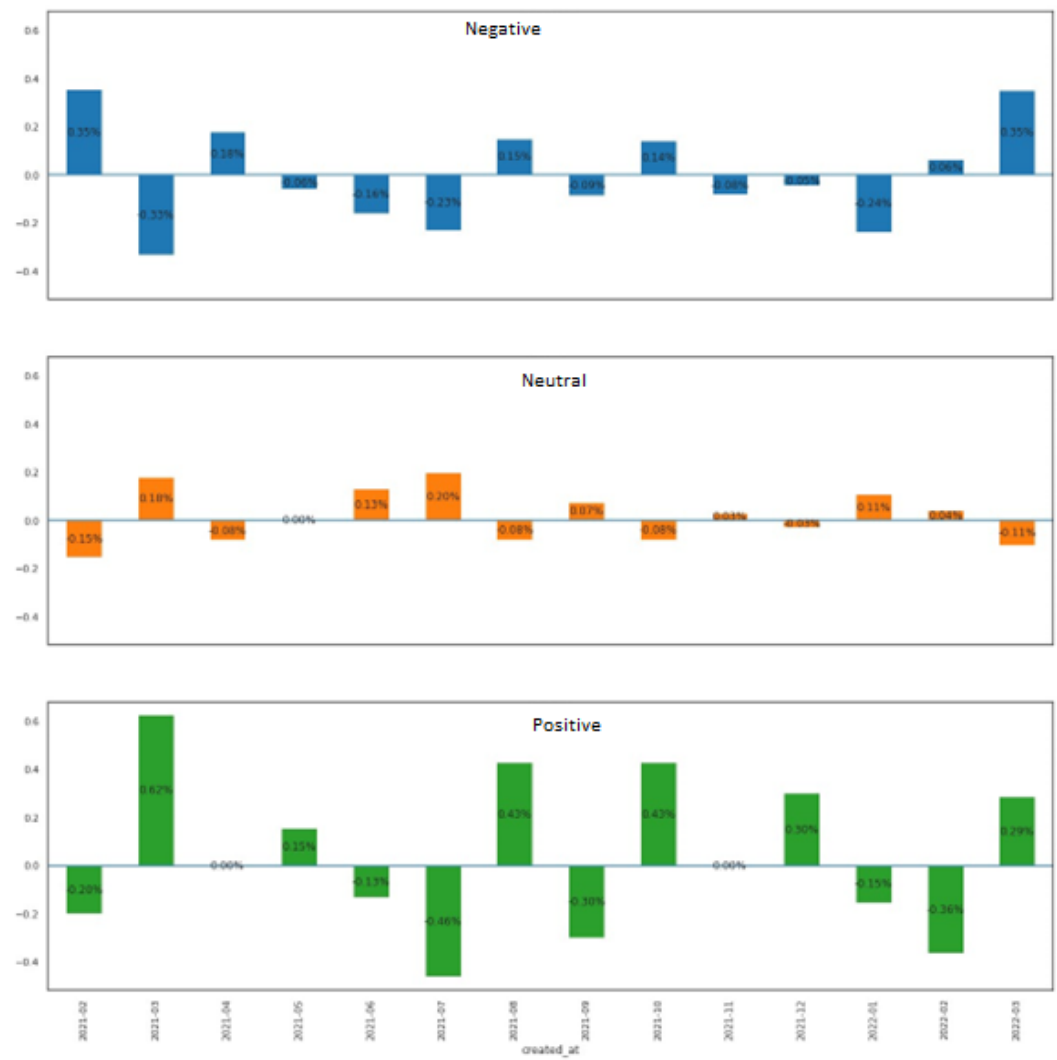


Figure 11. Percentage change in negative, neutral, and positive sentiment.

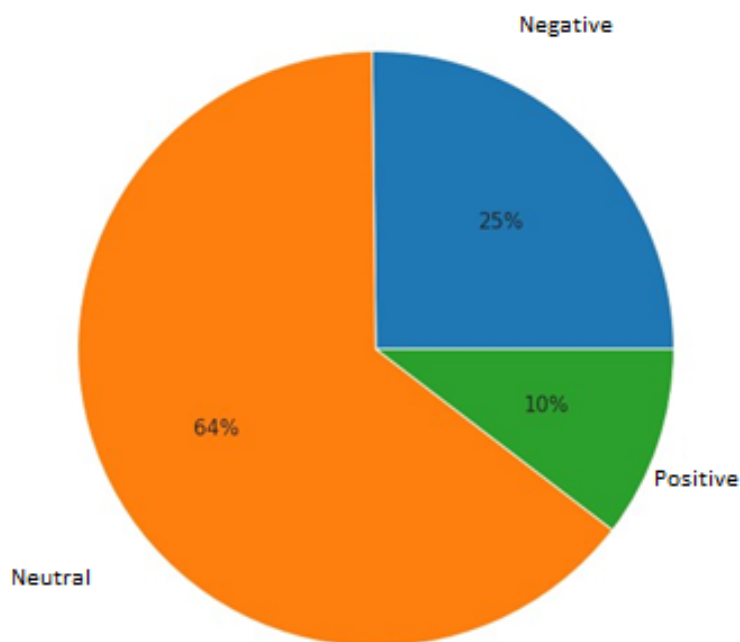


Figure 12. Sentiment ratio, media sample

(39%). Agricultura radio had the highest level of neutral tweets (85.8%), and ADN Radio had the highest proportion of positive tweets (25.25%). 316 317

For written, and/or electronic media (72.3% vs 56.5%), these were more neutral than radio and television (72.3% vs. 64.4%). It should be noted that their level of negativity was 21%, and positivity 6%. El Mostrador showed the highest level of negative tweets (27.15%), while La Cuarta only had 1% of positive tweets, yet a level of neutrality of 82.7%. 318 319 320 321

The rest of the non-traditional media showed higher levels of negative (29.68% vs 25%) and positive (15% vs 10%) tweets than the rest along with lower levels of neutrality (56% vs 64%). In the case of Mi Radio, LS had a level of negative tweets close to 96%, which, together with Crónica Chile (79%), had the highest number of negative tweets. UATV (97%), Tresfifths (96%), and El Morrocotudo (84%) showed the highest levels of positivity. Finally, Terra (78.4%), El Líbero (50%), and Crónica Chile (20%) had the highest levels of positive feelings. 322 323 324 325 326 327 328

4.5. Qualitative methodology for interviews 329

The project design considered the implementation of a qualitative component of the descriptive-explanatory type, whose central characteristic is to seek the depth in the knowledge of the social, and experiential reality of a relevant sample of actors linked to the investigated theme, and online than the qualitative tools resulting from the first part of this methodological application. The analysis, therefore, is obtained through an inductive process, starting from the qualitative textual data, rather than a deductive process. Thus, the analysis can capture experiences and meanings through access to discourses that carry a historical, political, and cultural substrate. 330 331 332 333 334 335 336 337

4.5.1. Data Collection Techniques 338

The proposed qualitative component considers the design, application, and analysis of semi-structured interviews of an individual nature. The semi-structured interview corresponds to a primary information collection technique that seeks to obtain information from the perspective of the actors whose life experiences and knowledge are important 339 340 341 342

to observe and try to understand the phenomenon. The use of this technique provides contextualized and comprehensive information through the answers and stories of the interviewees themselves. The characteristics of this technique enable each of the answers of the guideline to be explored in an unstructured way (not prepared in advance, but systematic) and to look into aspects derived from the answers provided by the interviewee in an environment of trust. By delving into the interviewee's strongest ideas, meaning can be given to their behavior.

4.5.2. Sample:

The selected sample is the following:

- Two constitutional experts.
- Two experts in the area of communication.
- Two directors of traditional commercial media.
- Two traditional independent digital media directors

The interview schedule includes the following items:

- Pluralism: understanding, and exercise.
- Communication law: understanding, and clarity/confusion concept.
- Ideology of the environment, and other media: political orientation.
- Agenda construction: method of selecting information.
- Method of collecting information, and sources on constituent process.

4.5.3. Qualitative evidence for interviews

The constitutional experts interviewed agreed on the contradictory imposition that the claim that the state is the arbiter, and owner of the truth, seems complex. They advocated for pluralistic free competition, especially in digital media. "I do not know if, I do not remember well, but I don't they there are many constitutions in the world that collect or demand from the media system (or linked to the right to information) the issue of pluralism. I believe that this is fully delivered to the law." Regardless of its format, deconcentration concerning digital media is achieved through competition rules or laws. In terms of competition, some criteria make it possible to identify if a particular market is concentrated; therefore, if that occurs, they force deconcentration. At the same time, one of the interviewees referred to the need to regulate these matters more strictly in the digital field, as opposed to regulations of other markets. Another alternative could be the existence of public media.

On the other hand, in the field of expert actors in the communication of national universities, the interventions were categorical enough to call for the need to stop not only information hegemony but also socioeconomic hegemony. The effect is that it turns the traditional media into allies of the business powers and, in turn, of the political powers behind these business powers, going far beyond the informative, an issue that was installed and imposed in the dictatorship. The ability to reverse it should be a fundamental task within the constituent process: "I believe that finally the issue of ownership and diversity of property in the media also has to do with the very conception of the state (...). If we recognize a plurinational state, the decentralization, and deconcentration of power, we must also consider how that falls on the digital media ecosystem."

The directors of traditional commercial media expressed the need to deconcentrate because there must be more perspectives, including the digital version of these: "I understand that talking about media deconcentration sounds good, and it is a positive question when you say why so many radios are in the hands of a single controller, or why three groups have been articulated, or four chains of radio groups, and there is no greater diversity. As far as I know, it is a difficult business to survive if you have only one medium of communication, a single radio."

Finally, traditional independent digital media directors indicated that, for media digitalization, a media law is fundamental: "If you are a banker, or a brewer, or a miner, you cannot have a media outlet" since the conflicts of interest are apparent. "You can be a

billionaire: Juan Sutil always wants to buy a medium... The idea would be, if you wish, to buy a medium, but you must get rid of your non-media companies." "The intersection between commercial interests, and, in addition, press owners is the most harmful thing there is for democracy." "The idea is to raise a media ownership law; a second point that has been struggling for years, and no one has given a solution beyond good words, is the deconcentration of the state's notice, the state, not the government, the state is the largest advertiser in Chile. In general terms, we need a law with media ownership, transparency in distributing the state's notice, and a mini constellation of newspapers and state digital media financed by the state. "

5. Conclusions

The methodological results of a quantitative nature allowed us to notice an enrichment of information pluralism through digital media that translates into greater political pluralism in the shaping of public opinion. For example, we noticed a variety of dominant concepts in the media that do not have the same representation in social networks (for example, the concept of "social outbreak" that appears underrepresented. See Figure 4). The country's political contingency is reflected in search criteria on social networks (Figure 6). The amount of repetition confirms this by words of greater frequency in the general sample of social networks (Figure 8), which do not have the same distribution in the media sample.

On the other hand, social networks allowed us to investigate users' variation of political feelings (Figure 10), which exhibit different behavior concerning the media. In particular, political feelings (positive or negative) vary, especially in social networks, compared to the editorial line of the different media. For example, negativity is higher than the editorial line of some media concerning others (figure 11). Variation also occurs depending on whether the medium is radio or television (figure 12). In short, this implies that the media editorial lines have a relevant impact on the production of political feelings.

Interviewing constitutional experts allowed us to notice contradictory conclusions. On the one hand, in the competition of the information companies and their regulatory framework, interviewees recognize an essential component of media deconcentration, which includes the irruption of digital media. In this context, it should be acknowledged that the massive irruption of digital media is favored for market reasons: shallow entry barriers and very low or free transaction costs for the public. However, this market's regulatory framework based on information pluralism still needs to be revised.

The interview with the expert actors in communication revealed that the constituent process is important for generating the terms and conditions to break media concentration by limiting media ownership. On the other hand, the interview with the directors of independent digital media aimed to give voice to those who are precisely expanding the information spectrum beyond the traditional margins. Interviewees proposed that information companies have a single line of business to avoid being part of the holdings of prominent entrepreneurs who try to influence public opinion. This would be part of a media ownership law. On the other hand, they stress the importance of distributing the state's advertisement with an important proportion to digital media since this economic income is the most important for this media type.

Based on the above, a series of normative innovations are proposed below, considering that pluralism, concentration, and the emergence of digital media require a legal framework that offers civil society the opportunity to exercise its rights of expression and information effectively:

Indeed, Chile has issued a series of regulations seeking to deepen information pluralism on new technologies. Thus, Law No. 18,168 on the General Telecommunications Law establishes a general framework concerning different types of media, which includes new technologies under the broad concept of "telecommunications." while establishing a guarantee of access to all inhabitants to telecommunication means available in the country. Law No. 20,808 on free choice of telecommunications services, enacted in January 2015,

solves a recurring problem in buildings with community departments, which was the obligation to hire a certain telecommunications service provider, guaranteeing free access of owners to choose any plan or offer available, agreements that prohibit the entry of other telecommunications service providers to the building are unenforceable.

However, our position is that there are still many regulatory difficulties in these new technologies that undermine due pluralism. The original draft of the Constitution of 1980 envisaged a National Council of Social Media. However, the formula finally imposed by the constituent assembly in article 19 No. 12 was the existence of an autonomous body only on television, that is, the National Television Council, omitting radio, which was submitted to the Undersecretariat of Telecommunications (Subtel) of the Ministry of Transport and Telecommunications. Of course, this affects the independence and impartiality of a public service endowed with autonomy (regardless of the government in power) to grant a concession and to exercise the regulatory, supervisory, and sanctioning powers in radio, digital media, and new technologies that are also subject to the technical superintendence of the Subtel [6].

Concerning Internet regulation, our legislation does not contain a general regulatory framework on the operation and provisions of the Internet, which is why the provisions of Law No. 18,168 on Telecommunications apply generically. There are only specific laws in our legislation that address individual problems on the Internet, such as net neutrality or the guarantee of a minimum speed to browse. As a result, there is a regulatory vacuum regarding how social media shapes public opinion. This is inseparable from the fact that the spectrum likely to be concessioned became exposed to being considered a market good purely, so we can hardly think that, in the current state of affairs, information pluralism through new technologies is close if they exercise economic control that may affect, in turn, political pluralism in the country. The latter has not been properly investigated.

Although the emergence of digital media is favored for market reasons with lower transaction costs than traditional media, attention must be paid to the existence of invisible or emerging entry barriers through the new technological trends arising in the world, as well as to the entry of new competitors offering technological services. As [20] pointed out in the 2013 Joint Declaration on the protection of freedom of expression and diversity in the terrestrial digital transition: "To the extent necessary, actions must be implemented to prevent the terrestrial digital transition from causing a greater or undue concentration of ownership or control of the media. Some possible measures are the adoption of regulatory provisions regarding the operation of multiplexers, clear rules of competition, pricing for multiplexers, and distribution networks, and differentiation between distribution and content production operations within the same company, among others" (2017: 25). In short, not only for political shaping of public opinion, the problems arising from the interaction of users with each other should be investigated, but also the interaction of users versus the participation of Internet service providers.

The Internet is a particular niche that could facilitate the massification of hate speech against specific people or groups of people with particular characteristics that generate self-censorship. Part of the function of information pluralism is to allow a diversity of opinions and participation of political actors in the same communication channel; however, manifestations of hatred tend to destroy both opinions and even the people who issue them, limiting the pluralism of political positions. Although it is impossible to exercise some control over the opinions issued, nor can there be censorship to prohibit those opinions, regulatory programs must be established between States and Internet service providers to prevent opinions that affect properly.

In summary, our legislation is still in the initial phase regarding the regulation of digital media and the Internet. Consequently, there are still general regulatory frameworks regarding the Internet and new technologies that must be specifically developed to ensure information pluralism and, ultimately, favor political pluralism in democracy.

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