Comunicación y Sociedad
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#EsLey2020. The collective action frames of the IVE (Voluntary Interruption of Pregnancy) in Argentina in social networks[1]

#EsLey2020. Los marcos de significación para la acción colectiva de la IVE (Interrupción Voluntaria del Embarazo) en Argentina en redes sociales

#EsLey2020. Os marcos de significação para a ação coletiva da Interrupção Voluntária da Gravidez na Argentina nas redes sociais

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This paper studies the most popular collective action frames on Twitter during the legislative debate on Voluntary Interruption of Pregnancy: "pro-right" (pro-choice) and "pro-life". The findings show a rotation of the network which results in a less intense polarization, where the party division does not explain the formation of frames. In the #EsLey event, the application of the Network Activated Frames (NAF) model allows us to verify the selective propensity of users to share content with those who have cognitive affinity, and its topological consequence, the overrepresentation of the frames activated by the most ideological users.
KEYWORDS: Abortion, Twitter, framing, Argentina, collective action frames.

Este artículo estudia los marcos de la acción colectiva más propagados en Twitter durante el debate legislativo de la Interrupción Voluntaria del Embarazo: "pro-derecho" y "pro-vida". Los hallazgos muestran una rotación de la red que redunda en una polarización menos intensa, donde la división partidaria no explica la conformación de encuadres. En el evento #EsLey, la aplicación del modelo Network Activated Frames *(NAF) permite constatar la propensión selectiva de los usuarios a compartir contenidos con los que tienen afinidad cognitiva, y su consecuencia topológica, la sobrerrepresentación de los encuadres activados por los usuarios más ideológicos.*
PALABRAS CLAVE: Aborto, Twitter, encuadre, Argentina, marcos de la acción colectiva.

Este artigo estuda os frames da ação coletiva mais populares no Twitter durante o debate legislativo sobre a Interrupção Voluntária da Gravidez: "pró-lei" e "pró-vida". Os achados mostram uma rotação da rede que resulta em uma polarização menos intensa, onde a divisão partidária não explica a formação dos quadros. No evento #EsLey, a aplicação do modelo Network Activated Frames *(NAF) permite verificar a propensão seletiva dos usuários em compartilhar conteúdo com quem tem afinidade cognitiva, e sua consequência topológica, a super-representação dos frames ativados pelos mais usuários ideológicos.*
PALAVRAS-CHAVE: Aborto, Twitter, enquadramento, Argentina, marcos de a ação coletiva.

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Introduction

The activation and propagation of online content requires users to share messages that have been created by their connected peers. The action of sharing a post makes it possible for that information to be seen by a wide audience. The discursive exchange between different types of actors in the media-digital territory is a privileged entry way to understand public definitions and political expressions about political events and, even more, the positions occupied by elites and their followers on the ideological spectrum (Barberá, 2015).

The model proposed here –Network Activated Frames (NAF)– explains the propagation of media frames in the current communication ecosystem (Aruguete, 2021), considering the key role played by network topology in the circulation and amplification of such content.

This study analyzes the selective activation of certain frame elements in different regions of the Twitter network *#EsLey* and to what extent these frames were condensed into two collective action frames (Snow & Benford, 1992): the one promoted by the feminist movement and the one promoted by the sky blue countermovement.

It seeks to verify that: 1) people are more prone to activate content with which they have cognitive affinity (activation of network frames); 2) the activation of certain messages, as well as the magnitude with which they are expected to be shared,[3] are overrepresented in social media (expectation of framing activation). The ulterior purpose is, on the one hand, to explain the formation of local frames in social networks from a reticular dynamic that enables combinations of some of its elements within a virtual community. On the other hand, to analyze the two faces of online activation: the one that attends to the subjective behavior of the users, corroborated through survey experiments (Aruguete et al., 2022), and the one that focuses on the expectations of such activation by part of its connected peers.

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[3] In this article, activation in social networks is defined as the action of sharing through the action of retweeting, both at the conceptual and methodological level.

The paper is structured as follows: first, the cascade activation model defined and operationalized by Entman (2004) is described, which was reviewed by Usher (Entman & Usher, 2018) to understand frame amplification in social networks. Here we discuss the limitations of cascading activation (Entman, 2004) and the network activation model is proposed (Network Activated Frames, NAF). Secondly, the model designed to analyze the activation in the network and the configuration of the frames of the voluntary interruption of pregnancy (IVE in Spanish) is presented. Finally, the results are presented and a discussion about the empirical scope and limitations of the model of activation of frames in social media is proposed.

Literature. Network Activated frames

This study takes framing in political communication as its conceptual basis, understood as a comprehensive and interactive process that goes through and is expressed at different moments of the discursive interaction. The notion of integrality allows us to approach the framing process from different paradigms. This work falls within the critical, cognitive, and constructivist paradigms.

The critical paradigm, focused on the stage of construction of media frames –in this particular case, on the relationship between social movements, political elites and the media– is productive to explore the strategies deployed by the pro-IVE movement and the anti-IVE counter-movement, to promote certain interpretations around a public problem (Ingrassia et al., 2022). The cognitive paradigm studies the influence of messages, that is, the ability of certain framing elements to activate individual perception schemes when evaluating political or other events (Matthes & Kohring, 2008). The constructivist paradigm allows us to understand the propagation of frames from the congruence between cultural conventions, narrative traditions and the cognitive schemes of the users that are activated in the network by a series of frame elements. Those messages that have cultural resonance will be incorporated by the receiver/interlocutor to the extent that they are "applied" (associated) to latent cognitive schemes, updated and/or modified (Scheufele & Tewksbury, 2007). "The applicability model suggests that applicable

ideas compete with what is already in the minds of readers or viewers" (Aruguete, 2021, p. 3).

Studying this case from the critical, cognitive, and constructivist paradigms in a complementary manner is essential for understanding the process of constructing, circulating, and reproducing shared meanings on social networks, which are condensed in frame elements highlighted in various communities of the Twitter network #EsLey (#ItsLaw) due to the cultural and political resonance they generate.

In 2004, Entman proposed the cascading activation model to analyze the ability of interpretive frameworks initiated in government discourse to activate and propagate in a stratified communication system. The cascading activation suggests that traditional media make visible only some of the framing functions[4] formulated by governments and other non-governmental elites. Thus, they inhibit the possibility that certain contents reach the social base and leave a loophole for other actors to initiate alternative interpretations and promote counter-frames that challenge the official word.

By enabling only some frame elements, the media alter the frequency of the components of a message that are observed by readers. The waterfall metaphor suggests that "some actors have more power than others to get ideas to the news and then to the public" (Entman, 2004, p. 9). Entman's original analysis postulates that interpretive frames are filtered and activated by the media. This is conceptually insufficient to understand the amplification of such frames among users interconnected in a social network.

Entman and Usher (2018) review that model and propose, instead, the Cascading Network Activation model, which addresses the features of the digitization of symbolic interactions between elites, traditional media and citizens. This paper attempts to go even one step further by understanding that the model so called Network Activated Frames recovers the notion of integrality of framing from the topological dynamics of propagation and amplification of content typical of virtual social networks (Aruguete, 2021).

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4 In this paper, the concepts "framing functions" and "frame elements" are used interchangeably.

The objective is to present the dynamics of discursive circulation in the digital ecosystem: users selectively activate content by accepting attributes of a message that are cognitively congruent and culturally resonant; the messages shared by cognitive affinity are activated –enabled– on the wall of their followers. This selective attention and activation, to the extent that it alters the frequency and speed of circulation of different content, generates a segregated distribution of messages.

In short, the decision of a user to share certain messages and the expectation of other users to observe such content show the subjective perception of the formation of bubbles in social networks (Alipourfard et al., 2020). Barberá (2020) states that the circulation of narratives depends more on the frequency with which certain content is activated than on the number of users present in a virtual community. This is because the most active and ideologically positioned users are more likely to share content and, therefore, their narratives will be overrepresented on the web.

Saxena and Kumar (2019) analyze the influence between peers in social networks, taking into account the connection between users, their level of activity and the content propagated. In their work, they warn that the degree of centrality of a node[5] is not a sufficient criterion to measure its potential for influence. In addition, the type of content shared, the connectivity between users and the behavior of the most active nodes should be considered, to the extent that they show a greater propensity to share messages.

To verify the hypothesis of these authors, it is essential to analyze the time it takes a user to retweet a message to which they are exposed and, thus, activate the circulation of the frame elements that circulate within the different communities. Retweet time in observational data is

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5 In network theory, a node (or user) is said to be "central" if it is located in the center of the network rather than at the extremes. That location makes it easier for it to connect to a larger number of nodes. "Terms such as 'centrality' and 'intermediation' describe the nodes that are most often on the way to reach others" (Calvo & Aruguete, 2020, p. 190).

a proxy[6] for "latency", defined as a measure of cognitive dissonance. In experimental psychology, latency has been widely used to calculate variations in information processing (Fazio, 1990), although little considered to measure cognitive dissonance in the reactions of users of social networks (Aruguete & Calvo, 2018).

In this work, *latency* is defined as the time it takes an individual to retweet a message to which they are exposed on the Twitter social network. The expected result indicates that the most intense and active users will have an increased perception that their peers are more politically involved. This assessment does not hold in the case of users who perceive themselves as "undecided". This will allow us to verify the subjective perception of the formation of filter bubbles in social networks.

Starting from this conceptual development, the activation of frames within the #EsLey media event on the Twitter platform is analyzed during the parliamentary debate on the voluntary interruption of pregnancy project in December 2020. The proposed tool for the empirical work arises from a theoretical-methodological triangulation[7] that will allow: 1) to analyze the collective action frames (Snow & Benford, 1992) promoted by the movement and the counter movement on Twitter; 2) to operationalize the collective action frames that illustrate this case, taking into account the frame elements and features that enable a social problem to become a public problem (Gusfield, 2014); and 3) to empirically apply the network activated frames (NAF) model to understand the form that symbolic interchange takes between users connected to a social network. The following section develops the hypotheses that the empirical work seeks to verify.

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6 In statistics, a proxy is an indirect measure of a variable, that is, a variable that is used as an indicator of another variable that is difficult to measure or is not available.

7 In this paper, the terms "media event" and "network" are used interchangeably, referring to the interaction in the Twitter network #EsLey.

Hypotheses

Selective exposure on digital platforms depends, initially, on users accepting messages with which they agree and avoiding those that generate dissonance (selection effect) and, later, that such reactions modify the frequency of circulation of the contents that frame the political events (composition effect). The first hypotheses of this study are derived from this argument:

- H1a: Users share information that is cognitively consistent, which increases the frequency of circulation of certain framing elements among the users that make up a virtual community (Selection effect).
- H1b: Users do not share information that is cognitively dissonant, which decreases the frequency of circulation of narratives that do not match the values and beliefs of connected users inside a filter bubble (Selection effect).

To measure cognitive dissonance, it is proposed to examine the time elapsed between a public authority posting a message and other users sharing it. Dissonant content is expected to induce longer "time to retweet" and cognitively congruent content to decrease such response times. To put it in simple terms, If I agree with a message, I will feel more likely to share it quickly, if a message causes me to disagree, I will feel less likely to share it and, if I finally share it, it will take me longer to do so.

- H2a: Users share messages that are cognitively congruent with their community of belonging with a lower latency, that is, with a shorter time to retweet (Selection effect).
- H2b: Users share messages that are cognitively dissonant with their community of belonging with a higher latency, that is, with a longer retweet time (Selection effect).

Both cognitive congruence and cognitive dissonance alter the rate of posts that are shared by users and define the way social media

communities frame events. An authority on social networks will seek to forge a certain framing of events. If the content is cognitively dissonant it will be shared relatively less frequently and therefore will not propagate between the connected peers. Consequently, their activity on social media will decrease, and their frame elements, instead of being activated, will be replaced by alternative ones.

The acceleration in the propagation of the content depends on the more active users who have a greater propensity to share congruent messages (Saxena & Kumar, 2019). Hence, their interpretative frames are overrepresented within their community of belonging, increasing their ability to influence among their connected peers.

- H3a: The content that circulates in virtual communities differs according to the way in which users connected within these communities vary their propensity to share congruent messages (Composition effect).
- H3b: Users who are ideologically involved with an event will feel unconditionally more motivated to share content on social networks that is politically consistent (Behavioral effect).
- H3c: Within the communities, homogeneous media frames will be formed as a result of the topological consequences of the act of selectively sharing congruent messages, that is, of the overrepresentation of the messages that are shared by the most active users (Composition effect).

The next section presents the methodological strategy designed to test the hypotheses of this study.

Methodological strategy

This study analyzes the activation of narratives, the speed with which they are shared by users based on the congruence or cognitive dissonance that they generate and, as a consequence, the conformation of local frames of the Twitter network #EsLey, within the context of the debate and sanction of the IVE. To do this, this section presents the

corpus of tweets circulated around this event and the statistical models used to corroborate the hypothesis in observational data.

Corpus

Between the first days of December and the enactment of the law in the Senate, on December 29, 2020, Twitter messages containing words related to the legalization of abortion in Argentina, such as "abortion", "Fernández", "Congress", "Deputies", "Senate" were collected. The initial data repository contained around eight million posts. This information was then processed to delimit the connected primary network (CPN), which included 2 241 555 messages (tweets and retweets) issued by 165 158 highly active accounts. The CPN is made up of users who published or retweeted at least four tweets related to the topic "abortion" in the period under study.

Twarc was connected to the Twitter search API (Application Program Interface). Twitter APIs are protocols for exchanging information collected by the platform, which can be pulled backwards (search mode) or forwards (stream mode) and rehydrate data based on unique identifiers. For this work, the Twitter API was used in search mode; the networks form graphs that give us a synthetic representation of the links (edges) between the users (nodes). For the analysis of this event, each node represents a Twitter user while the edges refer to the retweet, that is, the relationship that a follower establishes with the message issued by the original author of the post. The retweet indicated in the graph allows us to calculate the number of users of the connected primary network.

Together with the text of each tweet we collect a series of variables: the names of the users; the authorities and the followers; the time of the tweet and retweet, and the status of the user accounts (verified or unverified). On this corpus we use survival models, these are tools that model the time it takes users to share information produced by members of the communities in which they participate, to calculate latency. Specifically, the survival of a message refers to the time that elapses between the moment the message is created and the moment it is shared (retweeted). This survival time is equivalent to what we call "latency", explained conceptually above.

Communities

Once the corpus of the Twitter network #EsLey has been collected, the 2 241 555 edges of the connected primary network that systematize the relationship between nodes are loaded. The author of an original tweet is defined as an "authority" while the user who shares information from another is defined as a "follower". The systematization of relationships between users through edges (H_retw / A_tw) defines the communities. The nodes of a network are represented by coordinates that appear in a latent space. The latent location of the users in the connected network is estimated from the existing proximity between the nodes, and is calculated using the Fruchterman-Reingold algorithm for directed networks in R 3.2 igraph (Csardi & Nepusz, 2006). The latent location of the nodes and the frequency with which they interact define the communities of the Twitter network #EsLey, which acquire different colors depending on the proximity and affinity between the nodes. The three main communities are labeled as the ruling community (Frente de Todos- FdT), opposition community (Juntos por el Cambio and anti-abortion users), green community, and other smaller communities (mostly political communities with a lot of activity abroad).

Within these communities, the insertion of the different types of actors (authorities), the condensed keywords in the frame elements, and the hashtags that summarize the thematization of the IVE are systematized. These variables are relevant to deduce the position of the users on the IVE because the primary connected network is rotationally invariant. This means that the algorithms used to distribute the nodes only describe the relative distance between them, but do not inform where they are located. To interpret the tone and ideological positions in the political dialogue in networks, the nodes must be rotated. To do so, it is necessary to understand the political-ideological stances of the main authorities within the network (users with the highest level of influence) in the non-digital scenario, and thus, deduce whether they are politically positioned to the left or right in the virtual conversation, or if they take a stance in favor of or against a certain issue.

To understand how the "green movement" and the "sky blue counter-movement" framed their messages on the legalization

of abortion in social media from the most widespread frames, a theoretical-methodological triangulation composed of complementary perspectives is used. The collective action frames, proposed by Snow and Benford (1992), make it possible to distinguish the discursive strategies promoted from the movement and the counter movement. The conceptualizations by Entman (2004) and Pereyra (2010) are also productive for operationalizing the concept *frame*, creating a series of framing elements and verifying which communities selectively activate certain definition and assessment of the IVE –and with what speed they share said contents–, driven by the most active accounts that led the discursive dynamics inside the filter bubbles.

Dendrogram

The interpretative frames of the Twitter network #EsLey are derived from the degree of association (correlation) between the keywords that are condensed into a series of frame elements. To do this, a dendrogram is created using the agglomerative nesting algorithm (Agnes algorithm), which shows the grouping of variables into subcategories represented in a tree graph. In this graph, the indicators that are most associated with each other are located in lower branches. This model calculates the frequency of keywords extracted from the most circulated tweets to observe the competing collective action frames conform in the different communities. The keywords extracted for this analysis are included in dummy variables, that is, binary variables that allow representing the presence or absence of a specific characteristic or condition. These variables take the value 1 if the condition is present, and 0 if it is not.

Survival time

Survival time is modeled to verify to what extent cognitive congruence accelerates latency while dissonance delays it. The non-standardized coefficients of the Cox proportional hazards model measure the seconds between when an original tweet is sent and when that message is retweeted. Negative coefficients indicate higher retweet speed, while positive coefficients reveal slower time to retweet. To verify hypotheses 2 and 3, the survival time of the terms that make up the framing elements is measured: “definition of the IVE”, “attribution

of responsibility", "moral substratum" and "consequences of the legalization of abortion".

The differential activation of frame elements in different regions of the network is complemented by the results of the dendrogram. Both tools will account for the main collective action frames (Snow & Benford, 1992) configured around the voluntary termination of pregnancy in the Twitter network #EsLey.

Analysis. The #IVE in the streets, in the media, in the networks

The participation of women in various spaces of political-social struggle was key to consolidating a popular feminist movement in Argentina. In addition to highlighting sexist violence and gender inequities in the political, media and territorial spheres, in 2020 the feminist movement achieved one of its most significant achievements: the approval of the Voluntary Interruption of Pregnancy Law (IVE) in the National Congress. The legalization of abortion in 2020 is defined as the third "redefining critical event" in the process of the women's struggle. Staggenborg (1993) defines the "critical event" as an event that interrupts the routine dynamics of a society to attract public attention and mobilize collective action.

This paper recognizes the demonstration promoted by the #NiUnaMenos movement in 2015 as the first critical event: an action to repudiate gender violence and, in particular, the alarming number of femicides that occurred in Argentina. The second critical event took place with the IVE debate in Parliament in 2018. At that moment, despite being rejected in the Senate, the feminist movement represented by the National Campaign for Legal, Safe, and Free Abortion managed to crystallize the need to legalize abortion as a "public issue" (Gusfield, 1981).

In the third critical event, the approval of the IVE in Argentina in 2020, the role of feminist activists was key. This movement managed to turn gender inequality into a public problem and, in particular, the negative effects of illegal abortion in Argentina. Specifically, the pro-IVE movement installed a negative moral evaluation of the problem, extended its social character and increased interest in changing this state

of affairs. The formation of a movement, whose purpose is to impose an interpretative framework and mobilize support, is preceded by that of a counter movement that disputes that definition of the problem in some competitive arena (Hilgartner & Bosk, 1988; Meyer & Staggenborg, 1996).

But the parliamentary one was only one of the competitive arenas in which the contest between the pro-IVE and the anti-IVE frame took place. Consistent with the definition of the IVE promoted by different communities in social networks, the users showed dissimilar preferences in information consumption, in the degree of connection and in the propensity to share messages. This study analyzes the conformation of the main interpretative frames of the legalization of abortion on Twitter, based on the selective acceptance of messages that are similar.

Results. The frames of the IVE

In network analysis, dimensions express a reduction of many pieces of information to a limited set of features or characteristics. The first dimension captured by retweets offers a lot of information, while the second dimension, a little less. This dimension –expressed by the horizontal axis– accounts for the latent ideological position of the users and, derived from this, the formation of user communities positioned in favor or against some event, a government measure, among others.

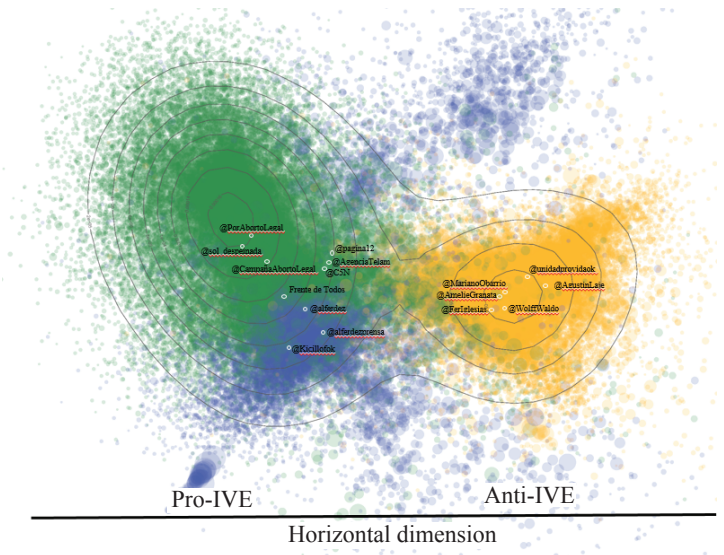
To form the primary connected network, the latent position of users on Twitter is first estimated, based on the frequency with which they interact with other users. Such location in the Twitter network #EsLey makes it possible to delimit three clearly discriminated communities, within which the levels of interaction are observed, as well as the users whose messages reach the highest degrees of propagation.

To the left of the graph is the green community, made up of users who promote the narrative of the "pro-right" (pro-choice) feminist movement, and the blue one, in which political authorities and followers who recognize themselves as supporters of the "Frente de Todos" (Front of all) political party and support the legalization of abortion. To the right, the yellow community unfolds, where voters of the "Juntos por el Cambio" (Together for change) political coalition and users who

identify with the anti-abortion counter-movement converge. In this, a compact density is observed, although triangular, which allows us to infer the coordination of certain users in their discursive strategy, as can be seen in the upper-right corner of the network. The green community is the largest in number of users (106 352), followed by the yellow (39 252) and the blue (19 554).

The discrimination between the communities suggests that the conversation about the IVE was mostly endogamous. In the *Frente de Todos*, intra-community activation was 92.5%. In *Juntos por el*

FIGURE 1
CONNECTED PRIMARY NETWORK OF THE NETWORK
#ABORTOLEGAL 2020



Note: The primary connected network (CPN) includes 165 158 highly active users who shared 2 241 555 tweets. The pro-IVE community (in green), the "Frente de Todos" community (in blue) and the "Juntos por el Cambio" and anti-IVE community (in yellow).
Source: The author.

Cambio / sky blue community, 97.4% of the tweets were shared within that group. The community detection process did not find a sufficient distance between opposing political elites and sky blue activists to place them in different communities. So much so that the first two authorities of the bubble on the right (*Juntos por el Cambio* / "sky blue", e.g. anti-IVE) are @vivianacanosa and @AgustínLaje –both opponents of the IVE– while the third is @feriglesias, who voted in favor of the law in the Congress. The position they take in the ideological spectrum is derived from their positions in relation to the norm: the legislator Fernando Iglesias was located on the extreme left of the yellow bubble, close to Mauricio Macri and deputy Waldo Wolf; the journalist Viviana Canosa remained in the center of her community, while the libertarian activist Agustín Laje was dragged to the extreme right as a result of having promoted intensely conservative narratives that activated the ideologically closest users. In the green movement, the account of the Campaign for Legal Abortion was the third authority –located towards the center of the network compared to other less institutional users–, given its ability to propagate a frame of rights that went beyond the boundaries of its community.

What is unique about this case is that it does not express a strict polarization as occurs with other networks that realigned their positions on the events with their political-partisan identities. In cases like the one analyzed here, the nodes with greater centrality –those that are located in the "center" of the network– become more active than those that inhabit the extremes of the ideological dimension. This is what we observe in the case of the members of the feminist movement, who explain more than 60% of the total activation. Hence, the "pro-right" (pro-choice) frame is more consistent than the "pro-life" frame. In short, the political-partisan vector does not exclusively explain the meaning and rhythm of the interactions, as well as the latent position taken by the users.

Why does the political-partisan dimension decrease as a predictor of the position of users? Three types of actors contribute in the sense given to the pro-IVE frame: 1) users of the green community, who promote a clear and compact narrative; 2) members of the blue community –politically identified with Peronism– favorable to the legalization of abortion although with an endogamous interaction; and 3) the political

wing of the yellow bubble (the opposition deputies, Fernando Iglesias and Waldo Wolf, voted in favor of the law) with a position contrary to that of the hierarchical anti-IVE users (the media celebrity Viviana Canosa, the journalist Mariano Obarrio, and the right-wing activist Agustín Laje). However, this does not prevent them from being part of the same community, since the low degree of discrimination between these nodes places them in contiguous positions within that bubble.

Of the three communities, the green one was the least inbred. Almost 20% of the content shared by its users redirected mostly to posts issued by the @alferdez account (of Alberto Fernández, president of Argentina between 2019 and 2023), located in the center of the blue community. Unlike what is observed with the authorities that activated anti-abortion users, Alberto Fernández's account was shared within the three communities, although activated with particular intensity among users of his own party (blue community).

The clear discrimination between the communities is consistent with hypothesis 1, while the intensity in the frequency of activation of narratives in each of the three main communities allows verifying hypothesis 3. The highest level of message propagation was reached in the green community, which concentrates the most active nodes: 46% of the users shared 64% of the messages of the primary connected network (between tweets and retweets). In other words, the exchange for each user was proportionally higher than in the communities occupied by users who were more organically supportive. This confirms the importance of node behavior, given that individual and collective green activists, although with fewer followers, manage to explain the greater degree of propagation of their frames due to the affinity of their messages. In short, it is not just about observing the connection between users, but also their propensity to share messages to understand the maximization of their influence (Saxena & Kumar, 2019).

The thematization of abortion

Social media hashtags group a series of events into a broader category, which defines and makes a theme visible. The hashtags place that topic at its highest level of relevance and show the idiosyncratic identification of users who live in different communities with that topic. Some of the

themes installed on the Twitter network #EsLey make it possible to account for these differences. For example, hashtags such as #abortion, #now and #argentina reached the highest levels of circulation of the topic in all communities and increased its salience. Other labels, on the other hand, were created to define this event from a contrasting position, providing polarity: #abortolegalya (#legalabortionnow) or #argentinaesprovida (#argentinaisprolife) fulfilled a branding strategy to catalyze positions for and against this law.

In addition to the hashtags, for this study a series of keywords were selected that express the framing functions proposed by Entman (2004): 1) definition of the problematic situation; 2) causal agents (attribution of responsibility); 3) moral evaluation, and 4) proposed treatment or consequences.

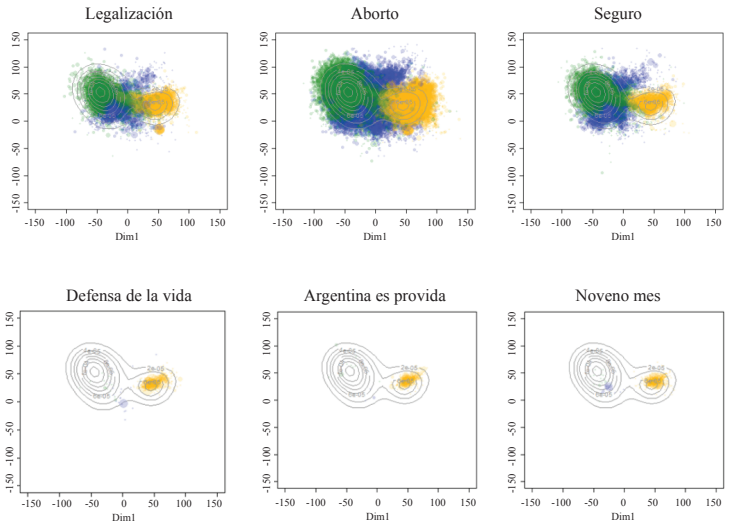
Given the specificity of the topic, a large part of the keywords fulfilled a function of visibility rather than political-ideological identification. This was evidenced, particularly, in the terms that integrate the framing elements promoted by feminist activists. In these cases, certain keywords that framed the claim as an extension of rights ("abortion", "safe", "legal", "free", "right") were shared in all the communities. On the other hand, the more identifying and aggressive words, associated with the "sky blue" counter-movement ("vulnerability", "vilma law", "national shame", "innocents", "Argentina without abortion" and "save both lives") generated higher levels of dissonance, so their activation was lower and more selective.

Here, two complementary behaviors are observed. On the one hand, the lack of "ownership of the issue" (Petrocik, 1996) on the part of the counter movement. On the other, the inconsistency of the narratives within the yellow bubble, where authorities with dissimilar discourses coexisted. In social networks, having a relative advantage on an issue contributes to higher levels of propagation of the frames that one seeks to install.

Figure 2 distinguishes between the keywords that drive high levels of retweeting among accounts from all communities and those –more associated with the "pro-life" framing– that generate cognitive dissonance, resulting in low message propagation levels in the yellow community and almost no circulation in the blue and green communities.

It should be noted that the most polarizing words did not reach high levels of circulation in their bubbles of belonging either.

FIGURE 2
ACTIVATION OF THE MAIN KEYWORDS DURING THE IVE DEBATE



Note: Estimated communities in R 3.6 (Igraph), using Fruchterman-Reingold to locate the nodes and random.walk to identify the community. Data captured between November 22nd, 2020 and January 5th, 2021.
Source: The author.

The collective action frames of the IVE

In addition to analyzing the propensity of people to share cognitively congruent messages on social media (Hypothesis 1), this study explores the formation of frames in different regions of the social media Twitter (Composition effect), as a result of the selective activation of messages by users (Selection effect). This section identifies and describes the frames configured around the debate and sanction of the Voluntary Interruption of Pregnancy Law. It is presumed that two large collective

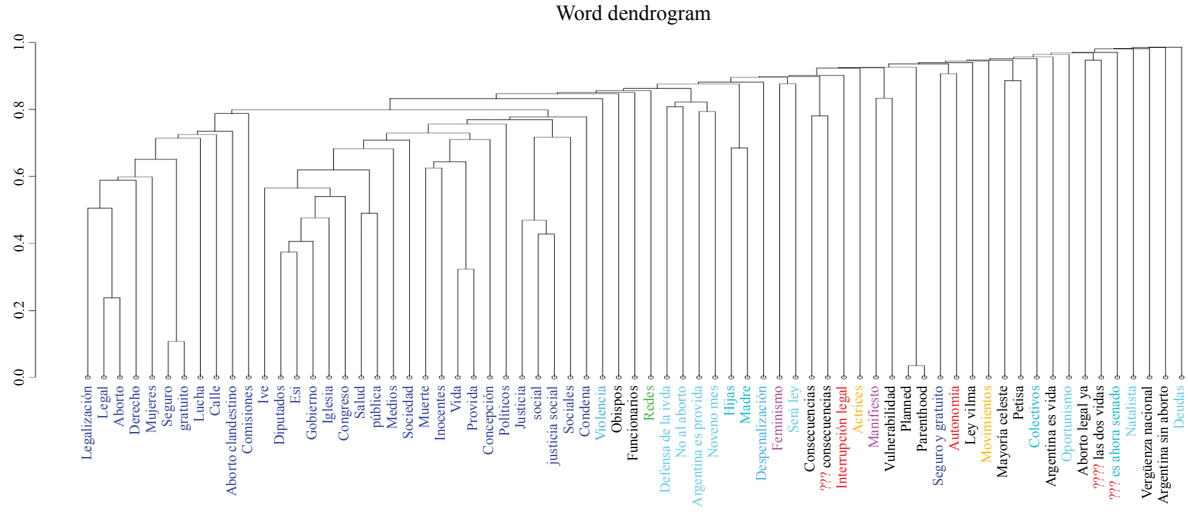
action frames will be condensed (Snow & Benford, 1992), although with different levels of structure and consistency: the one promoted by the feminist movement and the one promoted by the sky blue counter-movement.

The dendrogram in Figure 3 shows the grouping of subcategories by means of a tree graph, where the frame elements that are most associated with each other are located in lower branches. From these ramifications, associations between different frame elements emerge –although with dissimilar intensity and structure– that account for the interpretive frames of the IVE. Some of these frames categorically do not match what is expected.

A first glance allows us to see two subgroups of associated indicators, although not very compact, since some words are related to each other, but not linked to others that make up the same community. To the left of the graphic is the frame promoted by the green activists, called "Right to legal, safe and free abortion". It is more compact than the one associated with the counter movement, although it presents less structure than those frames activated in networks that have been polarized by more identity factors. We will see what happens within this frame.

The collective action frame linked to the "Pro-life" counter-movement presents an even less compact structure and, therefore, reveals the high levels of heterogeneity and narrative inconsistency that characterized this group. Specifically, to the right of the graph a series of words are displayed, few of them closely associated with each other, although disconnected from the rest; a finding that is verified graphically by the difference in colors that these words acquire. "Defense of life", "no to abortion", "Argentina is pro-life" and "ninth month" make up the largest grouping within this bubble. The rest of the frame only contemplates pairs of words joined in very high and little associated branches ("planned / parenthood"; "the sky blue majority / petisa"; "let's save the two lives / legal abortion now"; "national shame / Argentina without abortion"). These are keywords with a clearly polarizing content, although very dispersed to achieve a consistent frame.

FIGURE 3
DENDROGRAM OF FRAMING ELEMENTS



Note: The dendrogram describes the level of association between groups of frame elements. It uses the correlation matrix and, using Agnes's algorithm (*R* 4.1), groups the variables into subcategories. The "lower" branches describe a higher level of association between the framing elements.

Source: The author.

#Latencies: activation of the IVE frames

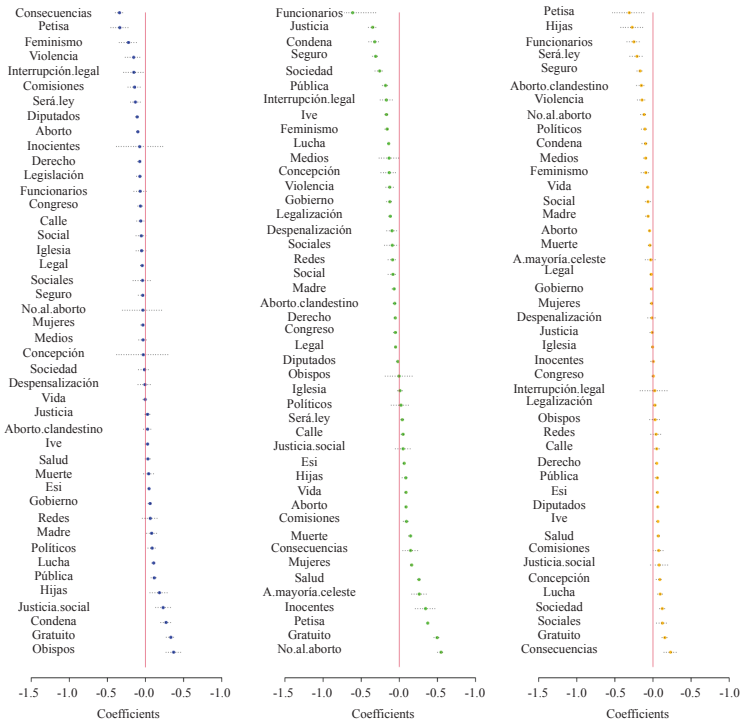
Inhabiting social networks means framing events collectively, by accepting and sharing or by discarding keywords, hashtags and hyperlinks that are later printed on the walls of other like-minded users. The act of sharing frames political narratives –it highlights certain facets of an issue– to the extent that it alters the frequency of content that is circulated within a community. The greater the agreement with that content, the less time a user takes to share it. In other words, the enthusiasm generated by a message with which we agree is expressed through low latency.

In this study, hypotheses 2 and 3 are related, insofar as users from different regions of the network will encounter –and share– very different content. Added to this is the fact that users who come across cognitively consistent information will be more enthusiastic to replicate messages posted by like-minded peers, and they will do so at a higher speed. As a consequence of this decrease in time to retweet, the conformation of frames will differ in each location of the network, resulting in unique and locally homogeneous collective action frames within the communities.

In the methodological design it is clarified that the survival rate is measured by the proportional models of Hazard Cox. Negative coefficients indicate faster time to retweet (ie, increased risk rate), while positive coefficients suggest slower times. For an intuitive interpretation, let us consider the effect of the covariate "legalization", which presents a lower latency in the green and in the "Frente de Todos" communities (-0.116 and -0.078, respectively). Instead, the propensity of users in the "Juntos por el Cambio/blue sky" community to share this keyword slows down, with positive values of 0.030. The same is observed with the keyword "legal interruption", with negative values in the green and the "Frente de Todos" communities (-0.155 and -0.169, respectively) and a longer delay in the yellow bubble (0.024). Figure 4 systematizes the estimates of all the keywords associated with the framing elements selected for this study. In order to facilitate the understanding of the estimates, graphical displays of all the parameters are presented.

Figure 4 shows substantial differences in the time it takes users to retweet keywords that are similar or dissonant. Clearly, the frames of

FIGURE 4
TIME OF SURVIVAL OF TWEETS CONTAINING KEYWORDS ASSOCIATED WITH THE FRAMES OF VOLUNTARY ABORTION (IVE)



Note: The graphs present the estimates of proportional risk within each community, which allows us to observe the cognitive dissonance generated by the messages disseminated by the members of each community: the green, the *Frente de Todos*, and the yellow (*Juntos por el Cambio / Celeste*).
Source: The author.

the IVE shared in the green community and in the "Frente de Todos" are more compact. On the other hand, the yellow bubble presents higher levels of inconsistency, given the heterogeneity observed in the latency of the different keywords.

Among green users, the terms that aroused the most enthusiasm consistently integrate the functions of the pro-abortion framework: the definition of IVE ("IVE", "conception", "violence", "legal interruption", "insurance", "condemnation"), the competitive arena ("media", "society", "public"), the attribution of responsibility ("officials", "feminism", "government"), the moral evaluation ("justice") and the proposed solution ("struggle"). Instead, this community slowed down its propensity to share terms that are congruent with sky blue activism: "the sky blue majority", "short", "innocent", "no to abortion". Namely, "health", "women" and "daughters", with slow retweeting times, do not match what was expected from the results of the dendrogram.

The blue *Frente de Todos* community is also keen to quickly activate similar terms as the green community, albeit with a few exceptions. For example, "consequences", "petisa" and "innocents" show a low latency among the most politically organic users identified with the current ruling party. Another singular observation that should be highlighted is the greater weight given to accountability around this event: "commissions", "deputies", "officials", "congress", "church" (framed as responsible), and the solution that those actors enable: "será ley" (it will be law).

The low survival times of certain keywords in the *Juntos por el Cambio/Celeste* bubble are striking because they are cognitively dissonant with the anti-IVE framing. "Daughters", "it will be law", "safe", "feminism" and "violence" are terms that have gained a reputation among feminist activists. However, this may be due to the fact that political and media authorities coexist in the bubble of the right who have taken antagonistic positions against the IVE.

In short, as observed in the results that confirm the hypotheses of this study, the communities on the left of the ideological spectrum maintain a compact narrative and a consistent framing that defines the voluntary interruption of pregnancy as a right of women that the State must guarantee. While, this time, the political right reaches high levels of heterogeneity and discursive incongruity, which could have resulted in low levels of incidence in the media, on the networks and on the Argentine streets.

Final thoughts

The movements create pathways and deploy discursive strategies to give visibility to their claims and demands. Its success and the scope of its public profile invite various actors to mobilize around the problem that summons them. Hence, a movement is naturally preceded by a counter movement, whose survival will depend on the network of political alliances it builds (Ingrassia et al., 2022).

In addition to analyzing the propensity of people to share cognitively congruent messages on social networks, this study set out to explore the conformation of frames in different regions of the social media Twitter, as a consequence of the selective activation of users. The findings allow us to verify a series of hypotheses that address the sociopolitical dimension of this event and the theoretical-empirical dimension of the activation of media frames in social media. Regarding the first point, it becomes evident that in the debate on political issues, where partisan identities do not explain the positions taken by citizens, it is possible to depolarize the conversation and allow the voices of social actors to reach higher levels of dissemination, thereby popularizing a more plebeian framework.

In the Twitter network #EsLey we can observe a rotation of the network that results in a change of frames where the organizing axis is not the partisan division between Peronism and Macrismo. This explains the change in the flow of information without changing the topology of the network, that is, the interconnections between users.

On the theoretical dimension, discrimination between communities, stemming from predominantly intra-community interaction, allows us to understand the model called Network Activated Frames (NAF) in the current communication ecosystem. The NAF in #EsLey confirms, once again, that people in social media are more prone to activate content with which they have cognitive affinity (activation of network frames); and that certain messages, as well as the magnitude with which they are expected to be activated, are overrepresented (expectation of framing activation).

Regarding the conformation of the collective action frames of the IVE –the pro-right frame and the pro-life frame– two behaviors arise

that explain each other. The feminist definition of the right to abortion was not only the most widespread on the Twitter network, but also gained greater discursive consistency than the frame linked to the counter movement, which retained a less compact structure.

This heterogeneity in the sky blue framing is observed in the three types of findings of this work: in the significant diversity of the framing elements activated by the yellow bubble, in the variation of the keywords in the dendrogram that could not be captured by the mean of narratives circulated in such community, and in the inconsistency of the words shared at great speed by the members of that virtual community.

The greater activation of messages in the green community –as well as the propagation of its frames– also confirms the hypothesis of Saxena and Kumar (2019), who propose to observe both the propensity to share messages by the most active users (node behavior) as their degrees of connection, when analyzing the influence of narratives. The virtual community made up of the feminist movement surpassed the other communities in intensity of interaction given its involvement with the event and, therefore, the enthusiasm of the most active nodes to retweet related information.

In some way, the three hypotheses of this study contribute to the understanding of selection and composition effects in social networks. That is, as a topological consequence of the selective activation of congruent messages, the contents shared by the most active users are overrepresented in certain regions of the network.

Both the movements and the counter-movements resort to dynamic and interactive schemes of perception and interpretation and forge dissimilar definitions of the situation that are put into dispute in the public arena to give meaning to an issue, as well as to the actors that participate in it. In fact, they can elevate a social problem to the status of a public problem to the extent that they manage to establish themselves stably in some competitive arena (Hilgartner & Bosk, 1988). Such has been the case with the legalization of abortion, which managed to gain political and public legitimacy in Argentina and to finally become law in December 2020.

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