



## Adapting to convergence: Evolution of second screening on Twitter and political television shows

### Adaptándose a la convergencia: evolución del *second screening* en Twitter y en programas políticos de TV

#### *Adaptando-se à convergência: Evolução do second screening no Twitter e nos programas políticos de TV*

**María de los Ángeles Miranda Bustamante**, Universidad de Playa Ancha, Valparaíso, Chile ([mmiranda@upla.cl](mailto:mmiranda@upla.cl))

**Francisco Javier Fernández Medina**, Pontificia Universidad Católica de Chile, Santiago, Chile ([ffernandez@uc.cl](mailto:ffernandez@uc.cl))

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**ABSTRACT** | Watching television and tweeting at the same time changes the nature of the media experience; thus, this quantitative research applies a frequency analysis and the seminality index to describe the evolution of this convergence between 2013 and 2017 in Chilean political shows. The comparison showed an increase in tweeting rates in second screening, while TV shows stopped managing their official accounts. This behavior shows a growing autonomy of both screens, consistent with Jenkins' convergency concept: making connections among dispersed media contents.

**KEYWORDS:** convergence; seminality; Twitter; television; second screening.

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#### HOW TO CITE

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**RESUMEN** | *Ver televisión y usar Twitter al mismo tiempo cambia la naturaleza de la experiencia mediática; por ello, esta investigación cuantitativa utiliza un análisis de frecuencia y el índice de seminalidad para describir la evolución de esta convergencia entre 2013 y 2017 en programas políticos chilenos. En la comparación, se detectó un aumento del second screening, o uso de segunda pantalla, entre televisión y Twitter por parte de los usuarios, mientras que los medios dejaron de gestionar sus cuentas oficiales. Esta conducta denota una creciente autonomía de ambas pantallas, lo que es coherente con la convergencia comprendida por Jenkins como la creación de conexiones entre contenidos dispersos.*

**PALABRAS clave:** *convergencia; seminalidad; Twitter; televisión; segunda pantalla.*

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**RESUMO** | *Ver televisão e usar Twitter ao mesmo tempo altera a natureza da experiência mediática. Por isso, está investigação quantitativa utilizada análise de frequência o índice de “seminalidade” para descrever a evolução desta convergência entre 2013 e 2017 em programas políticos chilenos. Em comparação, identificou-se um aumento da second screening entre a televisão e Twitter por parte dos usuários, ainda que os meios deixaram de administrar suas contas oficiais. Esta conduta denota uma crescente autonomia de ambas ecrãs, consoante com a convergência compreendida por Jenkins como a criação de conexões entre conteúdos dispersos.*

**PALAVRAS-CHAVE:** *Convergência; Seminalidade; Twitter; Televisão; Second screening.*

## INTRODUCTION

When Marty McFly traveled from 1985 to 2015 on the Back to the Future II time machine, he foreshadowed a world of flying cars and self-drying clothes. Among those anticipations, he proposed a large television screen subdivided into segments, with different on-demand programs and audios that overlapped.

Although the technical feasibility for that has existed for years (at least since the picture in picture was created), in general the consumer –and, therefore, the market– has not sought a single shared screen, but the coexistence of many screens, of different formats, that the user visits alternately: Smart TV LED screen, of at least 30 inches, added to another 15 inches of laptop, 10 of tablet and five of smartphone.

Within the same logic, rather than cannibalize the other supports and tend to a large integrated screen, digital media have managed to position content and media experiences in different simultaneous formats, arranged as fragments, that the user must join and relate mentally. Indeed, Jenkins (2008) argued against what he called the black box fallacy or the tendency to concentrate different media on a single screen: “(...) convergence represents a cultural shift as consumers are encouraged to seek out new information and make connections among dispersed media content” (p. 15).

Thus, he describes convergence not as a marvel of hardware or software, but as a phenomenon that occurs in the mind, in the individual experience of each user, caused by different media languages for the same content stimulus. Subsequently, the individual, continues Jenkins, troubled (or enthusiastic, perhaps) with these new meanings, tends to share them socially and, for this, returns to digital platforms.

In this study, we will address the second screening media convergence, referred in this case to the combination of the consumption of open television, as an old media, taking the term of Manovich (2006), and Twitter, as a new one, a digital platform and social media.

A mixture of media like that can transform television, until recently based on a unidirectional process, into a digital discourse in which different points of view converge or at least coexist in a multiplicity of deliberative discourses (Trilling, 2015). It is precisely the opening of this window that could lead to forming a space of opinion and dialogue (Williams & Gonlin, 2017). Thus, co-viewing 2.0 and the discussion of media content with others, even if they are unknown and geographically away, can improve the media experience and allow the acquisition of new knowledge (Pires de Sá, 2015, p. 55).

Besides, second screening consumption erases the boundaries between the users' active and inactive behaviors. On the one hand, there is the relatively passive attitude that involves viewers who receive information from a program on the air. There is also the partially active behavior that computers connected to the Internet allow when searching for specific data on the network. But there is also the mixture of both:

Individuals can choose, to some extent, what to watch, read, post, and share, even though the resources for these behaviors are derived from both social media *and* mainstream media. In other words, while dual screening blurs the lines between active and passive practices, the key point is that several different combinations, or what we term “bundles” of practices, are possible (Vaccari, Chadwick, & O'Laughlin, 2015, p. 1044).

Hence the importance of describing and dimensioning the multiple and changing forms of these modes of consumption that, although partly individual, crystallize in new collective ways of interacting with the media and building social realities. Therefore, this work seeks to examine the evolution of this type of media convergence in Chilean users, since in this country there are still no systematic metrics on social audiences. It is a descriptive exploratory study, which aims to characterize the interaction between media and audiences, in a situation of convergence between analogue television and Twitter. Therefore, we considered as units of analysis the contents published by the media and users on the platform before, during and after the broadcast of political Chilean television talk shows. This research aims to compare these dynamics of media consumption in 2013 and 2017, to see how the behavior of the open television channels and users has developed, and outline how these new evolutionary adaptations have configured themselves over the years, regarding the generation of networks, seminality and rating.

The above considering that, when new media appear, there are mediamorphosis processes, in which the old media do not disappear, but continue to evolve (Fidler, 1998) and the user continues to look through the “rearview mirror” (McLuhan, 1967, p. 75 ) for a long time, while trying to maneuver the new media.

### **A way to make open television interactive**

To generate convergence in the user, the second screening phenomenon must be interactive. Otherwise, it will not trigger the participatory attitude that allows it to create connections between content provided by different screens. For Manovich (2006, p. 12), interactivity is based on the principle of variability: “A new media object is not something fixed once and for all, but something that can exist in different, potentially infinite versions”. Therefore, it not only adheres to closed interactivity, which offers the user a menu with pre-set and finite options,

but the content can also lead to open interactivity, which allows unlimited combinations and interventions, with unpredictable contents, which are largely an occurrence of the user.

Based on this, open television, even in the digital age, usually only offers an interactivity of the first type, as a programming guide. But the second screening consumption of television added to Twitter increases the possible contents to infinity.

Therefore, a platform or a media content can be transformed into a digital place where narrative virtualities are developed that cross through both screens and acquire meaning in the user experience.

Janet Murray (1999) states that one of the essential characteristics of digital media is the possibility of the user to provoke certain peculiar behaviors, to which the computer does not have fixed responses, but simply limits itself to grouping all possible actions (and discourses) from users into categories.

In addition, Murray highlights the spatial quality of digital media. While analog media make verbal or iconic descriptions of space, digital environments have the power to represent a navigable space, within which we can move for the first time. Thus, Murray defines cyberspace as “an environment with its own geography in which we experience a change of documents on our screen as a visit to a distant site on a worldwide web”.

Therefore, we can say that the switching between screens, which constitutes a change of hardware and that strictly speaking occurs in the non-digital world, also enables spatiality by *visiting* the same content from two media with different natures, languages and audiences.

Thus, the alternate visit to Twitter and television, rather than a distraction, represents a new form of media content. In fact, this is how Kantar Media Audiences – a company that compares traditional television rating data in Spain with the measurements of the impact that a broadcast generates on social networks, but mainly on Twitter – justifies the value of the so-called social audience:

Understanding that a tweet about a television program is still a content, associated and originated by the program itself, gives us greater knowledge about the phenomenon of social television. It is content that praises, criticizes, entertains or simply communicates an opinion or a feeling about a television program. A content that amplifies the enormous power of television as a medium, and by which other users, spectators or not of that same program, can be influenced or conditioned. Because someone may be tempted to change the channel due to the positive tweets they are reading on a program or they may think otherwise due to the negative ones (Sánchez, 2015).

This goes to show that cultural convergence is embodied in a specific experience, leaving aside the idea that digital media will replace old ones altogether. It is rather a coevolution of the old and the new media, which gives rise to new media experiences (Finnemann, 2006), where the old media acquire new functions and purposes.

As Dwyer (2010) states, this change is experiential and characterized by adaptations, connections and transitions. When the dams of the old media are opened as watertight compartments, within the framework of digitalization, the most typical of the new media appears: increasing the versatility of human action.

Hence the importance of describing the emergence and evolution of these new phenomena that occur from convergence, which, far from a technological determinism, are culturally available to promote an interactivity open to thousands of possibilities.

Precisely because of this complexity of experiences made possible by the interaction, media convergence generates often contradictory stimuli in the user. On the one hand, there is the attractive diversity of the parts versus the disappearing completeness of the whole (Johnson Barella & Miranda Bustamante, 2016), since he/she is exposed to modules of apparently finished meaning, which in turn invite to explore new discrete fragments, more or less semantically related to each other. Finally, an internal struggle is generated between the search for more information and the desire for closure, satisfaction for finally apprehending an issue, for the synthesis of textual activators (Jenkins, 2007) that motivated him/her to initiate production, evaluation and data archiving actions, and that could be transformed into a coherent whole, that takes the form of an experience to remember, a social relationship or a learning or new knowledge.

In addition, the user experiences at the same time the singularity and transmediality (Johnson & Miranda, 2016), because he/she receives similar stimuli in different and specific languages, which contribute to the expansion of the content and the media experience. It is not, as in cross-media, about gathering the necessary pieces to understand a whole predetermined by the author, but an incessant search for more stimuli and content (Pradanos, 2012), in combinations that can be unique.

Therefore, at the time of the synthesis, he/she incorporates only one content, whose origin can be forgotten, but which, having been obtained by the more or less laborious task of transmedia integration, has a particular status in memory. In the case of the object of study of this research, open television is experienced as an audiovisual media of sequential, non-interactive exhibition, which is combined with a digital social one, composed of brief individual fragments. These segments can be considered statements, defined by Bajtín (1999) as the minimum units of a discourse,

because they have conclusiveness, since, at the end, they imply the possibility of alternation and of giving an answer (e.g., a Like, a retweet or a text as a replica). This interaction is characteristic of digital media and, particularly, of social media.

### **Double screen, double commitment**

It is interesting to note that studies on second screening have also evolved. In a first stage, a large part of the research that addressed the combination of Twitter and television moved away from media convergence as an object of study, to focus only on the contents disseminated there. It is the case of Himelboim (2014), who addressed the discussion of the tweeters around four television programs of political conversation, to conclude that most users avoid exposing themselves to content contrary to their own ideologies. Likewise, Greer and Ferguson (2011) also did not aim at convergence, but rather to analyze the contents of the Twitter accounts of television channels, to conclude that the stations are more interested in publicizing the news to their audience through the platform that in using it as a way to enrich the experience of live programming.

Instead, subsequent studies attempted to demonstrate the political effects of this practice and its correlation with citizenry exercise. This is the case of the investigation by Gil de Zúñiga, García-Perdomo and McGregor (2015) that does focus on the motivations and political effects of using second screening during the transmission of news in the United States, on users who, while watch news or political programs on television, search for associated content on the Internet or on social networks. The results suggest that viewers, through this media behavior, intend to discuss and obtain more data. In addition, they conclude that this behavior is an effective tool for predicting political participation. In fact, the study of the use of the second screening during a debate on parliamentary elections in the United Kingdom shows that those who use this practice tend to be educated users with great political commitment, especially if they have an active and productive attitude on the platform (Vaccari, Chadwick, & O'Loughlin, 2015).

This idea is enriched later in the research of Barnidge, Gil de Zúñiga and Diehl (2017), which establishes a relationship between the practice of second screening during television news program and the increased probability of forming or changing political opinions: "This mix of news and social opinion therefore makes people more open to the influence of other people's opinions, news recommendations, or conversations that they encounter in social media environments" (p. 325).

Moreover, the study by Gil de Zúñiga and Liu (2017), in 20 countries, estimates that Chile ranks third in that group in the use of second screening during the television broadcast of political debates, after Turkey and China. Besides, it suggests

that young people practice second screening more than older people and that more frequent users tend to express their political judgments on social networks, as opposed to those who use it less.

More recently, this media behavior has been linked to an increase in social capital, thanks to the practice of political discussion, which becomes more evident in countries with greater indicators of freedom of expression (Huber, Gil de Zúñiga, Diehl, & Liu, 2019).

Finally, it is pertinent to highlight how this form of consumption on double screens has increased in the period under study in countries such as Spain. The measurement of Tuitele gives an account of the “settlement of second screening” in that country (2013, p. 13). From the review of the conversations on Twitter on Spanish television, a 93.7% increase in Twitter comments about TV shows is seen in a year. In December 2013, there were 6.9 million tweets about television programs. Four years later, in December 2017, this figure increased to 11.5 million in that month (Barlovento Comunicación, 2017).

And, although it is clear that, given the changes that each of the media species have undergone, it is mandatory to change the studies and metrics to address the new social audience (Arrojo-Baliña, 2013), in Chile these figures are not yet systematically collected.

## **METHODOLOGY**

This is a descriptive study, which addresses all the political programs on the air on open television broadcasted in Chile during the second half of 2013 and the first half of 2017, to compare the state of media convergence between television and Twitter in both periods. On the first date, the programs broadcasted were *Tolerancia Cero* (Chilevisión), *Protagonistas 13* (Canal 13) and *El Informante* (Televisión Nacional de Chile (TVN)). In the second period, as the previous ones were no longer broadcast, we considered *Entrevista Verdadera* (La Red) and *Estado Nacional* (TVN, the only public channel).

*Tolerancia Cero* was a journalistic program from Chilevisión, in which a panel composed in part by journalists interviewed political personalities. The television station started in 1960 as the Universidad de Chile channel. Since 2010 it belongs to the American group Turner Broadcasting System Latin America (Chilevisión, 2013). *Protagonistas 13*, from Canal 13, was a political interview program conducted by three female journalists on Sundays, after the central news. The channel emerged in 1959 in the hands of the Pontificia Universidad Católica de Chile. In 2010, two-thirds of the property went to the private Luksic Group. In 2017, it was completely



taken over by this holding company (La Universidad Católica sale..., 2017; Grupo Luksic entra..., 2010).

*El Informante* is a program of interviews and political reportages of the State channel Televisión Nacional de Chile, an autonomous entity, which by law must report objectively and be commanded by a pluralist board (Ministerio Secretaría General de Gobierno, 2018).

*Entrevista Verdadera* is a journalistic program with a guest of the political field that was broadcasted by La Red, a private television station owned by Albavisión, of businessman Ángel González (La Red, n.d.). Lastly, *Estado Nacional* is a Chilean National Television program of journalistic interviews to politicians conducted by a journalist and a group of panelists (TVN, n.d.).

We used a quantitative content analysis, frequency analysis type, highly recommended for the study of web content (McMillan, 2000) and applied it to the tweets collected in the two periods. For the analysis units of 2013, we chose one edition of each program and the totality of tweets related to each of those episodes was taken as a sample, using the Twitter Search application, which had already been used in previous studies (Kwak, Lee, Park, & Moon, 2010; Song, Li, & Zheng, 2010).

Although Twitter Search has a limitation because it yields a maximum of 1500 tweets per search, in this investigation, the results obtained for each query were always below that amount, which assures us that there were no analysis units left out of the sample because of this restriction. We considered the micro discourses of the official accounts of each program and the keywords associated with the content of the broadcast. As in the 2013 programs no hashtags suggestions were used on the screen, tweets were tracked using the name of the programs, the last names of the guests invited to the analyzed episodes and, if there were, the short name that the program uses on Twitter (t0 in the case of *Tolerancia Cero*). Therefore, we ended up with a corpus of 1826 units of analysis, considering the tweets, and their possible answers, from the media and the followers.

In the 2017 phase, we considered the tweets of the official accounts, and those that used the hashtag of the programs promoted by the television channels, a practice that did not exist in 2013 in Chile. This time we used Twitter Archiver (Agarwal, 2015), a tool created in 2015, which systematically collects tweets that use a certain hashtag, and that has been applied in other studies of this type (Greenhalgh, Rosenberg, & Wolf, 2016; Saha, Yadav, & Ranjan, 2017; Twahirwa, 2017) because it solves the limitations of Twitter Search. All tweets were considered under these search criteria, which totaled 17,958 for both programs, with three editions of each.

Year	Program	Channel	Day	Time slot	Total tweets
2013	Tolerancia Cero	Chilevisión	August 25	10:32 to 0:08	534
	Protagonistas 13	Canal 13	September 8	21:45 to 22:10	367
	El Informante	TVN	November 26	23:20 to 0:33	925
2017	Estado Nacional	TVN	March 5	10:00 to 11:46	4782
	Estado Nacional	TVN	March 12	10:00 to 11:46	4527
	Estado Nacional	TVN	March 19	10:00 to 11:46	8220
	Entrevista Verdadera	La Red	March 7	21:00 to 21:30	366
	Entrevista Verdadera	La Red	March 14	21:00 to 21:30	16
	Entrevista Verdadera	La Red	March 21	21:00 to 21:30	47

**Table 1. Synthesis of the analysis units**

*Source: Own elaboration.*

Within the tweets, we distinguish what we call seminal tweets, i.e., publications made directly by a Twitter user, and response tweets, which are the replicas to another user's publications (Miranda Bustamante & Fernández Medina, 2015). Following the definition of UGC (user generated content) by Fernández Castrillo (2014), "the final result can be both the invention of a new work or the adaptation of previous proposals, always freely and voluntarily" (p. 60), which includes the seminal tweets, as original discourses, motivated by political discussion in this case, and response tweets, which generate a discursive connection with the previous ones.

Therefore, we seek to measure the ability of a television content to generate interactivity and creation of new contents by users, which in turn can generate responses from other tweeters. In the analysis, we will apply different indicators constructed to characterize the convergence in second screening between social and traditional media:

1. Network generation of networks: this indicator seeks to measure whether, based on the contents of the media, the tweeters did not limit themselves to replicating the contents, but instead generated their own and shared them with their contacts, taking the idea proposed by Buendía, Ruano and Gómez (2017). Thus, the media can act as an opinion leader, which in a social network is defined as a user with a high degree of centrality (Oh & Monge, 2016), i.e., that has a lot of connections and therefore tends to be more likely to influence. Therefore, users begin to generate autonomous seminal tweets, inspired and motivated by the content of the television

program. These are comments on Twitter published at the initiative of users, which include their own agendas and themes around the content proposed on the screen. Hence, we have quantified the generation of networks based on the proportion between the total tweets related to the program and the seminal tweets issued by the audience that relate to it.

$$\text{Network generation} = \frac{\text{Total Tweets}}{\text{Seminal tweets from the audience}}$$

2. **Seminality:** to characterize the interaction produced by the tweets in the context of convergence with the broadcast of a political program, we calculated the level of seminality of the tweet (Miranda Bustamante, 2018). This concept suggests that the tweet (and, in general, any original publication in a social environment) has the vocation to generate interactions, as a characteristic inherent to digital media, and to act as a seed –hence the name– of new content. Considering this, this calculation includes not only the UGC reflected in the response tweets, but also the other interactions, i.e., the retweet or marking one as favorite, valued according to the level of creative effort of the user (Kaplan & Haenlein, 2010). Therefore, the formula weighs better (0.3 factor) the action that represents a greater creative effort, which corresponds to the answers, since they involve generating new content from the stimulus of the seminal tweet. Then, retweets, which replicate the content of the seminal tweet for the users' network (0.2 factor), and, finally, the Likes (called Favorites in 2013), which only represent an additive conjunction connection (Renkema, 1999), showing a generic approval of the text of the original tweet. Thus, the formula (Miranda Bustamante, 2018) is expressed as follows:

$$\text{Seminality index} = \frac{(\text{RP} \cdot 0.3) + (\text{RT} \cdot 0.2) + (\text{LK} \cdot 0.1)}{0.6}$$

RP: Responses

RT: Retweets

LK: Likes

3. **Life cycle of the program on Twitter:** corresponds to the diachronic line of tweets generated on the platform and whose content is related to the broadcast of a television program, which becomes the event that focuses the conversation in this convergence environment. The life cycle on Twitter (or other social media) of a television program begins when the first tweet regarding that program is published, which can be made by the media itself or by a user, before, during or even after of the broadcast by open television.

It ends with the last tweet referring to that specific episode. Thus, the life cycle has a certain duration and has more or less concentration of tweets in that timeline, which dialogue with the beginning, development and end of the program's broadcast.

4. Relationship between the life cycle and rating: to establish a relationship between Twitter audiences and the political program on television, we made a comparison between the number of tweets reached by the programs and the rating obtained according to official measurements.

## RESULTS

It is important to note that this comparative study considers different political programs between both periods, because in the years 2013 and 2017 the TV programming registered changes and some no longer existed. However, the application of the indicators allows us to at least characterize the phenomenon of second screening and the convergence between analog and digital media in the context of journalistic content in Chile and to be able to detect some features in its evolutionary changes and trends.

In 2013, the program with the highest number of total related tweets was *Protagonistas 13* (51%). *Tolerancia Cero* obtained 29% and *El Informante*, 20%. In 2017, the proportion is even less equitable: *Estado Nacional* accounted for 98% of the micro discourses, against only 2% of *Entrevista Verdadera* (considering the total tweets in three episodes).

In general, we can observe a greater number of total tweets during the second period studied, which could suggest a growth in the practice of second screening at least for political programs.

Regarding the existence of seminal tweets, it is of interest to subdivide them between those published by the program, since the beginning of the conversation around the analyzed episode, and those generated by the audience. It is noteworthy that, in the 2017 sample, the number of tweets of the programs had decreased notoriously compared to 2013, which evidences a growing lack of content management on Twitter by the journalistic team. Even in 2017, *Estado Nacional* completely refrained from tweeting.

However, it is possible to observe that the 2017 programs included on the screen the promotion of generic hashtags (#yoopinoev and #enacional), which did not occur in any of the three programs in 2013. This means that, over the years,

	2013			2017	
	<b>Protagonistas 13</b>	<b>Tolerancia Cero</b>	<b>El Informante</b>	<b>Estado Nacional</b>	<b>Entrevista Verdadera</b>
Seminal tweets of the program per episode	31	63	30	0*	9*
Seminal tweets of the audience per episode	434	72	97	1946*	21*

\*: On average for three episodes. In total, Estado Nacional added 5837 seminal tweets from the audience and no own seminal tweet. Entrevista Verdadera collected 63 seminal tweets from the audience and 28 from the program.

**Table 2. Seminal tweets collected by the political programs**

Source: Own elaboration.

convergence has been included in the routines of audiovisual production, as a digital dynamic integrated into television support, not as an independent reality.

### Network generation

In this case, the program that achieved a higher percentage of network generation was *Protagonistas 13*, which obtained a greater number of related tweets in 2013 (47%), compared to *El Informante* (26%) and *Tolerancia Cero* (13%). In 2017, a similar percentage is seen between both programs (*Estado Nacional* had 35% and *Entrevista Verdadera*, 39%), which exceeds the average of this indicator among the three formats of the previous period (28.6%). This suggests that the indicator has improved over time, with users tending to comment autonomously on Twitter about television content.

### Seminality

In all cases, in 2013 and 2017, the tweets made by the programs had higher seminality levels than for those made by the audience, which confirms the centrality still in force in the network of media accounts (except *Estado Nacional*, that did not generate seminal tweets as a program).

In addition, it is possible to say that there is a tendency towards dispersion in the production of tweets; in both years studied, the programs that had more Twitter publications per episode had lower seminality levels compared to their similes. This is the case of *Protagonistas 13*, in 2013, and of *Estado Nacional*, in 2017. This means that, although it was possible to generate discourses in the social network from television content, there was no great tendency to generate conversations; this implies a lack of semantic overlapping and probably also of connections between the nodes that coincided in the television-Twitter convergence situation.

	2013			2017	
	Protagonistas 13	Tolerancia Cero	El Informante	Estado Nacional	Entrevista Verdadera
<b>Seminal tweets of the program per episode</b>	31	63	30	0	28
<b>Level of seminality obtained by each seminal tweet of the program</b>	3.05	8.21	4.01	NA	4.1
<b>Seminal tweets of the audience per episode</b>	434	72	97	5837	63
<b>Level of seminality obtained by each seminal tweet of the audience</b>	0.79	2.01	3.19	0.5	4

We calculated the average level of seminality for tweets obtained in all episodes.

NA: Not applicable because the program did not have its own seminal tweets during the measurement.

**Table 3. Seminality of the tweets of Chile's political programs**

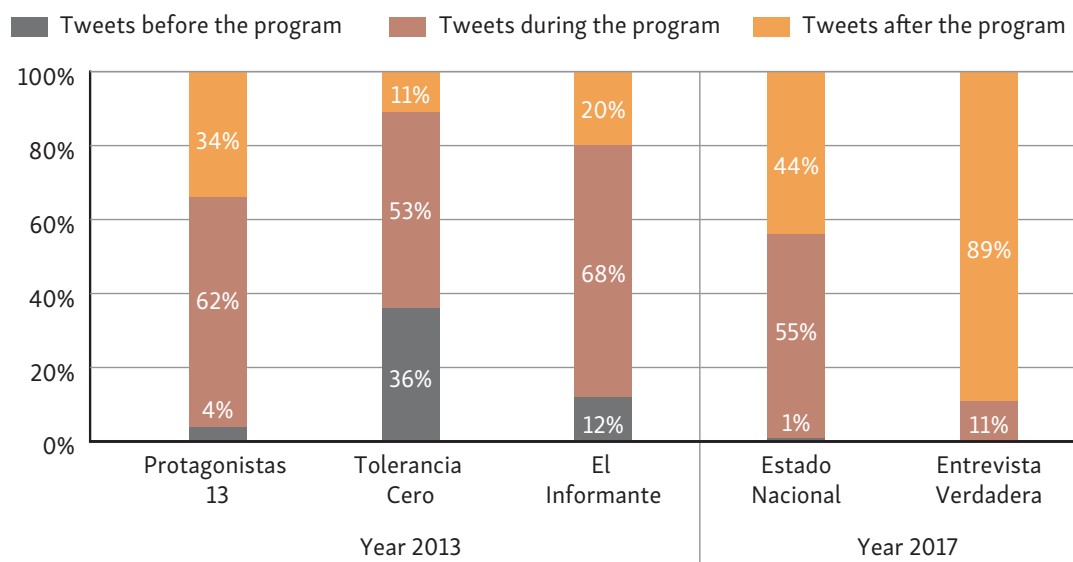
*Source: Own elaboration.*

### Program life cycle

Four years after the first measurement, it can be concluded that there are no major changes in the length of the political programs' Twitter life cycle. The average of the three programs of 2013 reaches 113 hours, while the average of the six episodes of both 2017 programs reaches 118 hours.

It was not possible to establish a correlation between the duration of the life cycle and the seminality or the network generation, so we cannot attribute a drop in these indicators only to a long-tail phenomenon, i.e., to the existence of many nodes participating in the program content with low level of individual centrality.

On the other hand, it is possible to state that, in the three cases of 2013, the life cycle was generated at the initiative of the media, which published, with a different period of anticipation of the broadcast, a tweet announcing the contents of the next episode. But in 2017 the six life cycles studied were initiated by a user of the audience, which again indicates that there is an apparent lack of attention in the administration of the Twitter community, but also a greater naturalness in the production of content on the platform: the generation of networks is a co-substantial process to the television broadcast, which occurs even without the intervention of the media.



**Gráfico 1. Generación de tuits en relación con la emisión del programa político**

*Fuente: Elaboración propia.*

In this same regard, we can interpret the tweets distribution throughout the life cycle. In 2013, the program digitally motivated a preparation prior to the television broadcast, which resulted in the publication of allusive tweets before the program, announcing the content of the upcoming episode. That is why, for example, the *Tolerancia Cero* account has a higher percentage of tweets than the other two programs, since it published almost twice as many micro discourses before the broadcast than the rest. *Protagonistas 13* is the program that took longer to announce the guests of the next episode, so its life cycle before the broadcast is the smallest of the three. We also detected a greater concentration of the publications during the broadcast, which decreased noticeably after its end.

This phenomenon changed in the programs studied in 2017, when the users' publication before the program was almost non-existent, since the media did not tweet before the television broadcast. The generation of tweets increased during the program, to conclude with the publication of a large percentage of micro discourses after the end of the episodes. This again demonstrates the increasing autonomy of the users to refer to the contents not only in the moments of synchronous convergence between Twitter and television, but also after the traditional media has stopped broadcasting.

### Relationship between Twitter and rating

After comparing the life cycle with the official measurement of television audiences, it is possible to affirm that the broadcasts that obtained more tweets

compared to the other programs of the period are precisely those that obtained the highest rating, according to the figures collected on Chilean television by Kantar IBOPE Media. This is the case of *Protagonistas 13*, which reached 50% of the tweets analyzed in 2013 and the highest rating (3.6). The same happened in 2017, because *El Informante*, with the largest television audience of the programs studied (3.3 on average), achieved 98% of the micro discourses of the period.

However, although rating can influence a greater proliferation of tweets around the program, it does not necessarily affect the autonomous publication of tweets alluding to the program by the users. Although *Protagonistas 13* had the highest rating and the highest percentage in this indicator, in 2017 *Entrevista Verdadera* obtained a generation of networks greater than its simile, even when it had a very low television audience.

Rating does not prove to be linked to a higher degree of seminality. For example, although *Tolerancia Cero* had a lower rating than its peer in 2013, it reached a much higher seminality. The opposite case can also be observed in *Entrevista Verdadera*, which had a very low rating and very little tweet production but presented a high seminality in relation to its peer.

These data contribute to confirm the idea that, in media convergence, although there is confluence in some aspects of the phenomenon, audiences have different behaviors in each of the platforms and, over time, the user could tend to become independent of the big screen and impose his/her own logics on social networks.

## CONCLUSIONS

Considering convergence as the user's ability to establish mental connections between dispersed content, and then share and exchange them socially, we must consider that, from communication, we only access to the social phase of this phenomenon, which is reflected in the UGC published in Twitter by users.

Due to changes in TV programming and technology, data collection methods and programs were different in 2013 and 2017, which only allows us to suggest that there has been an upward trend in viewers' allusive tweet production. Since the rating of political programs has maintained stable, we cannot attribute that probable increase to a greater interest in political programs (nor for politics) or to a higher quality of the audiovisual content, but to a growing tendency of users to comment the contents of public interest through Twitter.

Despite this, both in 2013 and 2017, the tweets of the programs obtained greater seminality than those generated by the audience, confirming that there is still a



tendency towards verticality in the conversations with the media, which usually motivate more interaction than the users' micro discourses, probably because of their centrality in the network.

Considering the latter, the notorious decrease in content management on the platform by the programs' community managers, comparing 2013 and 2017, is striking. This has at least two clear consequences in the programs' Twitter life cycle. The first is that the production of allusive tweets is completely canceled before the program, which in the first period were motivated by the media's Twitter accounts, which announced the contents and the guests, immediately initiating the debate. In 2017, life cycles were started by users and in parallel to the broadcast of the program, never before.

The second is that, instead of announcing the television content on Twitter, the invitation to participate in the discussion on the platform is made via the screen, during the broadcast, through a hashtag, which did not happen in 2013.

## DISCUSSION

Therefore, it can be said that there is, beyond the programs' lack of management, a growing autonomy of both screens, leaving Twitter increasingly in the hands of users to engage in a free political debate. In fact, it is part of the hashtag's nature to be out of the control of a specific user, including its own creator. At the same time, this resource promotes a collective action that, in addition to adding statistics, gives a collaborative perspective to the common theme, contributing with tweets and links or inviting others to participate, using mentions and retweets (Bennett & Segerberg, 2013).

Therefore, by excluding themselves of the political discussion on Twitter, political programs gain an apparent neutrality, still valued in Chilean journalism, and at the same time open the discussion exclusively for the audience, without moderating or giving an opinion. Thus, they allow the authentic UGC to emerge; by definition, this content should be out of professional routines and practices (Kaplan & Haenlein, 2010; Fernández Castrillo, 2014), so it would have to come first and foremost from the user more than from the specialist. This invitation has been received by users: in 2017 they increased the average generation of their own networks in the discussion, compared to the 2013 measurement.

In addition, in both years we were able to establish a correlation between rating and total number of micro discourses, since programs with a larger audience tend to promote more interactions on Twitter. However, the relationship of the television rating with the generation of networks and seminality is relative, because there

are other factors that determine that an original tweet can really be the seed of new interactions.

Based on these findings, it is possible to conclude that convergence seems to evolve deepening the platforms' autonomy, increasingly farther from Marty McFly's screen. It is in the head of the users where the media stimuli acquire new senses, which are then shared through social media to promote new constructions of reality.

Future research could explore in detail the causes that stimulate greater seminality, which may be related to the centrality of the users on the network, but also with the content and especially with the narratives, i.e., with the discursive strategies used. This would allow to promote best practices that stimulate seminality and, therefore, the connections between multiple screens, to converge on a single social screen.

## REFERENCES

- Agarwal, A. (2015, October 21). How to Save Tweets for any Twitter Hashtag in a Google Sheet (blog post). Retrieved from <https://www.labnol.org/internet/save-twitter-hashtag-tweets/6505/>
- Arrojo-Baliña, M. (2013). La Televisión Social. Nuevas oportunidades y nuevos retos para el sector audiovisual (Social televisión: New opportunities and challenges for the audiovisual sector). In *Actas del I Congreso Internacional Comunicación y Sociedad* (Proceedings of the 1<sup>st</sup> International Communication and Society Congress). La Rioja: UNIR. Retrieved from <http://reunir.unir.net/handle/123456789/1729>
- Bajtín, M. (1999). *Estética de la creación verbal* (The Aesthetics of Verbal Creation). Madrid: Siglo Veintiuno.
- Barlovento Comunicación. (2017). *Análisis mensual del comportamiento de la audiencia televisiva* (Monthly analysis of the behavior of the television audience) (PDF file). Retrieved from [https://www.barloventocomunicacion.es/images/publicaciones/NOTA\\_MENSUAL/barlovento-audiencias-diciembre2017.pdf](https://www.barloventocomunicacion.es/images/publicaciones/NOTA_MENSUAL/barlovento-audiencias-diciembre2017.pdf)
- Barnidge, M., Gil de Zúñiga, H., & Diehl, T. (2017). Second screening and political persuasion on social media. *Journal of Broadcasting & Electronic Media*, 61(2), 309-331. <https://doi.org/10.1080/08838151.2017.1309416>
- Bennett, W. L. & Segerberg, A. (2013). *The logic of connective action: Digital media and the personalization of contentious politics*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/cbo9781139198752.002>
- Buendía, A., Ruano, L. E., & Gómez, A. (2017). Comunicación digital y agenda cultural. El caso de Facebook en la promoción de imaginarios urbanos (Digital communication and cultural agenda. The case of Facebook in the promotion of urban imaginaries). *Investigação Qualitativa em Educação/Investigación Cualitativa en Educación*, 1, 630-639.
- Chilevisión. (2013, December 18). Historia (History). Retrieved from <http://www.chilevision.cl/corporativo/historia/2013-12-18/102819.html>

- Dwyer, T. (2010). *Media convergence*. Glasgow: Open University Press.
- Fernández Castrillo, C. (2014). Prácticas transmedia en la era del prosumidor: Hacia una definición del Contenido Generado por el Usuario (CGU) (Transmedia Practice in Prosumer Age. Toward a Definition of User Generated Content (UGC)). *CIC. Cuadernos de Información y Comunicación*, 19, 53-67. Retrieved from <https://revistas.ucm.es/index.php/CIYC/issue/view/2482>
- Fidler, R. (1998). *Mediamorfosis. Comprender los nuevos medios* (Mediamorphosis. Understanding New Media). Buenos Aires: Granica Ediciones.
- Finnemann, N. (2006). Public Space and the Co-Evolution of Digital and Digitized Media. *Final del formulario Politik*, 9(2), 64-73. <https://doi.org/10.7146/mediekultur.v22i40.1318>
- Gil de Zúñiga, H., García-Perdomo, V., & McGregor, S. C. (2015). What is second screening? Exploring motivations of second screen use and its effect on online political participation. *Journal of Communication*, 65(5), 793-815. <https://doi.org/10.1111/jcom.12174>
- Gil de Zúñiga, H. & Liu, J. (2017). Second screening politics in the social media sphere: Advancing research on dual screen use in political communication with evidence from 20 countries. *Journal of Broadcasting & Electronic Media*, 61(2), 193-219. <https://doi.org/10.1080/08838151.2017.1309420>
- Greenhalgh, S. P., Rosenberg, J. M., & Wolf, L. G. (2016). For all intents and purposes: Twitter as a foundational technology for teachers. *E-Learning and Digital Media*, 13(1-2), 81-98. <https://doi.org/10.1177/2042753016672131>
- Greer, C. & Ferguson, D. (2011). Using Twitter for promotion and branding: A content analysis of local television Twitter sites. *Journal of Broadcasting & Electronic Media*, 55(2), 198-214. <https://doi.org/10.1080/08838151.2011.570824>
- Grupo Luksic entra al mercado televisivo como dueño mayoritario de Canal 13 (Luksic Holding enters into television market as Canal 13's majority owner). (2010, August 6). *Emol*. Retrieved from <https://www.emol.com>
- Himmelboim, I. (2014). Political Television Hosts on Twitter: Examining Patterns of Interconnectivity and Self-Exposure in Twitter Political Talk Networks. *Journal of Broadcasting & Electronic Media*, 58(1), 76-96. <https://doi.org/10.1080/08838151.2013.875017>
- Huber, B., Gil de Zúñiga, H., Diehl, T., & Liu, J. (2019). Effects of Second Screening: Building Social Media Social Capital through Dual Screen Use. *Human Communication Research*, 45(3), 334-365. <https://doi.org/10.1093/hcr/hqz004>
- Jenkins, H. (2007, March 21). Transmedia Storytelling 101 (blog post). Retrieved from [http://henryjenkins.org/2007/03/transmedia\\_storytelling\\_101.html](http://henryjenkins.org/2007/03/transmedia_storytelling_101.html)
- Jenkins, H. (2008). *Convergence culture. La cultura de la convergencia de los medios de comunicación* (Convergence Culture: Where Old and New Media Collide). Barcelona: Paidós.
- Johnson Barella, D. & Miranda Bustamante, M. (2016). *Pasado Presente. La construcción del tiempo en las narrativas transmediáticas* (Present Past. Time construction on transmedia narratives). Temuco: Ediciones Universidad de la Frontera.
- Kaplan, A. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>

- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social network or a news media? In *Proceedings of the 19th international conference on World wide web* (pp. 591-600). Raleigh, N.C.: ACM. <https://doi.org/10.1145/1772690.1772751>
- La Red. (n.d.). *Corporativo* (About us). Retrieved from <https://www.lared.cl/corporativo>
- La Universidad Católica sale de la propiedad de Canal 13 y Andrónico Luksic se convierte en el único dueño (Catholic University leaves Canal 13's ownership and Andrónico Luksic becomes the sole owner). (2017, November 6). *Diario Financiero*. Retrieved from <https://www.df.cl>
- Manovich, L. (2006). *El lenguaje de los nuevos medios de comunicación* (The language of new media). Buenos Aires: Paidós.
- McLuhan, M. (1967). *El medio es el mensaje. Un inventario de efectos* (The Medium is the Message. An inventory of effects). Barcelona: Paidós.
- McMillan, S. J. (2000). The microscope and the moving target: The challenge of applying content analysis to the World Wide Web. *Journalism & Mass Communication Quarterly*, 77(1), 80-98. <https://doi.org/10.1177/107769900007700107>
- Ministerio Secretaría General de Gobierno. (2018, May 3). *Modifica la Ley N° 19.132, de Televisión Nacional de Chile* (Modifies Law N° 19.132 about National Chilean Television). Retrieved from <https://www.leychile.cl/Navegar?idNorma=1116654>
- Miranda Bustamante, M. & Fernández Medina, F. (2015). Hablándole a la televisión: análisis de las conexiones discursivas entre Twitter y tres programas de contenido político en televisión abierta (Talking to television: Analysis of discursive connections between Twitter and three political content talk shows in open television). *Comunicación y sociedad*, (24), 71-94. <https://doi.org/10.32870/cys.v0i24.2523>
- Miranda Bustamante, M. (2018). Jubilados en Twitter. Análisis de narrativas y seminalidad en los tuits de personas mayores para la discusión de temas públicos. El caso de Chile (Retired people on Twitter. Analysis of narratives and seminality of elders' tweets commenting on public affairs: The case of Chile). *Aula Abierta*, 47(1), 123-130. <https://doi.org/10.17811/rifie.47.1.2018.123-130>
- Murray, J. (1999). *Hamlet en la holocubierto. El futuro de la narrativa en el ciberespacio* (Hamlet on the Holodeck. The Future of Narrative in Cyberspace). Barcelona: Paidós.
- Oh, P. & Monge, P. (2016). Network Theory and Models. In K. Bruhn Jensen & R. Craig (Eds.), *The International Encyclopedia of Communication Theory and Philosophy* (pp. 1337-1351). West Sussex: Wiley Blackwell.
- Pires de Sá, F. (2015). The co-viewing 2.0: Detaching from History and Applying in the New Media Age. *Kymypa/Culture*, 5(11), 55-64. Retrieved from <http://journals.cultcenter.net/index.php/culture/article/view/164>
- Pradanos, E. (2012, March 2). ¿Cuál es la diferencia entre Transmedia, Crossmedia, multiplataforma, merchandising y productos licenciados? (What is the difference between Transmedia, Cross-media, cross-platform, merchandising and licensed products?) (blog post). Retrieved from <https://eduardopradanos.com/2012/03/02/cual-es-la-diferencia-entre-transmedia-crossmedia-multiplataforma-merchandising-y-productos-licenciados/>

- Renkema, J. (1999). *Introducción a los estudios sobre el discurso* (Introduction to discourse studies). Barcelona: Gedisa.
- Saha, S., Yadav, J., & Ranjan, P. (2017). Proposed Approach for Sarcasm Detection in Twitter. *Indian Journal of Science and Technology*, 10(25), 1-8. <https://doi.org/10.17485/ijst/2017/v10i25/114443>
- Sánchez, C. (2015, March 31). *¿Cuál es el verdadero sentido de medir la audiencia social de la televisión?* (What is the true sense of measuring the social audience of television?). Kantar Media. Retrieved from <https://www.kantarmedia.com/es/sala-de-prensa/press-releases/el-verdadero-sentido-de-medir-la-audiencia-social-de-la-tele>
- Song, S., Li, Q., & Zheng, N. (2010, August). A spatio-temporal framework for related topic search in micro-blogging. In A. An, P. Lingras, S. Petty, & R. Huang (Eds.), *International Conference on Active Media Technology* (pp. 63-73). Berlin: Springer. [https://doi.org/10.1007/978-3-642-15470-6\\_8](https://doi.org/10.1007/978-3-642-15470-6_8)
- Trilling, D. (2015). Two different debates? Investigating the relationship between a political debate on TV and simultaneous comments on Twitter. *Social Science Computer Review*, 33(3), 259-276. <https://doi.org/10.1177/0894439314537886>
- Tuitele. (2013). Informe audiencias sociales diciembre 2013 y total 2013 (Social audiences report. December 2013 and total 2013). Retrieved from [http://www.corresponsalesdepaz.es/archivos/201402/tuitele\\_informe\\_diciembre\\_2013.pdf](http://www.corresponsalesdepaz.es/archivos/201402/tuitele_informe_diciembre_2013.pdf)
- TVN. (n.d). *Estado Nacional*. Retrieved from <https://www.24horas.cl/programas/estadonacional/>
- Twahirwa, R. (2017). *Un débat national sur la valeur des vies: le cadrage des "vies noires", des "vies blanches" et de "toutes les vies" sur #blacklivesmatter, #whitelivesmatter et #alllivesmatter* (A national debate about lives value: Framing of "Black lives", "white lives" and "all lives" on #blacklivesmatter, #whitelivesmatter et #alllivesmatter) (Master's thesis). Retrieved from <https://archipel.uqam.ca/10465/1/M15118.pdf>
- Vaccari, C., Chadwick, A., & O'Loughlin, B. (2015). Dual screening the political: Media events, social media, and citizen engagement. *Journal of Communication*, 65(6), 1041-1061. <https://doi.org/10.1111/jcom.12187>
- Williams, A. & Gonlin, V. (2017). I got all my sisters with me (on Black Twitter): second screening of *How to Get Away with Murder* as a discourse on Black Womanhood. *Information, Communication & Society*, 20(7), 984-1004. <https://doi.org/10.1080/1369118x.2017.1303077>

## ABOUT THE AUTHORS

**MARÍA DE LOS ANGELES MIRANDA BUSTAMANTE**, professor at the Department of Communication Sciences, Universidad de Playa Ancha, Valparaíso, Chile, in the digital communication area. Ph.D. in Social Sciences, specialized in Social Communication, by the Universidad Nacional de Cuyo, Argentina. Master's in Hispanic American Literature from the Universidad de Playa Ancha. She holds a degree in Social Information and is a journalist from the Pontificia Universidad Católica de Chile. Her research areas are digital narratives, social media and journalism.

 <https://orcid.org/0000-0002-1825-0097>

**FRANCISCO JAVIER FERNÁNDEZ MEDINA**, Ph.D. in Journalism and Communication Sciences, Universidad Autónoma de Barcelona. Master's in Communication and Education, Universidad Autónoma de Barcelona. Master's in Journalism and Communication Sciences from that same university. He holds a degree in Social Information and is a journalist from the Pontificia Universidad Católica de Chile. His research areas are interactive digital media, audiovisual industry, communication and information technologies, digital divide and inclusion, and political economy of communication.

 <https://orcid.org/0000-0002-1825-0097>