
Ambient Journalism in Spain.¹ How Twitter and NREs are redefining agenda setting in *El País*, *El Mundo*, *La Razón*, *ABC* and *La Vanguardia*

L'ambient journalism a Espanya: de quina manera Twitter i les NRE redefeixen l'agenda-setting a El País, El Mundo, La Razón, ABC i La Vanguardia

Anna Tous Rovirosa

Universitat Autònoma de Barcelona (UAB)

Diana Rivero Santamarina

Koldobika Meso Ayerdi

Ainara Larrondo Ureta

Universidad del País Vasco (UPV/EHU)

The term “ambient journalism”, proposed by Hermida (2010), is employed in this research to comprehend the complex relations of news consumption and production in the main Spanish newspapers, resulting from the function of social networks in the sphere of digital journalism. To this end, we analyze the influence of Twitter, Facebook and News Recommendation Engines (NREs) on the digital editions of El País, El Mundo, La Razón, ABC and La Vanguardia and how they shape the news agenda, especially through analysis of the breaking news stories of these editions. The research is based on an empirical analysis carried out over two weeks, with a total of 191 front page news stories and 252 tweets analyzed. Amongst the main conclusions, we find that the Ca-

El terme ambient journalism proposat por Hermida (2010) s'aplica a la recerca per comprendre les complexes relacions de consum i producció de la informació a les principals capçaleres espanyoles, com a conseqüència de la funció de les xarxes socials a l'esfera periodística digital. Amb aquest propòsit, s'analitza la influència de Twitter, Facebook i les News Recommendation Engine's (NRE's) a les edicions digitals d'El País, El Mundo, La Razón, ABC i La Vanguardia i la seva configuració de l'agenda-setting, especialment mitjançant l'anàlisi de les breaking-news de les esmentades edicions. La recerca es fonamenta en una anàlisi empírica realitzada durant dues setmanes, amb un total de 191 notícies de portada i 252 tuits analitzats. Entre les principals

talan newspaper La Vanguardia holds a preeminent place amongst the media analyzed with its strategy of promoting social networks and attending to its active audience.

Key words: *ambient journalism, Twitter, Facebook, Social Networks, NRE, agenda setting.*

conclusions constatem la preeminència del diari català La Vanguardia pel que fa a l'estratègia d'impuls de les xarxes socials i l'atenció a l'audiència activa entre els cinc mitjans analitzats.

Paraules clau: *periodisme ambiental, Twitter, Facebook, xarxes socials, NRE, agenda-setting.*

In the year 2010, with the publication of his article “Twittering the News. The emergence of ambient journalism”, Alfred Hermida proposed a term that has proved useful for describing the new setting of online news stories. In case the digital editions of the different media at the international level had not sufficiently altered the sphere of journalism, the arrival of the social networks brought a new redefinition of the field, which required a new term. In this study we analyze the current situation of “ambient journalism” in the Spanish case.

The purpose of this research is to verify the changes taking place in the online media, concretely the Spanish ones, changes that entail a greater audience role (Meso, 2013), bringing about a reshaping of the role of the editor and of the newspaper itself. We set out from the supposition, which we try to confirm in this research, that the basic aspects for understanding this phenomenon are: a) the capacity of the audience to leave its mark on agenda setting thanks to social networks like Twitter; and b) the inclusion of tools in digital editions of the media that facilitate interaction by the audience and empowers it in choosing news stories. To this end we carried out an empirical analysis of the main Spanish newspapers: *El País*, *El Mundo*, *La Razón*, *ABC* and *La Vanguardia*.

One of the goals of this research is to determine the degree of audience involvement with the content of breaking news stories by means of readers' comments (which are published in the online media with or without registering) and the number of times those news stories are shared on personal Facebook or Twitter profiles, in order to gain a deeper understanding of the workings of ambient journalism.

With respect to the study of Twitter, social networks in general and the active audience, it can be said that even though this is a very recent field of research, it already enjoys a high level of thematic specialization. An example of this specialization is the field of politics and social networks, studied by Housholder and LaMarre (2014): how social networks are integrated into political campaigns; as

well as the study by Kensi and Jomini (2006) on the relation between Internet access, interest in political campaigns and national politics, and Twitter (Ausserhofer and Maireder, 2013); and also political participation on Twitter (Bode and Dalrymple, 2014). In keeping with the well-known nature of this microblogging service (cfr. Linares, 2013), such specialization is perfectly logical.

Another field of interest is the study of media complementarity (Scolari, 2009; Dutta-Bergman, 2004), replacing the perspective dealing with competitiveness amongst them. According to Dutta-Bergman, there is currently a tendency amongst readers to complete news stories that interest them by consulting different devices. The use of Twitter for broadcasting television programs to promote interactivity through experiments involving dual viewing of television and Twitter (Cameron and Geidner, 2014) completes the analyses of the inclusion of the option of audience interactivity in television programs through social networks.

Concerning our object of study, it should be noted that different authors focus on: Twitter and active user participation in digital news media, concretely news consumption on multiple platforms (Yuan, 2011); on changes in the mode of consuming news and participation (Thorson, 2008); and on changes in the form of news consumption and reader interaction with journalists (Xu and Feng, 2014); there are also studies concerning the promotion of news media through Twitter accounts (Greer et al, 2011). To a certain extent we adopt the approach of Schmidt and Loosen (2014) concerning the change towards user participation in news, with the eloquent title *Both Sides of the Story*. These authors focus on what they consider to be a shortcoming in research on the relation between journalism and its audience, mainly due to the respective academic traditions that basically focus on production (journalism) and reception (audience). Hermida (2010, 2012, 2013) and Russell et al. (2015) also analyze the relation between Twitter and journalism: Hermida coining the term “ambient journalism” (2010) to refer to the new media sphere of information due to the influence of Twitter and other social networks, and Russell et al focusing on how journalists contribute to setting the news agenda using Twitter.

Finally, but no less important, we focus on the theoretical background, which in our case is the theory of agenda setting and its latest updates. Attention can be drawn to the work of McCombs and Lei Guo regarding the study of agenda setting on social networks. The methodology of analysis they propose consists in applying Social Network Analysis in research on the third level of agenda setting (Guo, 2012; McCombs, 2012). This methodology is being implemented in Spain with the study of Twitter and 15M (Linares, 2013; Serrano, 2014). Research has also been done in Spain on the effect of Agenda Setting in shaping public opinion in today's digital environment (Rubio, 2014), based on an analysis of *El País* and *El Mundo*. The author uses the Trending Topic as a variable to carry out her analysis. The journalist's current role of as gatekeeper has been analyzed by Noguera (2013), through the use of Twitter by relevant journalists. The author relates Hermida's concept of ambient journalism with that of user-focused journalism, and one of his conclusions is that ambient journalism on Twitter “is developing audience activities rather than professional decisions by journalists” (Noguera, 2013: 110).

For their part, Bernal and Congosto (2014) analyze news stories dealing with the latest European election by comparing their publication in Spanish online me-

dia and on Twitter. Trending Topics are one of the variables studied in this case as well, together with the quantity of Tweets. Amongst their conclusions, the authors underscore the predominance of soft news in the online media they analyze, except in the cases of *el diario.es* and *publico.es* (Bernal and Congosto, 2014: 14).

NRES

News Recommendation Engines (NRES) are an interesting area of study due to different factors. The main factor is their location in the digital news medium as a tool that empowers the audience to some extent. We should recall that the audience is key on Twitter; the use of hashtags is a convention developed by users, an example of “end-user innovation”, in the words of Eric von Hippel (Johnson, 2009). Given the characteristics of the “ambient journalism” (Hermida, 2010) that surrounds us, NRES can be considered as tools that allow the reader to regulate news flows, complementing the journalist’s traditional gatekeeping function. Journalists and readers coexist on Twitter “involved in the flow, framing and interpretation of news” (Hermida, 2013: 304).

NRES (like Twitter) are instruments that put into practice Boczkowski’s assertion that the mere fact of reading digital rather than printed newspapers predisposes the reader to play a more active role (2004). Some authors, like Eliasoph (2004), consider that NRES represent the public as an institution. Among other functions, Thorson (2008: 473-476), considers that NRES predispose the reader, making individuals into sources of information.

Unlike self-promotion by the media, or advertising, NRES proceed from the individual diffusion of readers, which is perceived as a sign of reliability by the rest of the readers, leading them to read news stories that they might not have been drawn to without this tool (Thorson, 2008: 476). Another function emphasized by Thorson is “audience power” seen in the capacity to select news stories, whether through NRES that we might term *active* (commenting on news stories in the newspaper’s digital edition, publishing the news stories on Facebook, retweeting or commenting on them) and NRES that we can term *passive* (news stories that are most viewed, most read, most commented on).

The question in our research is whether, although online newspapers conserve a certain power when it comes to setting the news agenda, NRES and active audience participation on Twitter are reducing the traditional and institutional capacity of the media to determine the importance of issues. This change is not a minor one, since if this hypothesis is fulfilled, the media would cease to influence what issues we think about, to paraphrase McCombs and Shaw (1972).

AGENDA SETTING

The appearance of the social networks has had a dramatic influence on the theory of agenda setting, giving rise to certain doubts about whether it is really the media that shape the social agenda, or whether it is users who decide which

current issues are the most important, through trending topics, news items that obtain likes, or hashtags that flood audience profiles and reach leading positions. At the same time, social networks have contributed to increasing the audiences' capacity to personalize the information they consume and the issues that interest them. They have facilitated access to that information and have even become generators of content for the media themselves. The first studies on agenda setting were developed when readers had much fewer options available than they have today (Johnson, 2013).

There have been several examples in recent years where the most important news stories published by media were based on affairs that were the most talked about on different social platforms, producing a change in the process of influence, which now flows from audiences to the media. Trending topics, the issues most talked about and visited, and conversations that arise in the social media provide the details of a much more precise map of the affairs that interest people and about which they really are talking (Orihuela, 2011). What the theory proposes is that the media are capable of transferring the relevance of a news item on their agenda to the public's agenda (McCombs, 1996), graduating the importance of the information they diffuse, giving an order of priority to, and favoring a certain citizen perception of news stories about public life (Meyer, 2009).

On the second level, the media not only channel audience attention towards certain issues, but also towards details that reconstruct those issues. That means to say that they not only tell the public what facts are important, but also what aspects of each fact are most important, always according to how the media professional chooses to frame it following the editorial line established by his or her newspaper.

With the appearance and consolidation of Web 2.0, the employment of digital technologies altered the way users related to Internet. An important number of platforms (blogs, forums, chats), but especially social networks in recent years, changed the Web into a more interactive and participatory space, where users produce content.

The media are progressively coming to realize the importance of listening to the conversations emerging on social media, since they can thus open up the repertory of issues, attract the interest of the audience and can even discover breaking news stories. Thanks to interaction generated by social networks, users can go more deeply into content beyond what the media are saying. From this moment on the audience can publish information, express itself, share, debate, listen or exchange opinions. In short, it can play an active role in ambient journalism.

Nonetheless, there are quite a few authors who recognize that this process of democratization of content production is not free of a certain controversy: social networks not only contribute to changing the way news stories are consumed, but also to the way journalism is realized, the mode of production of the news story. In addition, social networks constitute an ideal means for affecting and generating conversations amongst people concerning news stories, as well as for attracting audiences to the newspaper.

AGENDA SETTING AND THE THIRD LEVEL

McCombs himself observed in 2005 that it is really difficult to determine the direction of influence in agenda setting, because there are multiple contacts between citizens and social networking sites and it thus becomes very complicated to establish a single direction (McCombs, 2005).

We are witnessing an exchange of agendas, what McCombs has termed *intermedia agenda setting* (2005). While the media's agenda continues to orient the public agenda, the public agenda *fed* by their audiences also orients the media's agenda. *Intermedia agenda setting* makes it necessary to enquire about the true role of audiences, who are finding their power to shape the public agenda increasing in a democratic context. What audiences are saying on social networks is starting to be included in the media. The consolidation of social networks means that users are acquiring a new role and that the power that was formerly held by media professionals alone is being distributed to everyone.

The so-called third level of agenda setting has been widened considerably in the recent research of Guo (2012) and Guo and McCombs (2011). This third level is obtained by cross referencing issues of interest to the media and issues of interest to the public, through the application of Social Network Analysis. The change of perspective can also be observed in the research of McCombs and Guo, as they seek how to find out "what elements are at the center in the news coverage and retained by audience members" (Guo, 2012: 628).

METHODOLOGY

Content analysis was the methodology employed for attaining the goals of this research. For this purpose, an analysis was made of the online editions of *El País*, *La Vanguardia*, *ABC*, *El Mundo* and *La Razón* for 14 days between 15th and 28th September 2014, which involved consulting these editions and the social media from 22.00 hours onwards. The choice of these media responded to criteria of representativeness. These are referential newspapers that are considered to have a widespread influence due to their print run and circulation. According to the 2nd wave of the General Media Study (*Estudio General de Medios – EGM*) for 2014, *El País* headed the ranking of the most read newspapers in Spain; in second position came *El Mundo*, the only newspaper that gained readers, followed by *ABC* and *La Razón*. On the other hand, we considered it interesting to include the territorial aspect in order to check whether the factor of proximity produced changes in the results. The inclusion of *La Vanguardia* was due to the application of the criterion of audience, since this is the regional newspaper with the greatest number of readers, even surpassing the national editions of *ABC* and *La Razón*.

Our preference for studying the online version of these leading newspapers also responds to concrete motives. At present these newspapers have an audience of 30.4%, meaning a loss of somewhat over 20 points in the total count of readers in the last two decades. On the contrary, Internet is consulted daily by 50.5% of people who want news. According to data from the Circulation Audit

Office (*Oficina de Justificación de la Difusión – OJD*), the most read online newspaper is *Elmundo.es*, followed by the digital version of *El País*; these are only surpassed by *YouTube* and *Marca*. *Lavanguardia.es* comes in the thirteenth position of the most visited websites, followed three positions lower by *Abc.es*, and in the last position (21) we find the online version of *La Razón*.

The sample was selected on the basis of a quantitative criterion —audience— and a territorial criterion – the national newspapers and the regional newspaper most read offline and online. Starting out from this media sample, the data were codified using a file elaborated by the authors. The design of this tool stemmed from the need to compare the following diverse indicators and related variables: front page news stories, most read news stories (most visited and most commented on), quantity or number of readers' comments or NREs (News Recommendation Engines) in each online medium and on its Twitter and Facebook accounts, news presence on the medium's Twitter (binary 0/1-no/yes analysis with respect to publication of the news story), headline area on Twitter (small, medium, big) and whether it fits the day's trending topic (binary 0/1-no/yes). This analysis pays special attention to the Twitter platform in the social media environment, as it maintains a greater relation, and has more advantages for distributing current news stories and for creating a dynamic dialogue (Domingo *et al.*, 2008; Hermida *et al.*, 2010).

Application of this file made it possible to obtain a large quantity of results related to:

- The current workings of the web versions of the main Spanish newspapers in relation to managing news on social media and the relationship with active audiences.
- Users' responses, uses and attitudes towards news 2.0 proceeding from the referential media.
- The type of mutual influence generated between online media as news senders and publics as receivers and new senders, with a great capacity to energize news and generate opinion around it.

Collecting the breaking news stories of each medium enabled us to know the breadth of its agenda setting, as well as the type of content chosen to present news reality to users. With the goal of understanding how the medium and its users influence each other mutually we used, in the first place, the percentage of breaking news stories found amongst the most read stories, in order to determine the capacity of influence of the medium's agenda setting. In the second place, we counted how many breaking news stories were shared by the medium on social networks —Facebook and Twitter—. Inclusion of this variable enabled us to transfer the influence of the online newspapers' agenda setting to ambient journalism. Finally, we wanted to know the capacity of influence that users of online newspapers might have due to Internet. In a certain way, the new format makes feedback possible in the configuration of the medium itself. This is due to the possibility of minute by minute measurement of the number of visits obtained by each news story, which determines its position on the homepage. For this purpose, we inverted the propo-

sal: in this case it was a question of knowing how many of the news stories read on Twitter were also presented as breaking news in the media.

During the phase of analyzing the results we decided to complete the study's initial methodological design by employing the qualitative technique of semi-structured in-depth interviews (Corbetta, 2003: 347). In particular, it was decided to employ this technique to go more deeply into the specific case of *Lavanguardia.es*, due to the consideration that in this case the interview could contribute additional interest, given the particular results provided by this online medium. In a subsequent phase of analysis, we do not rule out widening the object of study, as well as the indicators, and applying the technique of the in-depth interview to editors, journalists and users.

RESULTS

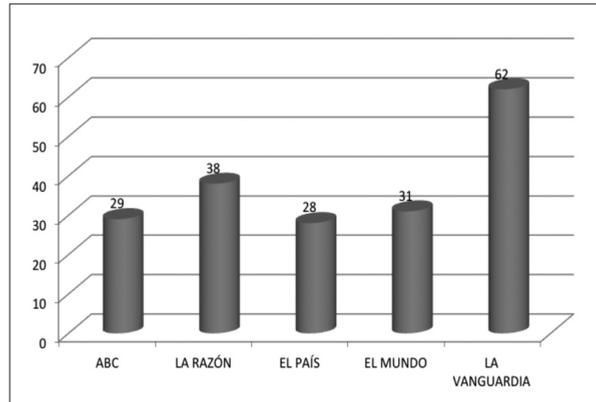
The first notable piece of information in the analysis is the strategy applied by the digital newspapers included in the study when setting their news agenda. The average of breaking news stories found on the homepage of these digital editions is the first feature for profiling their communications policies. In these newspapers, in contrast to what happens in the traditional press, news items of interest are constantly being decided on and updated as new events emerge and come to the attention of newsrooms, and the importance of these stories is established not only by the newspaper editors but also by the audience.

In collecting the data we quantified that during the two weeks of the study *El País* is the digital newspaper with the smallest number of high impact news stories – 28, giving the newspaper an average of two a day. Almost the same figure is given by the digital edition of *ABC* with the publication of 29 breaking news stories, meaning an average of 2 opening news stories per day. These figures are similar to those for *El Mundo*, which reaches 31 opening news stories, giving an average of 2.2. It is followed by *La Razón* with a total of 38 news stories, meaning that the average rises to practically 3 breaking news stories per day. Finally, and with a notably higher average, we find *La Vanguardia* with a total of 62 opening news stories, which raises the daily average to practically 4.5 opening news stories. *ABC*, *El País* and *El Mundo* follow similar strategies in this respect, choosing to provide a smaller number of high impact news stories in exchange for providing these with more space on the front page. *La Razón* applies a similar strategy although it chooses to provide a greater number of breaking news stories in exchange for reducing their spatial impact on the front page. The only newspaper without national distribution included in this study is the one that shows a differentiated strategy: *La Vanguardia* opts to double the number of high impact news stories in comparison to the digital editions of the main national newspapers.

The difference in the result is largely due to the national newspapers providing a single high impact news story when there are news events of great relevance such as, for example, the results of the Scottish independence referendum, the death of the Spanish priest infected with Ebola, García Viejo, the

resignation of the Justice minister, Alberto Ruíz Gallardón, the pro-sovereignty process in Catalonia, amongst others. In these cases the national newspapers opt more clearly than *La Vanguardia* to provide a prominent module for the coverage of such news stories, that is, they set their news agenda in a more concrete and less plural way.

Graph 1. Total breaking news stories per newspaper



Source: elaborated by the authors.

It is also relevant to obtain a more detailed profile of the type of content they provide. For this purpose, we categorized news stories in the thematic blocks of Politics, International, Sports, Economy and Society. By means of these data we can determine not only the diversity of news stories that make up the current events that are given prominence in the digital editions, but also the main type of content provided in these breaking news stories, as is done by other researchers in their analysis (Bernal and Congosto, 2014, for example).

Table 1. Classification of breaking news stories by type of content

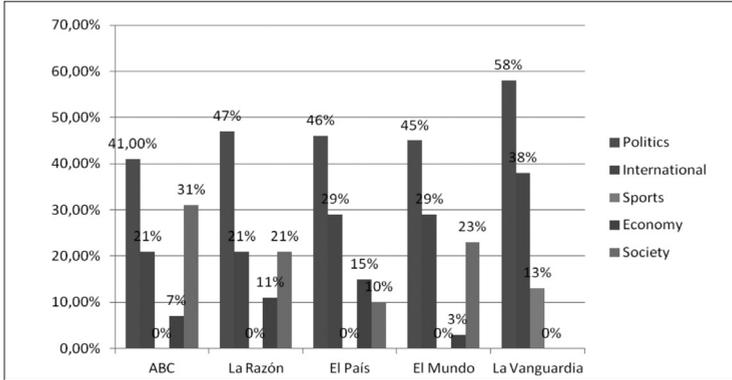
MEDIUM	Politics	International	Sports	Economy	Society	Total
ABC	12	6	0	2	9	29
La Razón	18	8	0	4	8	38
El País	13	8	0	4	3	28
El Mundo	14	9	0	1	7	31
La Vanguardia	36	10	8	0	8	62
Total	93	41	8	11	36	188

Source: elaborated by the authors.

Politics is the main theme provided by the five newspapers included in the study, closely followed by questions of society and international affairs. Economic issues are what occupy the least space in front page news. In relation to news

stories published as breaking news in *La Vanguardia*, which practically double the rest of the media in number, we can observe that they are found in the sections of Politics (36) and Sports (8). The number of political news stories that open the newspaper's digital edition is partly explained by the current political and social situation in Catalonia, and as can be seen this is reproduced in greater detail in the Catalan newspaper than in the rest of the national newspapers.

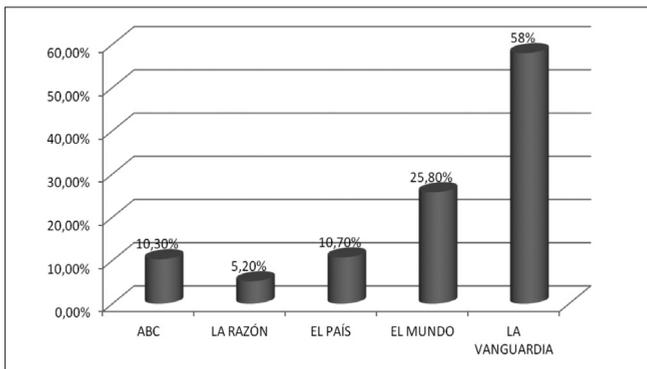
Graph II. Percentage out of total breaking news stories in each newspaper



Source: elaborated by the authors.

The average number of breaking news stories provided by each newspaper becomes more relevant if we cross reference the figures with those concerning the most read news stories of each of these digital editions. We can thus observe the extent to which the newspapers influence their users' news preferences through their agenda setting, where the featured news stories are given prominence on the homepage. As can be seen on Graph III, there are notable differences amongst the digital editions.

Graph III. Percentage of breaking news stories amongst most read stories



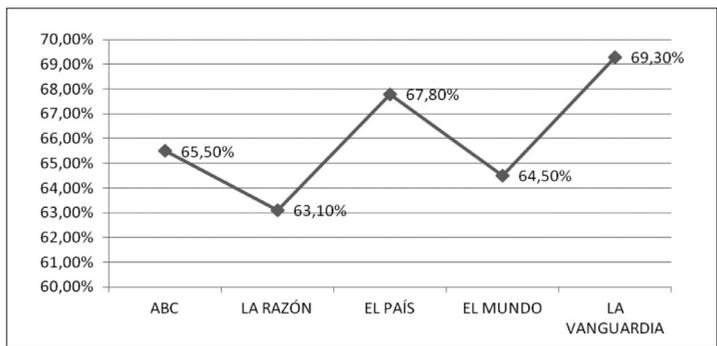
Source: elaborated by the authors.

If we link the percentage of coincidence between breaking news stories and most read news stories, we find that *La Razón* is the newspaper with the least power to influence its readers, since of the 38 opening news stories published on the days of the study, only on two occasions were they also the most read. A central point of this study is the extent to which content analysis enables us to make statements about the power of influence that a newspaper has over its readers, without asking either its editors or its readers about this.

ABC and *El País* obtain a very similar percentage (10.5%). In spite of doubling the percentage of *La Razón*, we also find that the capacity of influence is low. *El Mundo* exceeds the figure of 25% for breaking news stories that are most read. In this case the influence exerted by the newspaper's agenda setting on readers' choice is notably higher. Although the digital edition that unquestionably has the most influence on its users is *La Vanguardia*, where on thirty-six occasions the opening news stories coincided with the most read. Thus, with a coincidence of 58% *La Vanguardia* is the newspaper where we can observe a greater correspondence between the news offer and the interests of its audience. When it comes to determining why users are more interested in going deeper into one type of content rather than others, we find in the first place the personal preferences of audiences. It could be the case that the news items that arouse the greatest audience interest are soft news stories. Several research studies have dealt with this question, some of them concluding that readers usually look for news items with a more personal interest (advice about everyday life, curiosities) in the Internet edition, rather than in the printed newspaper (Tewksbury, 2003; Thorson, 2008: 484; Bernal and Congosto, 2014: 14).

The need to establish this classification confirms that in today's context, where the design of the day's news stories carried out by newspapers seems to have less and less influence in determining the content most followed by their users, it is worth analyzing whether that power to determine what is and what isn't a news story has moved to social networks. With this aim, in this study we counted how many breaking news stories were promoted on the Twitter social network by the newspaper.

Graph IV. Publication of breaking news stories on Twitter



Source: elaborated by the authors.

As we can see in Graph IV, the data show a greater homogeneity amongst the newspapers than in the previous cases. About 65% of breaking news stories were also promoted by the newspaper itself through the Twitter social network; that is, the agenda setting of newspapers in their digital editions coincides only relatively with how they spread the agenda in their social profiles. Probably the strategy followed by the media when publishing news stories on Twitter consists in spreading the news stories they consider most attractive to their readers.

The absolute data, expressed in percentage form in the graph, indicates that *La Vanguardia* is the newspaper that shows a greater affinity between the news stories it chooses to feature on its homepage and on its Twitter profile, where it shared 43 of the 62 breaking news stories included in the study. It is followed by *El País*, with a promotion through Twitter of 19 of its 28 high impact news stories. We find *ABC* has very similar figures, with the publication of 19 of its 29 breaking news stories, as does *El Mundo*, which shares 20 of the 31 leading stories featured on its front page on Twitter. Finally, the newspaper that shows the least similarity, although the percentage is not very significant, is *La Razón*. This newspaper applies a somewhat different strategy in its digital edition, as it published 38 breaking news stories, and in its profile on Twitter, with 24 tweets about the newspaper's opening news stories.

As occurs in the design of agenda setting on the homepage, which involves placement, typographic size or accompaniment with images, the newspapers employ similar resources when diffusing content on their respective social profiles. They do not only emphasize more relevant tweets thanks to the size of lettering, but these elements also serve as a vehicle for catching the attention of users and redirecting them to the URL of the digital edition of the newspaper or for encouraging a retweet by readers. To obtain a better understanding of the policy applied by the digital editions of *ABC*, *La Razón*, *El País*, *El Mundo* and *La Vanguardia* on social networks, we counted how many of the tweets put out on breaking news stories had a small, medium or big typographic size.

Table II. Typology of tweets put out by each newspaper: size

MEDIUM	SMALL TWEET	MEDIUM TWEET	BIG TWEET
ABC	9	9	13
La Razón	6	4	30
El País	23	0	17
El Mundo	15	5	28
La Vanguardia	55	4	34

Source: elaborated by the authors.

While we noted greater similarities in the design of the agenda setting on the homepages of the national newspapers' digital editions, differences could be appreciated in the strategy they employ on the Twitter social network. *ABC* and *La Razón* employ a similar tactic, opting to use big typography in their tweets, a practice that is more habitual in *La Razón*. For its part, *El País* makes grea-

ter use of small typography, which is what appears by default on the Twitter application, or moves directly to the big size. *La Vanguardia* also opts more frequently for small typography and employs medium-sized typography on very few occasions. For its part, *El Mundo* is more inclined to write in big type. Thus, each newspaper adopts a differentiated position in the use of typography. With respect to the quantity of tweets published, *La Vanguardia* continues to head the list with 93.

Users who decide to follow current news through the Twitter profiles of the mainstream newspapers find that the visibility of news stories is determined above all by the typography of the letters used in the one hundred and forty characters of the tweets. 92% of the content shared on Twitter is made up exclusively of textual elements in which the only design resource enabling more relevant texts to be differentiated from less relevant ones is the size of the typography used. In spite of the typography's making it possible to differentiate the visibility of tweets on a three level scale, barely 8% correspond to medium size. Thus, the universe provided to users is formed of tweets that are either very relevant or of normal relevance. That is, the importance of news stories on the Twitter social network is limited to two levels: in the case of this study, on 44.5% of occasions the content was very outstanding while on 40% it involved questions to which the medium did not give excessive prominence.

Once we had established in greater detail the type of strategy employed by the main digital newspapers on social networks and the type of content most followed by users on the newspapers they read, we thought that it would be interesting to relate the two variables, in order to observe the influence that agenda setting by the news media had on their readers and vice versa. The first information in this respect can be obtained by determining how many times any one of the most visited news stories in the digital media became a trending topic during that day. The relationship between the two variables was more than relative; the news media have a moderate influence in shaping public opinion, since in no case does the percentage of coincidence between the newspaper's breaking news stories and the day's trending topic rise above 25%. *La Vanguardia* reaches this figure of 25% – 16 of its 62 breaking news stories were trending topics. It is followed by *El País* and *El Mundo* with a percentage of coincidence that oscillates around 20% in both cases. We find *La Razón* a mere one point below. The newspaper with the least influence in generating dialogue around relevant issues is *ABC*, with close to 14%.

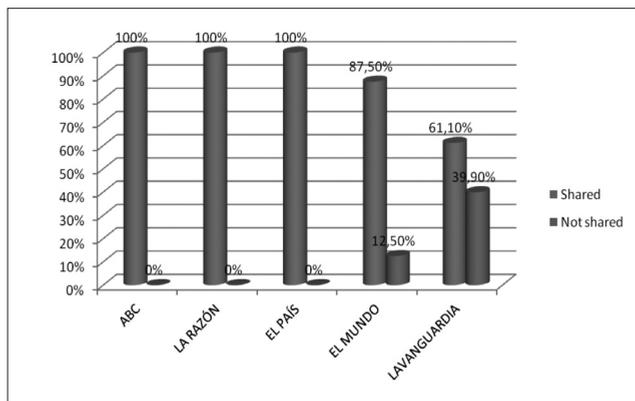
To discover the importance of good content management on social networks as a platform for attracting users, we counted how many times breaking news stories selected by the newspaper were found amongst most read news stories. With this figure we know the newspaper's capacity to determine its public's perception of current events. We also counted how many of the most read opening news stories were shared on Twitter and how many were not, in order to discover whether there was a relation between being present on social networks and obtaining a greater number of visits.

Table III. Most read news stories shared (and not shared) on Twitter

MEDIUM	MOST READ BREAKING NEWS STORIES	TOTAL MOST READ SHARED ON TWITTER	TOTAL MOST READ NOT SHARED ON TWITTER
ABC	3	3	0
La Razón	2	2	0
El País	3	3	0
El Mundo	8	7	1
La Vanguardia	36	22	14

Source: elaborated by the authors.

The newspaper with the greatest affinity with, or capacity to influence, the preferences of its audience is *La Vanguardia*, where there is a coincidence of over 50%. In the other mainstream national newspapers the capacity of the media to determine the interest of their audiences is much more limited. *El Mundo* stands out slightly, reaching 25%. In the cases of *ABC* and *El País*, only 10% of their opening stories are the most read, and in the case of *La Razón* the figure is barely 5%. It is striking that the capacity of the mainstream Spanish press to set the news agenda of its readers is minimal. The most read news stories shared on Twitter indicate a correspondence between the strategy of the newspapers on social networks and the news stories of interest to readers.

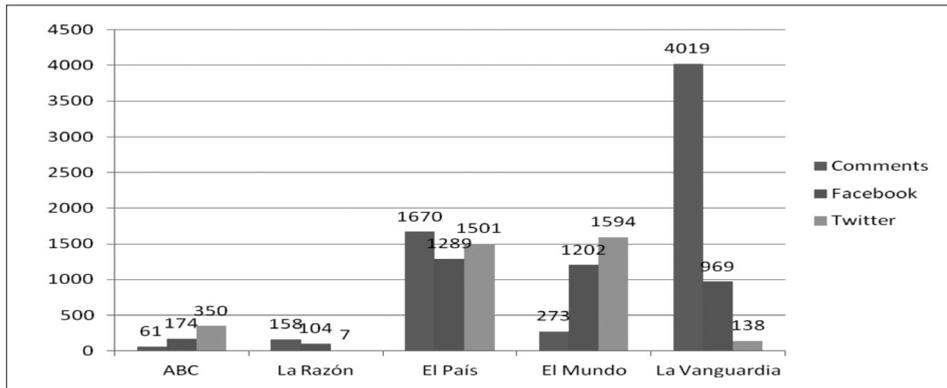
Graph V. Percentage of most read news stories shared (and not shared) on Twitter

Source: elaborated by the authors.

There is a direct relationship between the publication of breaking news stories on the Twitter social profile of the newspapers and that content's being found amongst the most read stories of the newspapers (see Graph V). This happens in 100% of cases in *ABC*, *La Razón* and *El País*. In the case of *El Mundo* the relationship is not so clear cut and on 12.5% of occasions the most read news stories were not shared on Twitter. Once again we find a difference in the case of *La Vanguardia*, where readers' preferences are not determined to such an extent by the fact that

these are available on Twitter. This is probably due to two factors: in the first place, the quantity of news stories in *La Vanguardia* is much higher than that of the newspapers that obtain 100%, since greater quantity produces greater variability. The second reason is that we can deduce that the public of *La Vanguardia* goes directly to the homepage, while in the rest of the newspapers a presence on social networks appears to be a channel for attracting users.

Graph VI. Daily media participation by the audience



Source: elaborated by the authors.

The analysis of volume of participation and channels preferred by the audience of each of the newspapers to exercise such participation provides very different data. In *ABC*, Twitter is the social platform most used by readers for sharing the newspaper's stories. In any case, participation by this newspaper's users is very low in comparison with the other national media. *La Razón*, where comments are the means most employed by users for participating, is the online newspaper with the lowest index of audience involvement through interactive elements. For their part, the readers of *El País* use the three channels analyzed—Comments, Facebook and Twitter—and their level of participation is high. In the case of *El Mundo*, however, the audience is more inclined to use social networks and less inclined to emit comments. The opposite occurs in the case of *La Vanguardia*, which is once again differentiated from the rest with a level of comments that is greater than all the newspapers analyzed here, with high levels of participation.

In reply to a semi-structured qualitative interview,² the manager in charge of participation at *Lavanguardia.es*, Toni Rubies, considers that the audience has a considerable influence over the media at present, that media are indebted to it, are interested in what it has to say, and that greater participation by users means greater involvement. Given these circumstances, the Catalan newspaper considers that the efforts made to moderate the debate are profitable, efforts that have increased significantly since 2006, when management of audience participation started at *La Vanguardia*. Another factor that should be borne in mind to

understand the data of this study is the current political situation in Catalonia.³ It would be worth analyzing the extent to which political reality influences the increase of news stories published or retweeted on the issue.

CONCLUSIONS

With a coincidence of 58%, *La Vanguardia* is the newspaper where we can observe the greatest correspondence between the news offer and the interests of its audience (breaking news stories/most read news stories). About 65% of the breaking news stories were also promoted by the newspaper itself through the Twitter social network, with the audience being provided with what the newspaper's editors thought that it wanted. It is striking that the capacity of the mainstream Spanish press to set the news agenda of their readers is minimal, when the most read news stories are placed in relation to those most shared on Twitter. *La Vanguardia* is an exception. There is a direct relationship between publication of breaking news stories on the Twitter network profile of the newspapers and that content's being found amongst the newspapers' most read stories. With respect to average daily participation by the audience, *La Vanguardia* is once again differentiated from the rest with a level of comments greater than all the newspapers analyzed here, with high rates of participation.

The goal of this study was to obtain a better understanding of the way ambient journalism functions in the main Spanish newspapers, especially observing the strategy of these media on the Twitter social network and audience response to these strategies. In this way, we answered some of the following questions posed:

- What is the power of the active audience? We observe whether or not the active audience has power through its reaction to the strategy of the media. For example, the most read news stories can be shared (or not) on Twitter. A positive result of the relation between the most read news stories shared on Twitter indicates a positive correspondence of the strategy of the media, which in this case is fairly low in general terms (5%-25%), with the exception of *La Vanguardia* (50%).
- With respect to the audience's preferences regarding the use of social networks, in the majority of cases we observe some homogeneity in the use of social networks. That is, the audience's use of the three (Facebook, Twitter and the medium's Comments) is generally small in the case of *ABC* and *La Razón* – not reaching a total of 500 comments; or they can be widely used, as in the case of *El País*, *El Mundo* and *La Vanguardia* (oscillating between 130 and 1670 comments). Once again it is *La Vanguardia* that provides different results in the quantity of comments in the medium (4019), which can be explained by the strategy of this medium alluded to in the interview with Rubías.
- The role of the journalist as gatekeeper, the role of the medium as editor. The majority of breaking news stories analyzed correspond to the Politics

section (93), followed a long way behind in second place by International and Society, which respectively do not have half the number of news stories (in the case of International) or a third (Society). Bearing in mind, as already stated, that current studies of this issue are concerned with the predominance of soft news, this would not be applicable in this case, and therefore it would be the medium's role as editor that takes precedence, insofar as it considers political news stories to be of interest to its readers.

- Is agenda setting by the media effective? How do the media promote their news stories on social networks? This question is one of the most complex to answer, and to do so we will use some of the variables analyzed. On the one hand, a low capacity of influence by the media on public opinion can be observed, as there is little coincidence between most read news stories and breaking news stories in general terms (percentages oscillate between 5% and 29%). *La Vanguardia* stands out with 58%. On the other hand, no relation is observed between these strategies of the media and the shaping of public opinion, or at least not if this is translated into a newsworthy event becoming a Trending Topic, since in no case does the coincidence between the medium's breaking news stories and the day's Trending Topic exceed 25%. Finally, we observe that the promotion of breaking news stories on their Twitter accounts by the media themselves is the sole homogeneous figure in this study, with an average of 65%. That is, in the cases analyzed the media have an interest in promoting 65% of their front page news on the Twitter social network. It should also be recalled that, from the formal point of view (size), prominence is given to the content of Tweets in 44.5% of the cases analyzed here, in order to increase the reader's interest.

Anna Tous Rovirosa has a PhD in Journalism from the Universitat Autònoma de Barcelona (UAB), where she is a lecturer in the Department of Journalism and Communication Sciences. Her research lines focus on online journalism,

media convergence and television fiction. She won the II Prize of the Consell Audiovisual de Catalunya. She has been a visiting lecturer at the University of the Ruhr (Germany) and the Federal University of Bahía (Brazil).

Diana Rivero Santamarina has a PhD in Journalism from the Universidad del País Vasco (UPV/EHU), where she is a lecturer in the Department of Journalism II. Her re-

search lines focus on women in the mass media and the changes brought to content, professionals and audiences by the new digital setting.

Koldobika Meso Ayerdi has a PhD in Journalism from the Universidad del País Vasco (UPV/EHU), where he is a senior lecturer in the Department of Journalism II. His research

lines focus on online journalism, audiences, content, interactivity and social networks. He is currently directing a project funded by the Ministry of Science and Competitiveness.

Ainara Larrondo Ureta has a PhD in Journalism from the Universidad del País Vasco (UPV/EHU), where she is a lecturer in the Department of Journalism II. Her research lines focus on online journalism, media convergence and the gender perspective. She is the head

researcher of the project (EHUA13/10) and is involved in several projects of the Ministry of Science and Competitiveness (CSO2012-39518-C04-03), the Basque government (GIU13/13) and the UPV/EHU (UFI 11/21).

Notes

¹ This study was carried out in the framework of the research project “Audencias activas y periodismo. Análisis de la calidad y la regulación de los contenidos elaborados por los usuarios” (CSO2012-39518-C04-03) and the project “Estrategia y gestión comunicativa 2.0 de los partidos políticos en el País Vasco. Implicaciones para medios y público” (EHUA13/10).

² Extracts from the interview with Toni Rubies (28/5/2014), the manager in charge of participation at Lavanguardia.es in the framework of the research project “The 2014 European Parliament elections: Scotland and Catalonia in Spanish public media”, by Javier Díaz Noci and Anna Tous-Rovirosa, presented at the Seminar “The 2014 European Parliament

elections: Scotland and Catalonia in Spanish public media”, organized by Irati Agirreazkue-naga and Phillip Schlessinger in the University of Glasgow, June 2014, carried out in the framework of the research project “Audencias activas y periodismo. Análisis de la calidad y la regulación de los contenidos elaborados por los usuarios” (CSO2012-39518-C04-03).

³ The news stories published on the “Catalan process” were: the pro-sovereignty consultation of 9 November in Catalonia and the approval of the Referendum Law (19/9/2014), the meeting of the Council of State to block the consultation (27/9/2014), the call for the consultation by Mas (27/9/2014) and approval of the appeal of unconstitutionality against the consultation (28/9/2014).

References

- Ausserhofer, J. & Maireder, A. (2013). “National Politics on Twitter”. *Information, Communication & Society*, 16: 3, p. 291-314.
- Bernal, A.I. & Congosto, M.L. (2014). “Campana electoral de las elecciones europeas: Medios de comunicación vs. Viralidad de la red”. III Congreso Internacional en Comunicación Política y Estrategias de Campaña, 24-27 de septiembre de 2014, Santiago de Compostela. Santiago de Compostela: Asociación Latinoamericana de Investigadores en Campañas Electorales.
- Boczkowski, P. (2004). *Digitizing the News*. Cambridge: MIT Press.
- Bode, L. & Dalrymple, K. (2014). “Politics on 140 Characters or Less: Campaign Communication, Network Interaction, and Political Participation on Twitter”. *Journal of Political Marketing*. DOI: 10.1080/15377857.2014.959686.
- Cameron, J. & Geidner, N. (2014). “Something Old, Something New, Something Borrowed From Something Blue: Experiments on Dual Viewing TV and Twitter”. *Journal*

of *Broadcasting & Electronic Media*, 58: 3, p. 400-419.

Corbetta, P. (2003). *Metodología y técnicas de investigación social*. Madrid: McGraw Hill.

Domingo, D. [et al.] (2008). "Participatory Journalism Practices in the Media and Beyond: An International Comparative Study of Initiatives in Online Newspapers". *Journalism Practice*, 2, 3, p. 326-342.

Dutta-Bergman, M.J. (2004). "Complementarity in Consumption of News Types Across Traditional and New Media". *Journal of Broadcasting and Electronic Media*, 48: 1, p. 41-60.

Eliasoph, N. (2004). "Can we Theorize the Press Without Theorizing the Public". *Political Communication*, 21-3, p. 297-303.

Greer, C.F. [et al.] (2011). "Using Twitter for Promotion and Branding: A Content Analysis of Local Television Twitter Sites". *Journal of Broadcasting & Electronic Media*, 55: 2, p. 198-214.

Guo, L. & McCombs, M. (2011). "Network Agenda Setting: A Third Level of Media Effects". Paper presented at the ICA, Boston.

Guo, L. (2012). "The Application of Social Network Analysis in Agenda Setting Research: A Methodological Exploration". *Journal of Broadcasting & Electronic Media*, 56:4, p. 616-631. DOI: 10.1080/08838151.2012.732148

Hermida, A. (2010). "Twittering the News. The Emergence of Ambient Journalism". *Journalism Practice*, 4:3, p. 297-308.

—. (2012). "Tweets and Truth: Journalism as a Discipline of Collaborative Verification". *Journalism Practice*, 6(5-6), p. 659-668.

—. (2013). "#JOURNALISM: Reconfiguring Journalism Research about Twitter, One Tweet at a Time". *Digital Journalism*, 1 (3): p. 295-313.

Householder, E. & LaMarre, H. (2014). "Facebook Politics: Towards a Process Model for Achieving Political Source Credibility Through Social Media". *Journal of Information Technology & Politics*, 11: 4, p. 368-382.

Johnson, S. (2009). "How Twitter Will Change the Way We Live". *Time*, <[\[liamwolff.org/wp-content/uploads/2014/01/johnson-time-2009.pdf\]\(http://liamwolff.org/wp-content/uploads/2014/01/johnson-time-2009.pdf\)> accessed 15 January 2015.](http://wi-</p>
</div>
<div data-bbox=)

Johnson, T. (ed.) (2013). *Agenda Setting in a 2.0 World: New Agendas in Communication*. New York: Routledge.

Kensi, K. & Jomini, N. (2006). "Connections between Internet Use and Political Efficacy, Knowledge and Participation". *Journal of Broadcasting & Electronic Media*, 50:2, p. 173-192.

Linares, J. (2013). "El 15-M en España y los flujos de información: medios, entornos y relatos. Del 9 de febrero al 19 de junio de 2011". Master's Dissertation directed by Javier Díaz Noci. Universitat Pompeu Fabra.

McCombs, M. (1996). "Influencia de las noticias sobre nuestras imágenes del mundo". In: Bryant, J. and Zillmann, D. *Los efectos de los medios de comunicación. Investigaciones y teorías*. Barcelona: Paidós, p. 13-34.

—. (2005). "A Look at Agenda Setting: past, present and future". *Journalism Studies*, 6, (4), p. 543-557.

—. (2012). "Do the Media Tell Us What to Think About?" DeFleur, M.L. *Distinguished Lecture*. Boston University.

McCombs, M. & Shaw, D.L. (1972). "Agenda-Setting Function of Mass Media". *Public Opinion Quarterly*, 36(2), p.176-187.

Meso, K. (2013). "Periodismo y audiencias: inquietudes sobre los contenidos generados por los usuarios". *Cuadernos.info*, 33, p. 63-73. DOI: 10.7764/cdi.33.515.

Meso, K. [et al.]. "Del porqué las redes sociales revolucionan la agenda setting de los medios". XX Congreso Internacional de la Sociedad Española de Periodística, Universitat Pompeu Fabra, Barcelona, 2014. *Periodística*.

Meyer Rodríguez, J.A. (2009). "Establecimientos de agendas en medios de comunicación: Repercusiones del escándalo mediático Marín-Nacif-Cacho". *Revista Latina de Comunicación Social*, 64, p. 15-28. [Online] <http://www.revistalatinacs.org/09/art/02_801_05_Puebla/Jose_Antonio_Meyer_Rodriguez.html> (accessed 2 May 2014).

- Noguera Vivo, J.M. (2013). "How Open Are Journalists on Twitter? Trends towards the End-User Journalism". *Communication & Society*. Vol. XXVI, n. 1, p. 93-114.
- Orihuela, J.L. (2011). "Los trending topics como el nuevo agenda setting". [Online] <<http://www.abc.es/blogs/jose-luis-orihuela/public/post/los-trending-topics-como-el-nuevo-agenda-setting-8123.asp>> (accessed 2 May 2014).
- Rubio, R. (2014). "Twitter y la teoría de la Agenda Setting: mensajes de la opinión pública digital". *Estudios sobre el Mensaje Periodístico*. Vol. 10, n. 1, p. 249-264.
- Russell, M.F. [et al.] (2015). "Who Sets the News Agenda on Twitter". *Digital Journalism*. DOI: 10.1080/21670811.2014.995918.
- Schmidt, J.H. & Loosen, W. (2014). "Both Sides of the Story". *Digital Journalism*. DOI: 10.1080/21670811.2014.930243.
- . (2015). "Both Sides of the Story: Assessing audience participation in journalism through the concept of inclusion distance". *Digital Journalism*, 3(2), p. 259-278.
- Serrano, E. [et al.] (eds.) (2014). *15MP2P. Una mirada transdisciplinar del 15M*. Barcelona: UOC-IN3.
- Scolari, C.A. (2009). "The Grammar of Hypertelevision: An Identikit of Convergence-Age Fiction Television (Or, How Television Simulates New Interactive Media)". *Journal of Visual Literacy*, 28 (1), p. 28-49.
- Tewksbury, D. (2003). "What do Americans really want to know? Tracking the behavior of news readers on the internet". *Journal of Communication*, 53 (4), p. 694.
- Thorson, E. (2008). "Changing Patterns of News Consumption and Participation". *Information, Communication & Society*, 11(4), p. 473-489. DOI: 10.1080/13691180801999027.
- Vargo, C.J. [et al.] (2014). "Network Issue Agendas on Twitter During the 2012 U.S. Presidential Election". *Journal of Communication*, 64, p. 296-316.
- Xu, W.W. & Feng, M. (2014). "Talking to the Broadcasters on Twitter: Networked Gatekeeping in Twitter Conversations with Journalists". *Journal of Broadcasting & Electronic Media*, 58: 3, p. 420-437.
- Yuan, E. (2011). "News Consumption Across Multiple Media Platforms". *Information, Communication & Society*, 14: 7, p. 998-1016.