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## Strategies of the Spanish press in the face of the Twitter algorithm change. Analysis of tweets published between 2018–2020

**Abstract**

Twitter recently celebrated its 15<sup>th</sup> anniversary. During this period, the platform has gone through several phases, culminating in a record number of subscribers and profits in 2021. Twitter is a household name all over the world and people know what it can or cannot provide, independent of the future growth that it may experience with new investments and updates. This article aims to verify two interrelated hypotheses, namely: the Spanish press already knows how to optimise the social network Twitter, as three decades have elapsed since its launch; and, secondly, the algorithm modification implemented by Twitter in 2018 has triggered a change in the positioning of the headers studied in this social network. In order to demonstrate both, the object of analysis will be conducted by a mixed approach through quantitative statistical processes (which will study the number of impacts and retweets and likes obtained), and inductive qualitative methods such as semi-structured interviews. This multidisciplinary approach will provide a more complete and in-depth analysis of the phenomenon. The research focuses on the period between 2018 and 2020, and addresses the participation on Twitter of the four main traditional newspapers (*El País*, *La Vanguardia*, *ABC* and *El Mundo*) as well as four native digital newspapers (*20 Minutos*, *El Español*, *elDiario.es* and *El Huffpost*). The analysis comprises more than 1.5 million tweets among the eight chosen newspapers.

**Keywords**

**Twitter, social media, journalism, digital platforms, digital media.**

### 1. Introduction

In March 2021 it will be fifteen years since Jack Dorsey, CEO of Twitter, launched the platform's inaugural tweet. The social network had already exceeded one billion tweets just three years after its inception in 2006, when the Spanish version and the retweet action were launched. This was the moment when the most relevant media companies in the United States would embrace micro-blogging (Swasy, 2016). Society was beginning to communicate massively in 140 characters and journalism accepted the potential of Twitter to connect with its audience (Arrington, 2008; Ingram, 2008; Arhi, 2009; Butcher, 2009).

The second turning point came around 2011, the year in which, for the first time, the figure of one billion tweets was reached in a week. What initially took three years was now achieved in just seven days. Twitter already had 100 million active subscribers, who in fact provide significant benefits (Kiss, 2011). All eyes were on the American company, and it was then that numerous academic research studies analyzing the boom and the impact of this novel form of communication on journalism would see the light of the day (Hermida, 2010; Boyd *et al.* 2010; García-de-Torres *et al.* 2011; Holcomb *et al.* 2011; Lasorsa *et al.* 2012; Mitchel, 2013).

The third notable milestone coincides with the arrival of Donald Trump in the White House in 2017. At that time, a vertiginous increase in the number of active customers and revenues was expected due to the visibility that the president gave to this social network year after year, as he gradually increased his number of annual tweets (Carlisle, 2019; Dale, 2019; Bump, 2019). This prediction was not entirely accurate, since the increase in audience that Twitter experienced did not translate into large economic benefits (Frommer & Wagner, 2017). However, Trump's use of the social network between 2016 and 2019 redefined the relationship of politicians with social networks (Simon, 2016; Ingram, 2017; Shear *et al.* 2019). The former American president found on Twitter the ideal mechanism to attract the attention of citizens and media to his figure even for the most trivial matters (Carr, 2018). It should be added that journalism, since the birth of social networks in general, and Twitter in particular, has been generating a new synchrony with the public (Swasy, 2016). Two lines –media and politics and media and citizens–, which in social networks were in full reconfiguration before Trump's arrival to the presidency, but which, during his term, assumed the need for their accelerated redefinition (Yeste & Franch, 2018).

Although Twitter has been innovating periodically with updates to the platform, it was the one implemented in 2018 that had a great impact. Among all the measures introduced, the most relevant one lies in the insertion of a new hierarchy based on ranked feeds. A timeline based on reverse chronological order and another based on the most popular and relevant content would coexist giving the user the possibility of switching from one to the other. This new hierarchy was first introduced in 2016 (Romano, 2018) and was improved a year later. However, its existence has always been conflicting, because it came to compete with what many think is one of Twitter's strengths: immediacy (Swasy, 2016). This purpose would come to be achieved with a reverse timeline, which has given rise over time to the irruption of another great dilemma: the huge flow of information on the network and the possibilities of managing it. Hence, users began to use acronyms such as ICYMI (In Case You Missed It) to catalog information they considered most essential, "what you can't miss." Thus, by offering both possibilities, Twitter also provided the public more control over the information consumed (Huang, 2016).

Thus, because of the 2018 update, the audience became able to choose whether to opt for those posts that have achieved the highest number of reactions and responses from the audience or for the most immediate, simply with a click. While this algorithm update has made it possible to avoid the most popular tweets, it has also introduced other possibilities in the way of operating on Twitter that many accounts, large or small, have not missed, but rather have modified their strategy or positioning on the social network, as reflected in this research.

During the pandemic, more specifically in the last quarter of 2020, Twitter experienced higher than expected growth (Needleman, 2021). Even more remarkable are the numbers for the first four months of 2021, as they announce the daily connection of 199 million users providing economic benefits through the purchase of Twitter products. In other words, they are talking about 5 million extra people since December 2020, which increase the company's profits to over a billion dollars: a 28% increase compared to the previous year (Goldsmith, 2021). Considering the monthly number of active users on the network, both those who return

economic benefits and those who do not, the figure is around 320 million individuals connecting to Twitter each month in 2021.

Despite the fact that research analyzing the Twitter platform already exists (Java *et al.* 2007; Cheng *et al.* 2009; DeVoe, 2009; Johnson, 2009; Requejo-Alemán & Herrera-Damas, 2011), it is worth highlighting, as a competitive advantage, its ease of establishing connections between unknown users, a fact that potentially contributes to interaction between individuals. Not in vain, Twitter's co-founder, Biz Stone, remarked in 2021 the inclusive nature of the platform: "There is nothing like Twitter [...] you can watch TikTok videos, access news and even see tweets" (Iglesias, 2021). Twitter would seem to bring together everything and everyone, mainly due to the absence of limits to the approach between stakeholders.

After these years in the market since its birth, the social network Twitter continues to be a platform with future projection that, like the rest of the social networks, has been growing in parallel with the increase of time that users spend connected to their cell phones.

### 1.1. *The importance of the mobile phone for Twitter*

Social networks and news consumption through mobile terminals are experiencing powerful growth year after year, as shown by data revealed in the 2020 Pew Research, published earlier this year. In the United States, more than 8 out of 10 adults consume news on digital devices (Shearer, 2021). The Reuters Digital News Report, 2021, determines the fall of news consumption on computers for another year, against the respective rise of news reading on the cell phone.

In parallel, internet customers are growing year by year. The 2015 and 2020 Cisco Annual Internet Reports reveal a rise from 2.8 billion Internet citizens in 2014 to 4.7 billion in 2021, with a forecast growth of around 5.3 billion in 2023. In other words: 66% of the world's population will have an internet connection in just two years. Connections from mobile devices maintain an upward trend year after year, as can be seen in Graph I. As of 2019, more than half of internet traffic is generated from the mobile device. The average time an individual spends connected to the network via mobile is increasing year by year (Ditrendia 2020 report). This inclination augurs a systematic growth that will be favored by the use given to the terminal and improvements in data transfers. This fact has been reflected in the average speed increase in mobile connections in 2018, which was 13.2 Mbps and is estimated to triple by 2023, reaching 43.9 Mbps. In addition, the power of 5G will rise, reaching 575 Mbps (Cisco Annual Internet Report, 2020). These data outline a scenario in which technology will no longer be a difficulty but, rather, the solution for the enjoyment of mobile Internet connections. In addition, its development will boost the increase in data traffic, connection time from these terminals and, therefore, the consumption of news on social networks. Almost half of the world's population actively uses some type of social network, which means that social platforms have a high level of social penetration. The increase in the use of Facebook, Youtube, WhatsApp, Messenger, Wechat, Instagram or TikTok is worth noting. These networks already have a great weight in the daily routines of society and are present and future business niches that are becoming more and more important in media strategies to attract new audiences.

## 2. Objectives

The main objective of this paper is to study the use of Twitter by the Spanish press. From this main objective emanate other specific objectives: 1) to analyze the work that the press is doing on this social network; 2) to know whether the Spanish media are optimizing the potential of the platform; and 3) to ascertain whether there has been a change in the strategy of these media impacted by the change of Twitter algorithm in 2018.

From these specific objectives arise some research questions that will guide us towards the working hypotheses: is the Spanish press backing this platform intensely enough to make

news public? Does its use provide the return it should? Are they fully aware of its growth and future forecasts? What kind of strategy have they chosen to convey their message? There are many questions that could be asked about the use that the national press is making –or will make in the future– of Twitter, and to find an answer to them, this research has been structured in two central hypotheses:

- 1) The Spanish press is aware of the opportunities that Twitter offers, has incorporated them into its routines and is fully aware of all that it offers for the sector.
- 2) The Spanish press has made a change of positioning on Twitter since 2018.

### **3. Methodology**

To confirm or refute these hypotheses, a mixed approach is proposed (Chen, 2006; Johnson & Onwuegbuzie, 2004) that combines quantitative and qualitative procedures, as it is thought to favor a more complete and in-depth analysis (Creswell, 2009) of the phenomenon to be investigated. Numerical measurements and statistical analysis of the data are practiced through sequential and evidential processes, which are common in the quantitative approach, but are complemented by inductive methods typical of the qualitative approach, such as semi-structured interviews.

This research collects the Twitter trajectory of eight Spanish newspapers in Spanish from 2018 to 2020; three years of observation that has led to the extraction of more than 1.5 million tweets from the official accounts on this platform of the chosen media.

The selection of the newspapers has been carried out based on three variables that seem transcendent for the work:

- A. They are generalist newspapers
- B. They are the newspapers with the largest number of followers on Twitter.
- C. Their action and visibility on Twitter are remarkable

Therefore, following the above conditions and with the aim of addressing a wide range of variants, four traditional newspapers (*El País*, *La Vanguardia*, *ABC* and *El Mundo*) and four native digital newspapers (*20 Minutos*, *El Español*, *elDiario.es* and *El Huffpost*) have been chosen.

Thus, in a first phase, the headers mentioned will be evaluated by means of descriptive and inferential data analysis following the following steps:

1. Quantification of the number of tweets disseminated during the period.
2. Quantification of the number of retweets and likes given by the audience to the tweets.
3. Qualification of formal elements that structure the tweet; for example: number of words, use of emojis, hashtags and most repeated tags in the tweets.

In a second phase of the research, part of the information extracted from five semi-structured interviews carried out with the heads of the media studied will be presented to contrast and qualify the results obtained from the quantitative data analysis.

Finally, we have extracted the tweets of the selected newspapers from Tweet Binder, one of the official Twitter metrics providers. In 2015, Twitter bought the company Gnip which specialized in archiving tweets published on this social network. Since then, it has distributed its information that it markets through third-party companies advertised on its website. Once obtained the more than 1.5 million tweets and their corresponding number of likes, retweets and most-used hashtags generated between 2018 and 2020 we proceeded to sort and count the data by running a dynamic analysis with all the information achieved. Manipulating and processing these amounts of data –more than 10 million– has been one of the great technical challenges of this research.

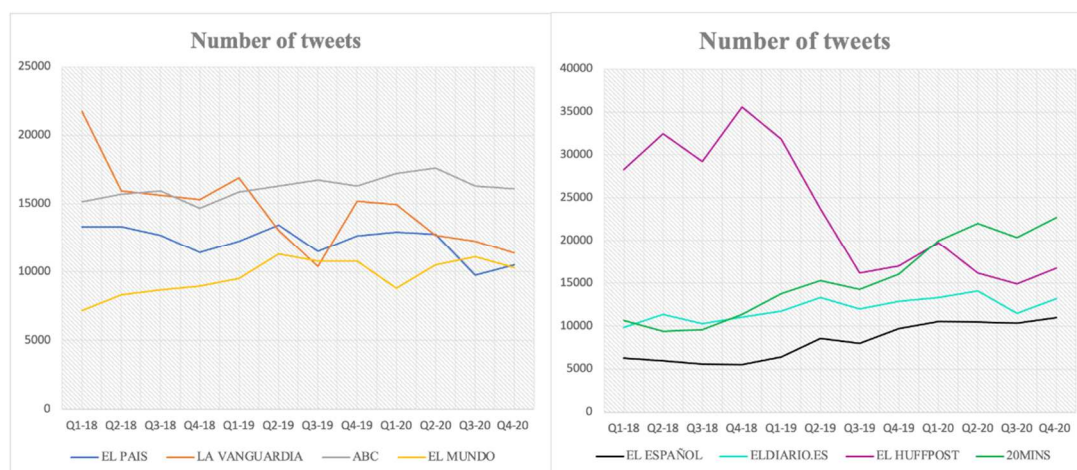
## 4. Results

The opening date of the Twitter accounts of the selected traditional newspapers –*El País* in August-07; *La Vanguardia* in September-09; *ABC* in February-09; and *El Mundo* in April-09– indicates that the selected newspapers were some of the first Spanish newspapers to start using this platform. Between the four of them, they have more than 15 million followers, 2 million tweets, 15 million retweets and 16 million likes on tweets during this period. In this block, 632,348 tweets have been analyzed, corresponding to the messages sent from these accounts between 2018 and 2020. In the case of the digital native newspapers analyzed, *20 Minutos*, *elDiario.es*, *El Español* and *El Huffpost*, the first to open its account in April 2009 was *20 Minutos*, the rest began operating on Twitter between 2011 and 2015. Between them they account for more than 3.5 million followers and 1.5 million tweets in 12 years (from the oldest date). The tweets generated between 2018 and 2020 amount to 710,106, which would be the messages analyzed in this second block. A figure that, translated into reactions, becomes 11 million retweets and 17 million likes.

### 4.1. Tweets

Tweets are messages created and published directly by the issuers. It can be seen in Graph 1 that the pattern of tweet impacts of *El País* and *La Vanguardia* is decreasing in the period covered by this project, despite the outstanding events of recent months and the large amount of information they have triggered. The 25% drop in the number of tweets between 2018 and 2020 in *La Vanguardia*, which shows a very pronounced drop in the first quarter of 2018 from publishing an average of more than 250 tweets per day to 180, continuing to fall to 140 messages per day in 2020, is striking. However, the decline in *El País* has been more subdued, with a change in the pattern of 9% compared to 2018.

**Graph 1.** Evolution of tweets by quarters from 2018 to 2020 in the 8 newspapers.



Source: Own elaboration.

In clear contrast to this downward trend are the newspapers *El Mundo* and *ABC*, which have been increasing the number of tweets by 23% and 9% respectively. The lines drawn in their graphs show a symmetrical and constant pattern, although with differences. The daily *El Mundo* has gone from publishing averages of tweets in 2018 of 106 to 112 in 2020 and *ABC* from 177 to 184. Both show an upward pattern of their daily impacts that mark a difference with the downward trend of *El País* and *La Vanguardia*. Although *El Mundo* has been the newspaper that has grown the most in number of publications, it should also be noted that it starts from relatively low frequencies in 2018, i.e., its growth ceiling is higher than that of *ABC*, since it is

the medium with the highest average number of tweets in this block during the three years of this study.

In the segment of digital native newspapers, as shown in Graph 1, there is an upward trend in the number of impacts in three of them: *elDiario.es*, *El Español* and *20 Minutos*. The newspaper *El Español* takes the lead with an 81% rise in its daily averages of tweets with respect to 2018 going from 64 to 116 tweets and continues with that upward pattern in 2021. Similarly, *20 Minutos* has increased its averages by 107% from 169 in 2018 to 233 in 2020. In the same ascending line is *elDiario.es*, which has increased the number of impacts by 23% in 2020. In this block of headers, the upward pattern is broken by *El Huffpost*, which has decreased notably since the end of 2018. Its plunge has been 46% from 2018 to 2020 going from 344 daily tweets in the first months of 2018 to 154 in 2020.

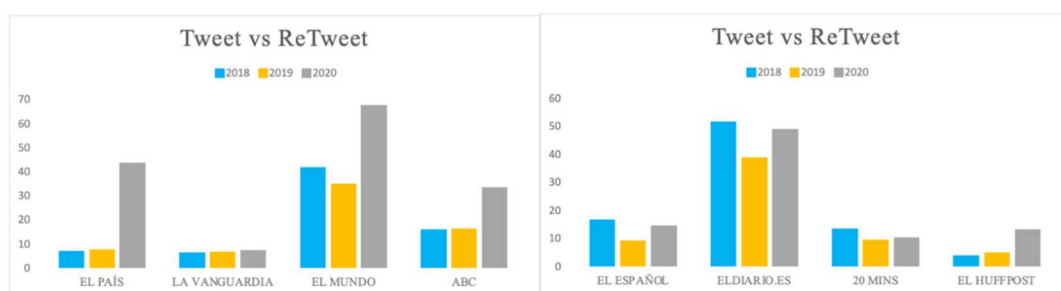
While the newspapers of the first block end 2020 with very similar averages, except for *ABC*, the same does not happen with the digital natives. Although the trend of all except *El HuffPost* is upward, their daily tweet averages are far apart.

#### 4.1.1. The success of tweets: measuring retweets and likes

The success of a tweet depends on the type of interaction with the content (message) that is encouraged among participants. On Twitter, the possibilities of audience response can be measured through retweets and likes, which delimit the penetration rate and the echo of the information on the network. Many of these responses are generated by the followers of an account, but not all interactions are produced by them, because tweets can be received by those who follow the followers of an account if they respond to the media's messages with a retweet or a like. Thus, a retweet can be defined as the resending of the tweet by an individual to share the information, thus actively participating in the communicative process. Likes, however, provide a less premeditated and therefore more impulsive response, which also provides the possibility of rectifying. Considering both factors of interaction with the content, their use and presence in the headers present in the analysis will be shown in order to establish whether or not the return obtained corresponds to the efforts employed.

The retweets of the four traditional newspapers versus the tweets generated reveal the following data (Graph 2).

**Graph 2.** Evolution of retweets in relation to the number of tweets published from 2018 to 2020 in the 8 newspapers.



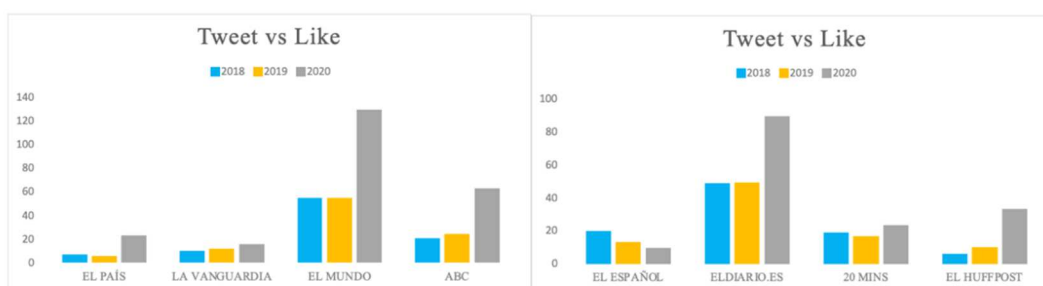
Source: Own elaboration.

The first block of newspapers shows an upward trend in retweets from 2018 to 2020, although its growth is uneven among newspapers. Highly significant is the rebound presented by *El País* at the end of 2019, when an increase of 554% in the number of retweets is detected. Also noteworthy is the change in the pattern of *La Vanguardia*, with a 13% growth. These increases are particularly significant because the pattern of dissemination of tweets of these two newspapers is downward with respect to previous years; that is, with fewer tweets in 2020

they are achieving a more notable impact. Similarly, *El Mundo* has also experienced a 114% growth in retweets. For each tweet published, it is obtaining a return of approximately 67 retweets. *ABC* also follows this upward trend with 61% growth. Thus, although there are marked differences that we will analyze in the discussion section, the return figures in retweets are positive in all newspapers.

However, in the second block, a change of pattern is detected in the use of retweets in the four digital native newspapers. Those that have experienced the greatest increase in tweets (*El Español*, *20 Minutos* and *elDiario.es*) have decreased in obtaining retweets compared to 2018 but maintain an upward pattern compared to the previous year. And finally, only *El Huffpost* shows an upward trend in retweets since 2018, despite having moderated the publication of tweets. A similar case to those of *El País* and *La Vanguardia*, which have achieved greater penetration with fewer tweets. The rise experienced in retweets of *El Huffpost* has been 265% since 2018.

**Graph 3.** Evolution of likes in relation to the number of tweets published from 2018 to 2020 in the 8 newspapers.



Source: Own elaboration.

The other important variable to verify in this segment is the correspondence between the tweet and the number of likes obtained, i.e., the average number of likes obtained by a tweet. Graph 3 shows a higher growth in the number of likes per tweet in traditional newspapers. For example, *El Mundo*, in 2020, has obtained an average of 128 likes per tweet, an increase of 138%. In the same line, *ABC* has stood out with an increase of 222%, with an average of 60 likes per tweet. Finally, as mentioned in the retweet section, it is worth noting the exponential growth of *El País* and *La Vanguardia*, which, with fewer tweets, are obtaining better results than in previous years. *El País* recorded an average of 22 likes per tweet and *La Vanguardia* 15 likes per tweet.

In the digital native newspapers, the evolution is upward except for *El Español*, whose number of likes decreases. This newspaper increased the number of its tweets by 81% from 2018. A change that seems to move it away from the averages of 18 likes per tweet in 2018, and in fact decreasing to 54% in 2020. However, *20 Minutos*, which on the other hand has generated more traffic than *El Español* (107% more hits than in 2018), has achieved 23% more likes than in 2018. Likewise, *elDiario.es* continues in a bullish line of likes achieving a rise of 84% compared to 2018. In that sense, it would have increased its tweets by 23%. Finally, *El Huffpost* presents the same bias as with retweets, which, despite its downward slope of tweet publication is nevertheless reaching higher levels of likes.

#### 4.2. Analysis of the structure of the tweet

Tweets are messages configured by a series of formal elements such as text, links, emojis, hashtags, various multimedia elements (photographs, videos or gifs), questionnaires, etc. Due

to the number of possible parameters, three of them have been chosen to compose our analysis, which is thus divided into three segments: words, symbols and tags or hashtags.

#### 4.2.1. The number of words

In September 2017, Twitter began to offer the possibility of doubling the number of characters of its tweets, which would go from 140 to 280. After the boom of the implementation that pushed much of the public to increase the number of words to test the experience, only 5% of the messages published at the end of 2017 worldwide exceeded 140 characters (Rosen, 2017). This data, announced by Twitter, revealed that the audience still preferred short 140-character messages that have an approximate equivalence of between eighteen and twenty-one words. But, when it comes to the media, how many words make up the tweets of the Spanish press? To find the average number of words per tweet in the selected headers, we decided to quantify the words published in tweets during the months of January of four consecutive years: from 2018 to 2021 inclusive. In this way, with this inferential analysis it is possible to obtain an average number of terms per tweet, but also its evolution year after year.

If we analyze the evolution of the average number of words per tweet per year, we can confirm that all newspapers, although unevenly, have been increasing the number of words in their messages between 2018 and 2021. Of all of them, only three: *El País*, *La Vanguardia* and *elDiario.es*, exceed the average of 140 characters. They are the only ones to incorporate this Twitter novelty, but with nuances. *El País* began to exceed 140 characters in 2018 (possibly it already did so at the end of 2017, but it should be remembered that this research starts in 2018), while *elDiario.es* and *La Vanguardia* have reached it in 2020. The most notable increases from 2018 to 2021 have been experienced by: *La Vanguardia* with 60%, *El País* with 39%, *El Mundo* with 25% and *El Huffpost* with 20%.

**Table 1.** Evolution of the average number of words per tweet from 2018 to 2021 in the in the selected Spanish newspapers.

Newspapers	2018	2019	2020	2021
<i>El País</i>	25	29	31	35
<i>La Vanguardia</i>	13	18	21	21
<i>ABC</i>	14	16	16	16
<i>El Mundo</i>	15	17	19	19
<i>20 Minutos</i>	16	17	18	18
<i>elDiario.es</i>	19	21	25	23
<i>El Español</i>	17	16	18	19
<i>El HuffPost</i>	15	13	16	18

Source: Own elaboration.

In summary, this increase in the number of words per tweet is in line with some studies such as that of Kurt Gessler (2020), which confirm that tweets with more words generate an increase in audience participation, evidenced by a greater number of retweets and likes. This is explained by the fact that more characters offer the possibility of expressing more information and more creativity.

#### 4.2.2. The incorporation of symbols in the text

The use of emojis in tweets gives a more striking visual effect to the message. This technique makes it possible, not only, to locate the message quickly in the network, but also a quick identification of its content, especially if the emoji is linked to a tag. In this analysis we have detected the incorporation of emojis that express emotions, such as applause, laughter, or broken hearts (in some newspapers such as *El Huffpost*, *20 Minutos* or *El Mundo*), although it



is true that in most of the occasions emojis in the Spanish press do not abound in emotion but are symbols that enclose an idea or visually reinforce a label, a phrase, a link or a piece of information as explained below. Thus, it can be established that most of the emojis used by the Spanish press selected in this research have the visual function of highlighting the message, but also to warn of the type of information it contains. It should also be noted that not all the headers began to use this technique at the same time, nor do they use it in the same way or with the same frequency.

The newspapers that in 2018 incorporated visual symbols periodically in their tweets are: *ABC*, *El Mundo* and *elDiario.es*. For its part, *El Huffpost*, as well as *La Vanguardia*, *20 Minutos* and *El Español*, also employed emojis in 2018 but their use was exceptional and did not follow any thematic or structural logic in that first period. *El País* has taken the longest to adopt this series of signs in its tweets, but it has done so by bursting in very emphatically in 2020. The headers that have most increased the use of visual symbols between 2018 and 2020 have been: *La Vanguardia* (1,932%, its red dot that is combined with the latest and breaking news, live news, announcements, exclusives tags); *El Español* (99%, its red circle that accompanies the latest news, live news and exclusives tags), *ABC* (85%, the symbol of the hand writing or the pencil with the pattern that is associated with the “*ABC Recommends*” tag) and *20 Minutos* (85%, its loudspeaker symbol that accompanies the “latest news” tag). All have increased the use of visual signs or pictograms to give more visual and semantic strength to their texts.

Similarly, it has been observed in the analysis that these symbols are sometimes multipurpose and function to highlight different tags, but in others, they enunciate a very specific theme facilitating the identification of the content. Continuing with this idea, some other emojis have been detected that have not been previously mentioned because they are not the most repeated, but that fulfill a more personalized classification and order function, for example: 1) *El Español* uses a yellow square held on one of its angles that indicates an advertising tweet; 2) *El Mundo* has a large red circle on white that advances the latest information about the coronavirus; and 3) *La Vanguardia* uses a black dot that presents the section of *The faces of evil* where mostly news of deaths and murders are published.

### 4.3. Hashtags and cataloging with tags

Hashtags in a tweet contribute to its second cataloging outside the internal structure of the message. They can be linked to other tweets that have added the same hashtag, since clicking on it brings up lists of all the contents linked to that idea or concept. This is a way of locating a tweet and favoring the permanence of the message over time, thus helping to reinforce and qualify the meaning or area in which it is used. By analyzing the tweets, it was possible to find out which was the # most repeated by each newspaper, as shown in Table 2.

**Table 2.** Most-used Hashtags and Tags from 2018 to 2020 in the 8 newspapers.

Newspapers	Hashtags
<i>El País</i>	#Hemeroteca
<i>El Mundo</i>	#últimahora
<i>La Vanguardia</i>	#endirecto
<i>ABC</i>	#lomásleído
<i>El Español</i>	#últimahora
<i>El Diario.es</i>	#covid19
<i>El Confidencial</i>	#lomásleído
<i>El HuffPost</i>	#oscars
<i>20 Minutos</i>	#directo

Source: Own elaboration.

A subject word is added to this metadata and together they constitute key tags that make it easier for the user to find specific messages if he/she performs a specific search. In addition, the use of the # sign serves to order and establish relationships between the different elements that make up the message.

### 4.3.1 Tweet tags

The most frequently used tags can be classified into three categories, which have been gathered in Table 2:

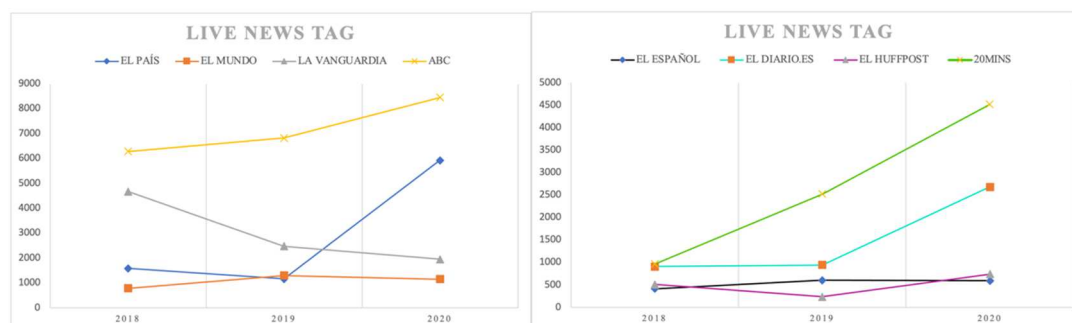
- Related to current affairs (#últimahora, #endirecto, #directo).
- Library-related (#Hemeroteca, #lomásleído).
- Miscellaneous (#covid19 and #oscar).

The first group of terms alludes to journalistic statements. So, they facilitate the localization and understanding of the message based on its instantaneousness, newsworthiness and topicality. These tags are a call for the reader's attention and highlight the value of the moment, the speed of the information or the facts in real time. The second block emphasizes aspects such as subject matter or interaction with the content. In this sense, the use of #Hemeroteca, in the case of *El País*, operates as a mechanism for review and reminder of what has been previously written. And finally, the miscellaneous group brings together very diverse concepts. For example, the topic #covid19 announces and encompasses all the data on the socio-health situation. Likewise, the use of the hashtag #oscar by *The HuffPost* is striking for its repetition and the repercussion achieved by this newspaper on this event.

If we look at the hashtags mentioned above, we can see that # last minute and #direct/#live have been reiterated by several newspapers. This redundancy is related to the increase of tags within the tweet with the same factor. Sometimes it has been detected those tags and hashtag coincide in a tweet, and hashtags can also do the work of a tag. However, the trend that has been observed is that tags tend to open the message by indicating what it contains and do not tend to be hashtags, although some newspapers use them for both purposes.

This type of cataloging can be combined with the use of emojis, which give the text greater visual and semantic strength. Regarding tags, very diverse works have been carried out from a social angle (López-Cleries, 2019; Casero-Ripollés, 2020; Escuder-Rodríguez, 2019) or a media angle (Calvo-Rubio, 2018; Cabrales, 2017). In the present analysis, the tags “live news” and “breaking news/last minute” have been quantified for two main reasons related to journalism: 1) that all the headers make use of them to a greater or lesser extent, which also lends itself to comparison; and 2) their commitment to the most immediate and close current affairs.

**Graph 4.** Evolution of the “live” tag from 2018 to 2020 in the 8 newspapers.

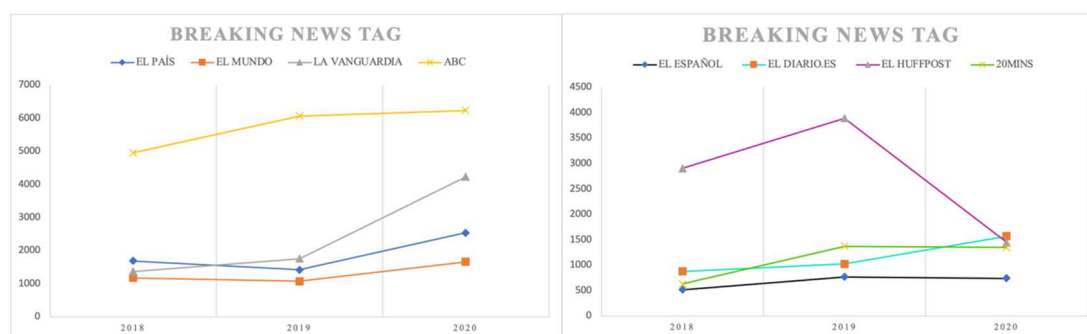


Source: Own elaboration.

Although an upward trend is revealed in the analyzed presses (Graph 4) in the use of the “live news” tag, *La Vanguardia* breaks the pattern with a decrease of 138% compared to 2018, a significant drop that evidences a new direction, as we will see below, towards a more elaborated audiovisual content. The newspaper most involved with live news, whose broadcasts per year reach more than 8,500 links in 2020, is *ABC*. Although its increase from 2018 to 2020 has been 25%, it is not the one that has grown the most. *El País*'s favoring of this format in its tweets is powerful with 73% growth. With a discreet 31% *El Mundo* marks a pattern of growth by joining the new technologies of live streaming.

In the block of digital natives, the newspaper *20 Minutos* shows a steep rise with a growth since 2018 of 78% publishing more than 4,500 tweets with the live tag. It is followed by *elDiario.es* with also a significant rise of 66%, although with lower numbers close to 1,000 messages published in 2020. Finally, *El Español* and *El HuffPost* ride the upward trend in this block with increases of 30% and 31% from 2018. In general terms, except in the case of *La Vanguardia*, all the press has grown in the use of this technique to tell the news on Twitter.

**Graph 5.** Evolution of the “breaking news” tag from 2018 to 2020 in the 8 newspapers.



Source: Own elaboration.

*La Vanguardia* has been the newspaper that has obtained the most growth with the use of this tag with respect to 2018 rising by 67%, although it is not the medium that employs it the most. In this case, it is the *ABC* newspaper with 6,200 impacts published in 2020 with a growth figure of 20% from 2018. Similarly, the rest of traditional newspapers have increased the frequency of the use of these tags especially since the end of 2019 experiencing a remarkable growth of 33% and 29% of *El País* and *El Mundo*.

In the digital native's block, the newspaper that has shown the highest rise since 2018 has been *20 Minutos* (53%), followed by *elDiario.es* (44%) and *El Español* (30%). The upward trend in this group is broken by *El HuffPost* with a 100% drop in usage. Although this group shows a rise in the use of this category, its averages are low compared to the traditional newspaper block, even though digital natives generally publish a greater number of tweets.

## 5. Discussion

Throughout this analysis, it has been observed how the newspapers *El País*, *La Vanguardia* and *El HuffPost* have decided to reduce the number of daily tweets. However, with this decrease –executed particularly since 2019–, they have managed to increase their impact and echo on Twitter if we consider the increase in retweets and likes received in this last period. This aspect has been reinforced in the testimonies of the network managers of each of the newspapers interviewed to add more information to the analysis. It should be noted that not all of them wished or had the opportunity to participate in the research. In the case of *La Vanguardia* and *El País*, it has been confirmed that they are indeed issuing fewer messages on Twitter, but that they are nevertheless more elaborate as Pau Rodríguez (CMO of *La*

*Vanguardia*) and Álvaro Romero (Networks editor of *El País*) have stated. This reality has also been confirmed by the analysis itself, but with the verbalization of the strategy by the media it has been possible to better understand the increase in retweets and likes with fewer impacts. On the other hand, there is evidence of a difficulty of growth if we look at the large audiences of followers that they move. Similarly, the interlocutor of *El País* also pointed out the distribution of his team's efforts among other social networks, as they think they have more room to work than on Twitter, where they believe they have already reached their ceiling.

Other newspapers, such as *El Mundo*, *ABC*, *elDiario.es* and *20 Minutos* have increased in impacts (*20 Minutos* by 107%, *El Español* by 81%, *El Mundo* and *elDiario.es* both by 23% and *ABC* with a 9% increase), and have obtained more impact on the network, although unevenly. Their efforts to generate volume and traffic have not always been rewarded with an increase in retweets or number of likes in all the newspapers. For example, *El Español* has decreased in retweets and likes despite having increased the number of impacts. Similarly, *20 Minutos* and *elDiario.es* have also decreased in the number of retweets by 23% and 5%, although not in likes, where they would have added 23% and 84%. Ultimately, both *El Mundo* and *ABC* have achieved an upward trend in retweets and likes with the increase in impacts. Both newspapers have experienced a significant rise in both variables.

Regarding the possible change of strategy due to the implementation of the Twitter algorithm in 2018, especially in those press that have increased the number of daily publications, Guacimara Castrillo (Social Media Manager of *El Mundo*) argues that its strategy has remained practically unchanged in recent years, except for the attenuation of retweets from transversal accounts. This decision is taken after having corroborated that they do not get the penetration they get with the tweet. The account publishes everything that is launched from the website of *El Mundo*. Castrillo adds that the new impact pattern is due to the volume of news generated by the pandemic and highlights the growth in impacts of 23%, with an increase in retweets and likes of 62% and 138%. Similarly, *El País*, *ABC* and *La Vanguardia* deny a change of strategy due to the update of the Twitter algorithm, but in pursuit of a greater care of the message.

However, Carlos Serrano (Social Media Manager of *20 Minutos*) has recognized a change of positioning in this micro-blogging network because of this improvement that Twitter undertook in 2018. He understands that a permutation of the algorithm necessarily implies a change of strategy. This implementation of the American company has motivated them to decrease publication times with the purpose of creating volume to incorporate the new variant of relevant content enabled by Twitter into their diary. They have also started to generate threads of these tweets to multiply the volume. In this way, their messages will stay longer in the new non-chronological Twitter hierarchy, as they will get more interactions from the audience.

It has been commented above that the three newspapers that have decreased in the number of impacts, *El País*, *La Vanguardia* and *El Huffpost*, have obtained an increase in retweets and likes. One of the actions carried out by the three media had been to increase the number of words per tweet. Thanks to a remarkable increase, together with *El Mundo*, the four outperform the rest of the newspapers in this aspect. Likewise, the two newspapers that have shown the greatest increase in the incorporation of visual symbols to their tweets have been *El País* and *La Vanguardia*. In general terms, all of them have grown and in a very varied way with very different signals, but in the analysis of the two most repeated emojis it has been observed that these newspapers are far ahead of the others, which does not mean that they are the ones that incorporate more emojis, but the ones that have experienced a more significant change of pattern in their use.

The importance of the use of the series of formal elements analyzed and constituents of the tweet itself is related to the increase of words, the incorporation of visual symbols and the

analyzed tags “live news” and “breaking news/last minute,” which show the relevance that newspapers place on information that occurs. This means providing greater value to the news in terms of the immediacy of its dissemination. A value that has been reflected in the interaction that the subscriber has made on the content in the network. Similarly, in the analysis of the tags, an increase in “breaking news” and “live news” has been detected in almost all the media, but with some notable nuances. Although *ABC* is the newspaper that publishes more tweets including both categories, it has not been the newspaper that has grown the most in the use of this technique during this study period. However, the head of networks Javier Corcuera Urandurraga (Social Media Manager of *ABC*) has emphasized the importance of this technique for *ABC*, but also of scheduling some of its daily tags at certain times to generate greater loyalty with the follower.

In this sense, *La Vanguardia*, *20 Minutos* and *elDiario.es* lead the growth of “last minute” in these three years of study. In the “live news” category, *20 Minutos*, *elDiario.es*, *El País* and *El Mundo* stand out. Both *20 Minutos* and *elDiario.es* –and, of course, *ABC*, already mentioned– are demonstrating with their actions that they are more committed to current affairs on Twitter. Although both categories are focused on current affairs, the “live news” section gives us the chance to experience it first-hand.

The strength of live news in streaming makes it possible to go a little more in depth, a fact that also implies the need for greater investment. Thus, those media that favour this category and are growing invest more than the rest in visibility on this platform through the development of streaming audiovisual content. In the conversation held with the head of networks of *20 Minutos*, it was stated that they maintain a team of four people linked to the networks department that has been growing in recent years for the creation of videos and live recording. Similarly, the newspaper *El Mundo* has three people dedicated to audiovisual creation for its networks. The data for the other media are unknown, but it is to be understood that, if the evolution of live broadcasting is growing in the presses analyzed, the incorporation of more products and investments in the short term will continue to increase for the rest.

## **6. Conclusions**

This paper has analyzed the tweets launched by the Spanish newspapers *El País*, *ABC*, *El Mundo*, *La Vanguardia*, *elDiario.es*, *El Español*, *El Huffpost* and *20 Minutos* during the period from January 2018 to December 2020. The data derived from this research evidences the high level of knowledge that the traditional newspapers have of Twitter’s functionalities. The daily presence on the network, the adaptation of the texts to a specific syntax and the use of the textual elements that make up the message denote a high performance in the use of this social network. The headers know what elements to use, how to organize them and adapt them to the communicative chronology of this network, as the data derived from the analysis of the content and structure of the tweet suggest. Likewise, the information obtained shows that tweets become more sophisticated with the use of emojis, tags and multimedia elements, as well as with the increase in the number of words in the message.

The study highlights two opposing but significant strategies that occurred during this period: some media have shortened the time between tweets to generate volume, while others have lengthened the time between tweets to reduce the number of impacts. The first block would be made up of *El Mundo*, *ABC*, *20 Minutos*, *El Español* and *elDiario.es*. On the other hand, although the newspaper *20 Minutos* has been the only media that has openly acknowledged that the 2018 Twitter algorithm change has become an opportunity to achieve greater penetration of its content and, consequently, greater return of audience interactions, the rest of the press are also expressing the desire to grow in this social network by increasing the number of daily publications. The second strategy, which consisted of moderating the quantity of tweets by paying more attention to their quality, as seen mainly in *El País* and *La Vanguardia*, has led to a greater impact on Twitter with fewer but more elaborate messages.

So, it seems that the more sophisticated the content on the network, the more interactions it achieves. In conclusion, the case of *El País* and *La Vanguardia* also shows a possible ceiling in their growth if we consider the number of followers, they have with the number of interactions obtained. A circumstance that could also have helped to trigger this change in strategy, as stated by the head of *El País* interviewed. Similarly, it has also been detected that *El HuffPost* has decided to reduce the number of publications since 2018, but its figures of retweets and likes are equally significant. However, we think that its success is not related to the quality of the tweet, as demonstrated in the analysis, but to the subject matter of the publications. This variable that has not been addressed in this research, but it opens the door to future research.

Ultimately, it is striking that those newspapers that show the greatest desire to grow on the platform (judging by their tweet averages and interaction results) are those that are investing more in the publication of audiovisual content through links to live news in streaming in their tweets. This fact shows the significant investment that these presses are making to use this technique, which is not exactly cheap. Likewise, the use of live news content could be interpreted as a variable that, if it grows, would confirm the development claims of newspapers in the social network Twitter.

In conclusion, this research ratifies the two hypotheses put forward at the beginning: that the chosen Spanish media optimize the possibilities provided by Twitter, and that the Spanish press has experienced a new positioning in the social network Twitter.

Spanish press has experienced a new positioning in this social network. In some cases, encouraged by the Twitter algorithm change in 2018 by generating greater volume to gain more presence; in others, aware of their development limitations, they have chosen to take more care of the quality of broadcasts, reducing them.

Finally, future research emerges that could delve deeper into the consequences of the consumption of relevant content on Twitter due to the implementation of the new algorithm, as new questions open with this study: will Twitter end up eliminating the chronological hierarchy of content? What other strategies will the media apply to make their content the most viewed? In addition, the confirmation of the increase in the creation of audiovisual content on Twitter year after year leads us to a new study to analyze the consequences of this progression in the short and long term; the starting hypothesis would be whether traditional newspapers companies might have found a way to become audiovisual producers that compete with traditional television news.

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