

# Bots as a news service and its emotional connection with audiences. The case of *Politibot*<sup>1</sup>

## *Los bots como servicio de noticias y de conectividad emocional con las audiencias. El caso de Politibot*

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### **Abstract:**

It is evident that users are permanently and pervasively connected to the network through their mobile devices. Journalism has tools that use artificial intelligence and instant messaging systems to send filtered and personalized information to users. These systems are known as chatbots, or conversational applications. While the big media companies are developing their own applications via Messenger or Telegram, there are other companies that provide this type of service as well. This is the case of Politibot, a service that was launched during the election campaign in Spain in June 2016, which gained 8,400 subscribers just a month later. The purpose of this research paper is to analyse this case in order to determine the way in which audiences perceive and value bot news. To do so, we have applied, among other techniques, documented analysis, direct observation, surveys, and an analysis report. Results show that the quality of information (73.1% of answers) and the emotional connection with the information received (26.8%) are the main strengths of these formulas, and due to this fact, they will soon create an opportunity for journalism.

### **Keywords:**

Robot journalism; innovation; audiences; social networks; mobile devices; artificial intelligence.

### **Resumen:**

*Es perceptible que los usuarios se hallan conectados de forma permanente y ubicua a la red a través de sus dispositivos móviles. El periodismo cuenta con herramientas que, usando inteligencia artificial y a través de sistemas de mensajería instantánea, permiten remitirles información filtrada y personalizada. Son los llamados bots o aplicaciones conversacionales. Mientras los grandes medios están desarrollando sus propias aplicaciones vía Messenger o Telegram, vienen surgiendo empresas que ofrecen servicios de este tipo, como Politibot, lanzada durante la campaña electoral de junio de 2016 en España y que, un mes después, aglutinaba 8.400 suscriptores. La presente investigación analiza desde la perspectiva de las audiencias hasta qué punto los usuarios diferencian y valoran las noticias de los bots. Se aplican, entre otras técnicas, el análisis documental, observación directa, entrevista y ficha de análisis. Los resultados constatan que la calidad informativa (73,1% de las respuestas) y la conexión emocional con la información recibida (26,8%) son las principales fortalezas de estas fórmulas que se erigen, así, en una oportunidad para el periodismo.*

### **Palabras clave:**

*periodismo robot; innovación; audiencias; redes sociales; dispositivos móviles; inteligencia artificial.*

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## 1. Introduction

### 1.1. Journalism in the Age of Permanent and Pervasive Connection

The so-called web 2.0, defined by O'Reilly and characterized by citizen participation and the emergence of social media, has given way in recent years to a new concept of the web, which was created by the same author together with journalist Batelle (2009), and is an idea that combines the virtual world with the real world. It is the so-called squared web. The web is still social, but now the new technologies have been added to social media such as smartphones, sensors, and data filtering, and new forms of consumption, such as the constant and massive use of social networks through primarily mobile devices<sup>2</sup>. These are practices that generate an enormous amount of data, which in the era of macro information and big data are constantly processed and analysed in order to generate knowledge, detect trends, or even explore future prospects.

In the field of journalism, this overabundance of news has led to the emergence of either media or applications oriented to the management of information with the capability of filtering and adding value to a specific topic, or online narratives such as the display of information or other interactive multimedia content. Many media sources have opted for these innovations as part of their digital strategy. Its development often occurs through the so-called labs, which have teams of journalists and computer developers. In Spain, this is the case with the Audiovisual Innovation Laboratory of RTVE, El Confidencial Lab, or Vocento Medialab, among others (Salaverría, 2015: 397-404). In addition to facilitating the understanding of complex issues, the idea is to search for and attract new profiles of readers to the websites of cybermedia and foster loyalty from audiences, who in the era of the liquid society and following the idea of sociologist Bauman (2002), have at their disposal a digital ecosystem with multiple sources, both traditional and citizen-based, in order for them to stay informed.

However, the development of online interactive digital content such as those cited is not the only innovation that has been produced in order to attract online traffic and user engagement in the media. Thus, in recent years, many media have been using, for example, mobile devices as a means of distributing news and interacting through their own apps or web-enabled apps, and later through social networks like WhatsApp. However, apart from certain innovative projects, these practices of mobile journalism have been facsimiles of conventional digital journalism (Sánchez, 2011), at least in terms of content and possibilities of participation. If WhatsApp and similar apps have been used primarily as channels merely for warnings or summaries of prominent news, generating pervasive and permanent traffic to media websites, the emergence of chatbots that operate through these and other apps as intelligent systems that allow for the personalization

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<sup>2</sup> Thus, for example, the report "The Information Society in Spain in 2016" (Various Authors, 2016) points to the mobile as the main device through which Spaniards access Internet, ahead of the computer, with 88.3% of users, 5.9 percentage points more than in 2014.

of the delivery of information and interaction with users opens the door to new possibilities that the media is beginning to experience.

In this paper, we intend to show to what extent users differentiate and value news proceeding from the so-called bots as the new generation in mobile robot journalism that enhances the personalized consumption of news and the participation of audiences with features and resources that allow for communication similar to that of talking to a friend, and that also seek an emotional connection with users. What is the conversation like that is generated between users and bots? What is the opinion of users? Is it an opportunity for journalism in terms of its potential to gain the loyalty of new user profiles? These are some of the questions that we try to answer in this investigation.

In order to obtain a diagnosis regarding the bots as a news service and the connection with the audience in Telegram, we set out the following objectives: 1. Inform people about the service offered by Politibot that provides information about current events. 2. Find out what the conversation is like between Politibot and the audience, and the opinion of users as well.

Analyses that have described robot journalism are very recent (the oldest are from 2012). On one hand, they provide an exploratory and global view of the phenomenon by gathering significant cases in different media and pointing out their implications for the practice of the journalistic profession (Thurman et al. al., 2017, Clewall, 2014), or for companies that choose these formulas as an option. On the other hand, they also present the characteristics from the technological point of view of the applications (Dörr, 2015) or classify them according to the use made of these by the media (Lokot and Diakopoulos, 2015). However, it has hardly been approached from the perspective of the audience, and even less so with regard to chatbots as a tool with the potential not only of providing personalized information to these audiences, but of doing so through trusting speech and interactions by which they seek to generate emotion, and along with it, foster loyalty.

## *1.2. Robotics at the service of journalistic innovation*

### *1.2.1. News machine: pioneering cases of robot journalism*

As in other fields, robotics and artificial intelligence systems have their application in journalism and have opened up the possibility of a new market in the way of both producing and consuming information. These are the so-called newsbots, software applications designed to collect news published for consumption according to the criteria that the user has previously defined. According to Lemelshtrich in *The New Word of Transitioned Media* (2015), in the beginning this Robot Journalism was founded on two fundamental pillars:

“The computer software that automatically extracts new knowledge from huge data silos employing the new “social Physics” concept; algorithms that automatically convert this knowledge into readable stories without human involvement. Besides the huge potential for savings on labour costs, these robot journalists seldom miss

facts, if programmed correctly, are never tired, and if programmed objectively, are free of personal bias. Data silo managers of the media organizations and the AI narrative software engineers may become the key employees of the organizations. Human journalists, considering labour and other costs, may become obsolete.”

If data mining and analysis using computer systems have been helping journalists create stories for decades, the novelty is new Artificial Intelligence programs that can compile facts and write them as news stories in record time.

In Europe, one of the pioneering media sources has been the British newspaper, The Guardian. Already interested in bots in 2010, this media carried out two projects of automated sports news that allowed them to obtain statistics of games and historical information of teams and players, and they also combined these data with pre-made phrases and connectors to compose stories (Bunz, 2010). A year later, this media organization launched an app that allowed them to automate the search for current news via Twitter (González, 2011), and in 2014 they launched the so-called “Guarbot” (Gani and Haddou, 2014), a program that complemented financial information with complex data, avoiding the need to use journalists for the task. In the same year, The Guardian even published a free monthly newspaper in paper format, first with an American edition and then a British, and the selection of topics was done using artificial intelligence systems (233 grados / La Información, 2014).

At the same time, Forbes magazine was working with the company Narrative Science on a kind of virtual journalist to write about matters of economics and sports. Moreover, the Associated Press news agency has been a pioneer in the use of these smart applications to produce news in the United States on subjects like minor league baseball leagues, as well as information about economics and technology. Toward the end of 2014, of the 300 stories that were produced manually before its implementation, the agency had begun to offer 4000 stories, which were published, if appropriate, with the announcement “This story was automatically generated by Automated Insights using data from Zacks Investment Research”.

Also in 2014, The French newspaper Le Monde used artificial intelligence from Data2Content to generate 30,000 micro news stories on electoral results in small municipalities and counties. As pointed out by the deputy director of the newspaper, this is an amount of content that would have been impossible to generate by its professionals, and it adds value to the publication (Sainz / Vocento Media Lab, 2016). In addition to the current political and economic situation that has been the subject of more recent projects developed by media such as NBC News (Morán, 2016), service journalism, among others, is also finding new ways of using the bots. This is the case, for example, at the Los Angeles Times, where in March 2014 Ken Schwencke, a journalist and programmer, developed an algorithm called “Quakebot” that was used in the creation of warning systems and news about California earthquakes. Social media information itself has also been written using computer systems: It is important to comment briefly on the interesting case of the Swedish man Severker Johansson, who according to Wikipedia statistics is the most prolific author of this type of social media with 2.7 million articles presented in 2014 (Emmerentze, 2014). His secret is using software known as “Lsjbot”, which extracts information from diverse online databases and summarizes it in a draft that the program later revises.

### 1.3. Chatbots: features, examples and possible applications in journalism

According to more recent projects, however, the potential of bots lies more in its personalized distribution and power to converse with audiences through instant messaging applications rather than in the production of news. These are the so-called chatbots, or conversational bots, which are applications that distribute personalized content in the form of talks with users, and in a way can be considered the second generation of newsbots (Al Johri et al, 2016).

This is the case of “Purple”, an app that uses bots to launch journalism that is closer to the reader. Rather than publishing content on the web, it sends stories to mobile phones and has defined itself as a real media source. According to co-founder Rebecca Harris, the key to its success, in addition to its own conversational tone, is that goes wherever users go.

Traditional, standard news alert systems that the media have been implementing through the use of these messaging applications have evolved into intelligent systems that use bots, and they nearly always utilise instant messaging applications, which in the same way as Telegram, WhatsApp, or even Facebook Messenger, already have a high level of penetration among the population of several countries, including Latin America. Furthermore, while most of the projects are still undergoing experimentation, in 2016 this technology allowed big events such as the Olympic Games in Brazil or the American elections, among others, to be covered extensively in real time. The Washington Post, Forbes, Huffington Post, BBC, CNN and The Wall Street Journal, among others, already have their own bots systems (Sainz / Vocento Media Lab, 2016).

The implementation of bots has begun in Spain as well, especially in mid-2016, and there are already several media that have apps of this type. Thus, the digital edition of *El País*, which in 2014 had already launched the Verne website based on the location and distribution of news from Internet (El País, 2010), presented in the summer of 2016 a bot via Facebook to facilitate the personalized consumption of news by mobile users while on holiday (El País, 2016). Similarly, after conducting a test during the last general elections in Spain, eldiario.es began using Telegram, and has been using it since March of 2016 for its channel. This is how they explained the choice and operation of the tool:

“In case you don’t know what Telegram is, it’s like WhatsApp, but with the icon in blue. In reality, it’s not exactly like WhatsApp because it has what are called “Channels”, which is how we send these messages. If WhatsApp had similar features, we would use it without hesitation, but it doesn’t. At eldiario.es, we have known about Telegram for a long time, and in fact in 2014 we interviewed its creator, Pavel Durov, using the same app to do the interview. Thousands of people shared with us on Telegram the last election day of 20 December. We will continue experimenting together and experiencing current issues in a different way. Join us at telegram.me/eldiarioes”.

The development of chatbots has taken place in the aforementioned Labs, as in the case of *Vocento*, which in early 2017 launched *Infosky*, a robot journalism experiment for the snow season (Pérez, 2017). In its first six months, it was tested

through the youth portal “*Eslang*” in order to celebrate gaining its 100,000th follower, and as a “fun and fast way” to access its content in a personalized way. In this case, it offers versions for use with Messenger and Telegram by which users can select, through the use of words, key topics that may interest them, such as politics, sex, series, or virals, and by which they can also interact by participating in tests or trivia games, and even “tell the robot to get lost” (if one manages to avoid its ingenious answers)”. (Sainz, M./Vocento Media Lab, 2016). As the professionals at *Vocento Labs* point out, these are Apps that are in continuous development, and that take into account user responses.

As journalist Pau Llop (2016) pointed out, the media previously invested in creating and updating their own news apps (Sánchez González, 2011, 2014), but now they have found “much more agile and effective developments” in these bots, which can be configured easily and quickly (Pachico, 2016). With these bots, as Eduardo Manchón (2016) recently wrote, the media becomes one more contact in WhatsApp or Messenger, and the consumption of news and dialogue with the media takes place in what is already an environment of conversation that is natural and technically familiar to users, which according to some forecasts, could even replace search engines as a natural gateway to the Internet.

The idea of *the daily me*, which Negroponte created decades ago, seems to be coming true with the bots in the sense that because they include systems of filtering through the use of keywords or geolocation, they can allow users to receive content according to their subject preferences, their preferred authors, or the events that happen around them. However, even further, in a kind of gamification, bots also open the possibility of interacting with readers and enhancing citizen participation by attaching anything from emoticons to multimedia files, or allow citizens or journalists themselves the possibility of filtering information or checking for truthfulness by way of dialogue through the mobile.

Mobile applications create a closer relationship between the journalist and the source of information. “They make it possible to establish direct contact with people and provide a point of view that is different from the information published regularly in the media”. A real case of emotional connection between the journalist and the audience occurred during the Middle East riots. As an example, we could cite the journalistic chronicle, which by a succession of short messages were published on Twitter by journalist Mohamed Abdelfattah with the username (@mfatta7) (Sánchez, Méndez, 2013: 138) “Tear gas 21:12 hrs.); I’m suffocating (21:13 hrs.); Help! (21:24 hrs.); They beat me hard (21:27 hrs.); They’re going to arrest me...”

## 2. Methodology

To achieve our objectives, we designed a methodology that was based on the use of qualitative and quantitative techniques in order to perform, in the first place, the documentary analysis of specific literature on bots as news services, and secondly, we used the case study method to measure and record “the behaviour of the people involved in the phenomenon studied” (Martínez, 2006: 11), thereby answering two of our variables that are related to the questions of ‘what’ and ‘how’ the news service is carried out, and how the conversation is conducted with the audience.

To begin with, in order to respond to the first variable, we used the technique of direct and indirect observation as a strategy of the scientific method (Fernández-Ballesteros, 2004). As participating observers, we accessed the application in order to interact with the bot from January 9 to March 29 for the purpose of verifying how the news service was carried out on the instant messaging platform. Secondly, we performed the documentary analysis on Politibot through its usage policies and an in-depth interview conducted with journalist Eduardo Suárez, co-founder of Politibot. This way, we had the possibility of carrying out an analytical study of the research.

Thirdly, in order to respond to the second variable of interaction/conversation with the audience, the analysis unit that was used as an object of study was the event of the elections in Holland, which were held on March 15, 2017. However, in order to ensure the validity of the data obtained, a margin of 7 and 8 days before and after, respectively, of the indicated date was taken into account. Having said that, the timeframe for the analysis was carried out from March 8 to 23.

For the collection of data regarding the information treatment provided by Politibot to users, we used on one hand the semi-structured interview technique with one of the founders of the tool, journalist Eduardo Suárez. The main advantage we encountered was the flexibility to obtain data and deepen our knowledge of some specific point by asking the interviewee for clarification. At the same time, this technique gave us a guarantee of collecting the information necessary for our study. We created six open questions determining in advance the relevant information we wanted to obtain, but with the possibility of developing questions that might possibly have arisen during the course of the interview.

On the other hand, we collected the opinion of users regarding the coverage of the bot on Telegram through Twitter. This application allowed us to provide data on the individual and collective behaviour of users and determine how the interaction was established through conversation. As a research tool, the main advantage that Twitter offered us was the ability to access the data, classify it, and follow the conversations according to the search, or in other words, the bot user name in that application, @politibot. The technique of registration has been the analysis chart based on the aforementioned variables, and also takes into account the following indicators:

- Number of user responses through Twitter.
- Quality of the bot news service in relation to the information it distributes - for example, the variety of information on the coverage of facts (use of own material or from other media), dissemination of information with illustrative elements (graphics, images), multimedia (podcast, video and GIFs). The information was processed according to a satisfaction scale of very satisfied, satisfied, moderately satisfied, somewhat dissatisfied, and dissatisfied, according to users' comments.
- Close and warm interaction with the audience, such as the inclusion of emotions, phrases or words with courtesy formulas in language, or the use of figurative language taking into account the typology (metaphor, simile, hyperbole, personification, attenuation and irony) as well as the presence or absence of positive emotions (Goleman, 1996) and

(Bisquerra, 2000): joy (joy: enthusiasm, euphoria, excitement, contentment, delight, fun, pleasure, shuddering, gratification, satisfaction, caprice, ecstasy, relief, rejoicing, and amusement); humour (provokes: smiles, laughter, belly laugh, hilarity): love (affection, fondness, tenderness, sympathy, empathy, acceptance, cordiality, trust, kindness, affinity, respect, devotion, adoration, veneration, infatuation, agape, gratitude) ; happiness (joy, serenity, inner peace, joyfulness, calmness, satisfaction, well-being); ambiguous emotions (surprise, hope, compassion) and negative: anger (rage, fury, hatred, resentment, rage, indignation, revulsion, aversion, exasperation, tension, excitement, agitation, roughness, resentment, animosity, irritability, hostility, violence, ill temper, jealousy, envy, impotence); fear (worry, horror, panic, terror, dread, uneasiness, fright, phobia, anxiety, apprehension, restlessness, uncertainty); anxiety (anguish, despair, restlessness, stress, worry, longing, uneasiness, consternation, nervousness).

In light of what appears above, the multiple sources of evidence that we have used guarantees the validity of the results or principle of triangulation with the goal of obtaining reliable data specific to scientific rigor.

### 3. Results

#### 3.1. *Telegram and the case of Politibot*

The demand for instant messaging applications on mobile devices is increasing. Mobile platforms like WhatsApp, Line, Facebook Messenger, and Telegram are used by the Spanish population with greater diligence. According to the latest barometer published by the Centre for Sociological Research (CIS, 2017), it has been confirmed that 70.2% of Spaniards acknowledge having used instant messaging applications in the last six months. We focus on Telegram for its usefulness, although it is not utilized to the same extent as WhatsApp and Facebook Messenger in Spain.

From the end of 2015, Telegram started adding channels to its application. This tool transmits public messages, or in other words, it distributes information of interest to large audiences. The media have discovered a new way of approaching audiences by offering them the main news accompanied by a link and image to expand the information, and sometimes, though timidly, with audio included. In Spain, there are several cases of media and news agencies that have opted for this application using only the channels offered by the messaging service, such as the news agency *Efe* and media such as *eldiario.es*, *El País*, *El Mundo*, *elEconomista*, *El Español*, *El Periodico*, *El Confidencial*, *CTXT*, *Cambio16*, *Cuarto Poder*, *El Jueves*, *OKdiario*, *Público* and *Vozpópuli*.

However, the application not only has channels, but also offers the option of bots as a resource for any person or company to be able to create a system of automatic interaction with users. In Telegram, it is possible to find bots that offer different services according to a specific topic, an example being “DoNotPay”, created by a young, 19-year-old man, Joshua Browder (Gibbs, 2016). This bot is known as the first robot lawyer that helps people contest parking tickets and serves as



a guide in the appeals process. The bot has been a total success because of the number of requests it has received and the number of cases it has won in the appeals process despite its short existence. We can cite other examples such as the following: @ImageBot, weather information; @CorreYvuela, purchase of tickets; @icon8bot, application of filters for photographs; @octopocket\_bot, sending money between users; @GifBot, sending animated GIFs; @andyrobot, lets you practice English and @triviabot to play trivia games.

### 3.2. News service

Politibot is the first news service in Telegram that offers its users political information and facilitates interaction. It was launched on June 9, 2016 in Spain when the electoral campaign of 26 June began, and it provided subscribers with data visualizations and analysis of likely voting patterns based on sociological studies. By the end of the month in which it was launched (June), it already had more than 8,400 subscribers. Eduardo Suárez, one of the journalists who developed this service, made a statement in “Sinercom16”, a networking service that connects university projects and companies and is organized by the Laboratory of Communication Projects (LabProCom) of the University of Seville. Mr. Suárez said that it was necessary from the beginning to give additional added value to the audience by offering “useful and personalized information” (Suárez, 2016). Hence, the success obtained exceeded the expectations of its creators.

#### 3.2.1. Usage policy and main features

Politibot was launched as a bot that can hold conversations on various topics. Likewise, it can ask questions about the current information or ask the opinion of users, and can even ask the user about their preferences in exchange for offering information of interest. As described in its usage policy, “A typical conversation, with the advantage that I have no love life, and I will not bore you with it” (Politibot, 2017).

Its founding team is composed of an interdisciplinary group of professionals, consisting of eight people, three of whom are journalists: María Ramírez, Eduardo Suárez and Martín González. Three are computer developers: Juan Font, Miguel Gil and David Martín-Corral, and two are political scientists: Jorge Galindo and Kiko Llaneras. This is a group of people who, according to Eduardo Suárez, are united by their passion for politics and a new way of saying things. “These two passions led us at the end of May 2016 to think about how to cover the general elections differently”. Suárez added, “Some of us had not even met, but each of us worked a little on our own, and then we covered the elections for three weeks or three and a half weeks from June 2 to June 22” (Suarez, 2016).

In the beginning, the bot was created to offer information about the current political situation in Spain with the elections in 2016. However, at the moment it also gives information regarding international politics. It has covered the Brexit referendum, the US elections with the success of Donald Trump, the elections in Holland, the London terrorist attack, and the French elections.

Politibot provides information to users through links to news, blogs or studies that are related to the response of the audience. It also includes graphics, photographs, animated GIFs and audio through a podcast produced together with Cuonda.com, an independent start-up company in the Spanish language that seeks to open up new channels of dissemination and income for Spanish podcasting. Best of all, it provides users with relevant information through conversations with them.

It can also process data on “preferences, tastes, ideology, current employment status, profession, studies, interests, etc.,” of the audience. Politibot makes it clear (Politibot, 2017) that it is not mandatory for the user to answer everything asked, and it is actually possible to change the subject if the user wishes. If the user expressly accepts, the data is used for the following purposes:

- To offer products and services at half price, with consideration given to the quality of the product, according to user preference.
- To use geolocation to provide products and services to the user, as long as the user has this feature activated. He or she can receive offers from establishments near the place where the user is located at that moment.

The bot will ask the user to give his or her contact information (email and/or mobile phone) in order to send the information to third party companies so they can send personalized offers to the user.

Regarding the profitability of @Politi\_bot, Eduardo Suárez (2016) revealed that:

“The idea is to try something new in this business that the media have not yet explored, such as the possibility of selling services similar to those of Politibot to companies, individuals and even to media services who want to communicate in a different way, and to accomplish all of this, we need investment. So far, what we have is some help from Google that was given to us a few days ago from the innovation fund it has for media in Europe, and the fact that they have given us help makes us think there may be an opportunity in the media field”.

It is clear that the bot provides a series of services and products to the user on political issues. It also informs the user according to his or her profile and after the user expressly agrees to be informed about different offers, although it is true that the bot has not yet generated such information nor income for it.

### 3.2.2. *Conversation with the audience*

This is described as a tool that sends personalized and automatic information through conversation. According to its usage policy, it says the following: “I will only initiate a conversation if you address me and you want to talk to me” (Politibot, 2017). The bot initiates the conversation with a message that can be a question or information. Then the user finds a menu with four options that vary according to the current political situation. The topics that might arise include: Trump, Spain, Podcast and Inspire Me. The first two correspond to international and national news, respectively. The third is the podcasting service produced by Cuonda that the bot offers users. These are podcast episodes that are published by journalists

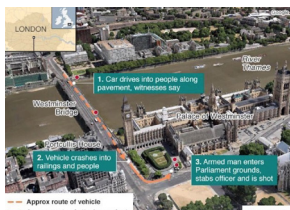
María Ramírez and Eduardo Suárez together with special guests, according to the national or international environment of the current political situation.



Finally, the fourth and last is Inspire Me, which refers to a sentence by an author that the bot sends to motivate and/or suggest something. An example we can cite is the following text sent by @Politi\_bot (2017): “Freedom, Sancho, is one of the most precious gifts that the heavens gave to men; all of the treasures on earth can never equal the value of freedom: to possess freedom, as well as honour, one can and must take risks in life” (Miguel de Cervantes). With the four basic options mentioned above, it is possible to initiate interactions with the bot.

Likewise, the bot offers personalized information to the user by identifying him with a close, empathetic message. To describe how the conversation is established between the user and Politibot, we have used the identity dialogue, based on the proximity identity paradigm (Sánchez and Sobrados, 2008), which considers that the adaptive behaviour of the user is determined by synechism (continuity principle), by the process of the code paradigm of emotional journalism (which considers the social code and repertoires of signs, comprehending the different states of the user in relation to their experiences and through the integrated action between sender and receiver), and by inferential processes.

We will cite the case of the London attack that occurred on March 23, 2017. The dialogue between Politibot and the user begins with a brief greeting and the necessary introductions, and then the bot reports on what occurred while obtaining information from the user about the degree of knowledge they have regarding the subject, as can be seen in the following table.

Table 9. Politibot and the London attack

Conversation	
@politibot	Good evening, human@. It was a tragic afternoon in central London. Here are the essential facts
@usuario	Ok
@politibot	A man ran over several people on the Westminster Bridge. Then he stabbed one of the police officers who was guarding the British Parliament. Four people have been killed in the attack, including the police officer and the assailant. Do you know the area?
@usuario	Yes
@politibot	 <p>This BBC map clearly shows the sequence of events and the surrounding area where they occurred. Do you want me to tell you the basic facts?</p>

@usuario	Ok
@politibot	<p>LO QUE SABEMOS DEL ATAQUE DE LONDRES</p> <ul style="list-style-type: none"> <li>• Un hombre ha arrollado a varias personas en el puente de Westminster y</li> <li>• Luego ha apuñalado a un policía junto al Parlamento británico</li> <li>• 4 personas han muerto en el ataque, incluidos el policía y el agresor</li> <li>• El ataque deja al menos 20 heridos</li> <li>• Han evacuado a la primera ministra</li> </ul>  <p>MARZO 22, 2017 21:41</p> <p>Above you have the essential information. Police have detained those who were inside the Parliament for hours. Some reporters witnessed the attack.</p>
@usuario	For example
@politibot	<p>Shouts of "ambulance, ambulance!" could be heard. There was no sign of movement from the police officer who had been attacked or from the assailant, lying barely 10 meters further down the cobbled entrance to parliament.</p> <p>Within 10 minutes, an air ambulance had landed on the grass of parliament square, next to the statue of Winston Churchill. Throughout this time, police officers had been treating their downed colleague.</p> <p>Around the corner on Westminster Bridge, a car lay rammed into the side of the railings which wrap around Westminster Palace after hitting several people.</p> <p>Those sentences were taken from the article by Tom McTague, a reporter from <i>Político</i>. Do you want to read it all?</p>
@usuario	Yes
@politibot	<p><a href="http://www.politico.eu/article/terror-beneath-my-window/">http://www.politico.eu/article/terror-beneath-my-window/</a>  POLITICO  Westminster attack: Terror beneath my window  POLITICO reporters witness terror incident in UK parliament.</p>  <p>Some people have been evacuated and taken to Westminster Abbey. This photo was posted on Twitter by Michael German, a member of the House of Lords. I have a Trivia question for you. One of these celebrities is not buried in Westminster. Do you know who it is?</p>
@usuario	Dickens
@politibot	Error. The correct answer was Thatcher
@politibot	Good evening, human@. British Prime Minister Theresa May has addressed Parliament for the first time since the London attack. I'll tell you what she said.

Source: [https://web.telegram.org/#/im?p=@Politi\\_bot](https://web.telegram.org/#/im?p=@Politi_bot)

According to Table 9, one can see that the Politibot conversation with users has a personal tone and a dialogical discourse. Furthermore, many of these users identify themselves as “fans” of the bot for its ability to broadcast useful news with its own content and/or with evidence-based information from the main media. In addition, it is capable of pointing out the presence of illustrative elements in the distribution of the information (graphics and images), as well as links to delve deeper into the information sent.

### *3.2.3. Politibot coverage and emotional interaction with the audience*

In order to gather the opinion of the audience on the political coverage of the bot and the connection established with the user, we chose the topic of the general elections of the Netherlands held on March 15, 2017. For the collection and subsequent analysis of the information, we selected the time period from March 8 to 23 (taking into account a margin of between 7 and 8 days before and after, respectively), as already pointed out in the methodology section.

Regarding the bot’s coverage of the Dutch elections, Eduardo Suárez (2017) explains:

“We had two of our developers there, living in Leiden. One of them sent us pictures and told us about details of the campaign. That helped us a lot because we were able to know what was happening beyond what the media said in Spanish and English. The bot covered the event on the channels we have in operation now. We recorded an episode of our podcast that had more than 3,000 downloads. We followed the activity up to the minute on Twitter, where during the month of March we exceeded two million impressions and we performed a ‘send’ every day on our Telegram bot and Facebook Messenger”.

In order to gather the opinions of users, the tool that was utilized was Twitter, because users establish through Telegram a private contact, but at the time they share their opinions they do it in spaces that promote behaviour that is both individual and collective, but always civic, as in the case of microblogging.

Users recognized that the information was complete, accurate and without political bias. In addition, they valued the presence of illustrative elements (graphics/images) and multimedia (podcast, video and GIFs) to complement the information. The data show that 24.52% (13 in number) out of 100% (53) were very satisfied, 66.03% (32) were satisfied, 13.20% (7) were moderately satisfied, and 1.88% (1) was somewhat dissatisfied. As an example, we have collected the following tweets from users regarding the information provided by the bot concerning the general elections in the Netherlands.

**Table 10:** User opinions on the Politibot service

User	Date	Message
@AlexandraGil	March 23	“My days would not be the same without @politibot. I urge all of you to talk to him. He informs you with accuracy, with a touch of humour, and sometimes makes you feel this good”.
@lmartinaguirre	March 16	“@politibot has a huge amount of information about the Dutch elections!! I really like the graphics”.
@raulbroto	March 16	“Thanks to the chats with @politibot, I already knew that Wilders wouldn’t be able to govern anyway. Thank you!”
@mdetoroh	March 16	“They’ve done it again. Huge coverage from @politibot in #paisesbajos, citing sources and colleagues”.
@mcarvajal_	March 15	“I just chatted with @politibot about the Dutch elections: informative, agile and graceful. If it’s good, journalism progresses”.
@AlexandraGil	March 15	“@politibot already explained to me yesterday what would happen today with #Wilders. With graphics and GIFs. “You’ve got to love it, right?”
@mariadelamiel	March 15	“I declare myself #muyfan of @politibot, If you want to know the latest political news up to the hour, don’t hesitate”.
@Wiklerman15	March 15	“Election numbers in #Holanda by @politibot”.
@Mariablanca_	March 14	“For me, nowadays, @politibot is indispensable, the ‘robot journalist’ who offers information, multimedia and interactivity”.
@AlejandraArizaB	March 11	“Very interesting podcast of @politibot on the subject of the elections in the Netherlands next March 15”.

Source: created by the authors with data extracted from <https://twitter.com/politibot?lang=en>

User satisfaction with the service offered by Politibot on Telegram is considerable and can be seen in Table 10. Another aspect to be emphasized is the emotional connection that can occur between the bot and the audience with regard to the use of this tool, and it is possible to define this connection through the behaviour of acceptance or rejection. Furthermore, the behaviour is limited to the connection between stimulus and response in relation to the information received, which “acquires importance due to the value placed on the intensity of the transmission of the message, or in other words, on the presence of emotional elements” within this, which occurs by way of neurological routes of the brain through experience (Sánchez Gonzales, 2007: 545).

Emotion “is the result of two types of inheritance, cultural and biological, and even more so when it has a direct correlation with our goals and beliefs as human beings”. The user is a social being by nature and therefore builds his or her reality within a context of interaction where emotions make sense and could change it “based on the meaning we give it within the context of interaction” (Sánchez Gonzales, 2012).

To identify the emotions awakened by the bot through conversation, we have taken into account phrases or words that are related to courtesy, the use of figurative language, and the presence or absence of emotion (Goleman, 1996) and (Bisquerá, 2000). The data show 154 conversations regarding bot coverage and 53.89% (83 in number) of the interactions make use of figurative language. A total of 31.32% (26 in number) of users employ metaphors, 25.30% (21) use hyperbole, 19.27% (16) personification, 13.25% (11) simile and 4.81% (4) use irony, which means that 46.10% (71) use neutral language (with no reaction). Regarding the emotions that establish the aforementioned connection between the bot and the user, of the 100% (138 in number) of the conversations about the news service, 88.41% (122) were positive, while 11.59% (16) were negative. In both cases, we have considered the syntactic order, as well as both the affective and emotional elements that comprise the text.

We have also identified the following positive emotions: In first position is love, which stands above the rest with 45.90% (56 in number) out of a total of 100% (122). We also refer to trust (25%), empathy (21.43%), sympathy (10.71%), acceptance (5.36%), affinity (8.93%), respect (5.36%), devotion (7.14%), infatuation (12.5%) and gratitude (3.57%) Happiness is in second place with 22.95% (28 in number), and included among this concept are the following: delight (3.57%), tranquillity (28.57%), satisfaction (42.86%), wellness (17.85%) and calm (7.14%). Thirdly, there is joy with 18.03% (22) and in particular: satisfaction (40.91%), enthusiasm (18.18%), euphoria (4.54%), relief (13.64%), rejoicing (9.09%), and fun (13.64%). Fourth position is held by humour, with 9.84% (12) using laughter (expressions and emoticons have been used), and finally, ambiguous emotions with 3.28% (4): surprise and hope, both with (50%).

On the other hand, negative emotions that have been found are, in first position, anxiety with 43.75% out of a total of 100% (16 in number), which include the following: despair, restlessness and nervousness, all with equal percentages (14.29%), and consternation (57.14%). Likewise, sadness stood at 43.75%, and specifically the following: affliction and sorrow (28.57%) in both cases, as well as grief, pessimism and melancholy with similar percentages (14.29%). Finally, aversion with 6.25% and among this group is antipathy. These emotions are manifested in the interactions, but refer to the feeling toward the news, and not to the coverage of the bot. In this regard, by using examples, we have created the following table (Table 11).

**Table 11:** Emotional interaction with the audience

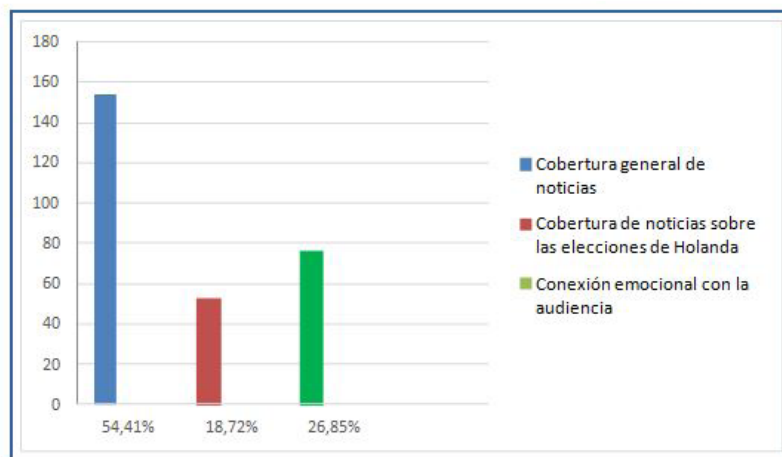
Users	Date	Messages
@SalvaBenasayag	March 20	"@politibot is better than a therapist".
@cygenta	March 17	"You are making a mistake if you haven't talked to @politibot on #telegram yet".
@p_molins	March 16	"@politibot, are you okay? Your silence has me worried. You haven't told me anything else :( ".
@ccandidop	March 16	"I confess that I have fallen in love with a robot. Everything I know about the #eleccionesNL was told to me by @politibot".
@JaviSkan	March 16	"@politibot is still asleep. But he tells me things about Holland in the morning, so I forgive him for everything".
@mlopca	March 15	"@politibot, thanks! If you stop by Barcelona I'll let you use the plugs in my house so you recharge yourself ".
@NilGarciaE	March 15	Political love, @politibot
@tammylidon	March 14	"I can't be more of a total fan, #FanTotal, of #Telegram @politibot. Finally, a robot that understands my political feelings".
@AlxandraGil	March 13	@politibot has got me. He's an artist.
@juanfont	March 11	"The first terms of use in the history of Humanity, the Universe and Everything, that are actually cool, are those of @politibot. <a href="http://telegra.ph/Politibot-Terminos-de-uso-03-05">http://telegra.ph/Politibot-Terminos-de-uso-03-05</a> "
@Naeri	March 9	"Put a @politibot in your life and you will never feel alone again. At least I have someone who talks to me every morning..."

Source: created by the authors with data extracted from <https://twitter.com/politibot?lang=en>

There is no doubt about the empathetic relationship that the bot establishes with the audiences in Telegram, and this can be corroborated by Table 11. To this we add that Twitter is a space that reduces stress because the "brain seems to see virtual interaction as if people were with us" (Zak, 2010).

On the basis of the data found regarding the political coverage (elections in Holland) by the bot and the emotional connection with users, respectively, Table 12 displays, in terms of percentages that out of 100% (283 in number) of interactions or responses by users (retweets), it is possible to point out, if we take into account the established time period, that 54.41% (154) are related to general news coverage, 18.72% (53) to the Dutch elections, and 66.03% (35) correspond to March 15 (election day). In addition, with regard to coverage of the current political situation, 26.85% (76), or about half of them, come from the emotional connection that the bot establishes with the user. However, it is possible to point out that 23.68% (18) of this interaction occurred with coverage on the London attack (March 23). These data show the preference and commitment of users for personalized and value-added information.



**Table 12.** Emotional Coverage and Connection with Politibot

Source: created by the authors

Although it is true that in June 2016 (the month it was created) Politibot reached 8,400 subscribers, months later in March (from the 8th onwards), when the bot started again, it obtained 3,210 new users by the 29th of that same month, and it did so in less than thirty days, Suárez assures us (2017). The intention of Suárez is to cover political events that happen in Spain, Europe and the USA, such as the elections in France and the primary elections of The Spanish Socialist Workers' Party (PSOE), by using surveys, his own graphics, and other means. "Always citing the source, naturally".

#### 4. Conclusions

Faced with the information overload from the media with which we have to live, new formulas that are personalized as well as applicable to information management are being established through instant messaging applications that include intimate speech and other resources that awaken interest and allow the user to connect emotionally with them. The media are betting on the creation of a channel in Telegram with an active presence in the application. This is the case of the news agency Efe and media services such as: *eldiario.es*, *El País*, *El Mundo*, *El Economista*, *El Español*, *El Periodico*, *El Confidencial*, *CTXT*, *Cambio16*, *Cuarto Poder*, *El Jueves*, *OKdiario*, *Público* y *Vozpopuli*.

Within this context, Politibot has appeared. It is the first bot in Spain that offers news services on Telegram regarding the political situation, and it has achieved great acceptance by audiences. In only 21 days (from March 8 to 29), it registered 3,210 new users. Likewise, its success has also been corroborated by the 73.13% response rate from users who have made reference to the quality of the information. This is the reason why out of a total of 90.55%, (66.03%) are satisfied, and

(24.52%) are very satisfied with the distribution of the information by the bot. The coverage of personalized information, agility, accuracy and lack of political bias due to its sources (internal as well as external) are some of the words and phrases that describe the bot. It also complements the information with graphics, images, GIFs and podcasts. The latter was well received after diffusing the episode referring to the elections in Holland with more than 3,000 downloads, and on the other hand, there were two million impressions on Twitter during the month of March after following events in the Netherlands minute-by-minute (Suárez, 2017). As a sample, here are some answers from users: “I have just chatted with @politibot about the Dutch elections: informative, agile and graceful. If it’s good, journalism progresses” (a1); “They have done it again. Great coverage by @politibot in #paisesbajos, citing sources and colleagues” (a2).

Additionally, it is possible to qualify the interaction with the audience as exemplary, and to this date, no media has had such a positive experience with their audiences despite user demand. 53.89% of these interactions make use of figurative language and 46.10% refer to a neutral language that does not generate reaction. The text messages published on Twitter reveal that 88.41% of the emotions are positive compared to 11.59% negative. In the first case, satisfaction (83.77%), confidence (25%) and empathy (21.43%) predominated on the part of the user, and regarding negative emotions, they were as follows: consternation (57.14%) and affliction (28.57%). These last percentages represent the emotions that have been prompted by the news itself, and not by the coverage of the bot on the elections in Holland. These data show that the user has established a relationship with the robot that is closer and more emotional, and in which the user identifies with the bot; this is corroborated by 26.85%, or about half, of the participation in the news service of the bot. As such, this data is significant. As a sample, here are some of the answers of users: “@charolarrea: @politibot is sensitive” (a1), “@politibot just told me I’m very nice. With the reputation for flirting that he has, I don’t know how to take it ... wink wink ... @AlzandraGil” (a2).

In the era of liquid modernity, with its impersonal aspect and information overload, Politibot is the answer to users who want to be informed on a specific topic and feel, in some way, cared for in a manner that is both personal and individual. The specialized information on national and international politics in this case is again of special interest, not to mention that the content and quality of information remains the king of the format. On the other hand, with the bot it is possible to have an excellent opportunity to collect reliable data by users and the media, which in the very short term will benefit from the advantage offered by this scenario. For all of these reasons, we could say that bots do not pose a danger to journalism, but an opportunity for its development.

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