

## **When media allow the user to interact, play and share: recent perspectives on interactive documentary**

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### **Abstract**

The evolution of digital media has inspired new narrative forms within the media context. In the last few years, interactive documentary has presented complex and alternative ways to access information. This article presents an analysis of this statement consisting of the case study of five international productions: *Bear 71*, *A Short History of the Highrise*, *Pirate Fishing*, *Do Not Track* and *Párkinson, que tiemble el camino*. The production of interactive documentary in online media as a journalistic format is tackled with a multidimensional approach which incorporates the product, the user's perception and the author's view. The exploration of new formats in online media is linked to innovation and a contemporary response to the audiences, who are now able to interact, play and share in an environment favoured by mobile communication and the skills of the current society.

### **Keywords**

interactive documentary; interactive non-fiction; interactivity; multimedia; online media; webdoc

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## **Introduction**

The production of interactive documentary in online media as a journalistic format is tackled with a multidimensional approach which incorporates the product, the user's perception and the author's view. It creates a form of expression based on the representation of reality which has undergone significant transformation in the last decade. Journalism is understood as "a varied cultural practice embedded within a complicated social landscape" (Carlson, 2015, p. 2), where the borders between the journalistic field and the interactive non-fiction world are blurring, also due to technological shifts. For these reasons and in order to complement current research, there is a need to include a panoramic view of the development of the format in the media, where it is also a sign of convergence. How is interactive documentary produced by the media? What can the user and the producers add to the redefinition of digital journalism in interactive non-fiction stories? This article proposes a contemporary vision based on the analysis of outstanding projects, a discussion group with users and interviews with both authors and producers.

The article aims at answering two main questions in relation to the development of interactive documentary in the media:

RQ1. Which is the characterisation of the interactive documentary created by the media, in terms of structure and navigation, multimedia resources and interactivity?

The identification of features allows to figure out how media implement resources to build a more interactive project. In addition, it potentially contributes to an enhanced experience for the user.

RQ2. How does interactive documentary provide new ways to tell stories from the point of view of the product, the users and the producers? There is a need to investigate these digital stories from many perspectives, considering the three-part relationship which has been modified: author, text and user.

## ***Evolution of Media and Journalism***

The evolution of computing and information technology have facilitated the progress and the transformation of many sectors, including journalism, through convergence (Deuze, 2007; Jenkins, 2006). The debate around the new media goes on when a technology is adopted by a consolidated medium. Thus, with the popularization of the computer came the

definition of 'meta-medium' (Kay & Goldberg, 1977) and, later, software took command (Manovich, 2013). The digital platforms that today lead an intense cultural production – YouTube, among others– are also called media. It gives meaning to the "evolutionary process of medium emergence and constitution" (McMullan, 2017, p. 13) that allows us to understand the current scenario. "This production of a belief in the new has real implications for how new technologies and media forms are perceived" (Stevenson, 2016, p. 1100).

The digital narratives, or digital storytelling (Alexander, 2011; Lambert, 2012), were born from the imitation of the printed media, incorporating the break of sequentiality through hypertext and the integration of multimedia resources. Nonetheless, interactivity is the feature that makes this new medium remarkable and adds a new conception of the users' participation, reached beside hypertextual development.

Interactivity can be defined as the degree to which a communication technology can create a mediated environment in which participants can communicate (one-to-one, one-to-many, and many-to-many), both synchronously and asynchronously, and participate in reciprocal message exchanges (third-order dependency). With regard to human users, it additionally refers to their ability to perceive the experience as a simulation of interpersonal communication and increase their awareness of telepresence. (Kiouisis, 2002, p. 372)

The interpretation of what interactivity means is related to the field where it is applied. Its typology has been also the focus of the research, so there are different proposals related to the origin –medium, medium-human, human-medium, and human (Chung, 2008)– or the response to the user –navigational, functional, adaptive (Deuze, 2003)– in journalism. In the last decades, it has been the topic of multiple studies. From computer-mediated communication (Downes & McMillan, 2000; Jensen, 1998; Stromer-Galley, 2004; Sundar, 2004) to virtual reality (Ryan, 1999; Steuer, 1992) and online journalism (Chung, 2008; Deuze, 2003; Rost, 2006), where it is defined according to user control and user participation, mainly.

Recently, studies about interactivity are more focused on more specific dimensions, such as effects (Oh & Sundar, 2015; Yang & Shen, 2018), interaction and engagement with news (Ksiazek, Peer, & Lessard, 2016; McElroy, 2017), public discourse (Barry & Doherty, 2017) and also interactive documentary, where we will go deeper with an accurate typology built by Gaudenzi (2013). We conceive interactivity as the user's ability to act within the

story and also with other users in multiple degrees, from control of the viewing (as a remote) and content selection (non-linear access and navigation) to participation (sharing, discussing and contributing), in a close approach to interactivity in online journalism as mentioned before. For the analysis, it will be differentiated the function of the user (Aarseth, 1994), the mode of interaction (Gaudenzi, 2013) and the mechanisms of participation –the greater level of interaction–.

Around 2012, news media increased the conflated use of video, pictures and graphics, towards a more visual experience. In that year *The New York Times* released *Snow Fall: The Avalanche at Tunnel Creek*, a multimedia story which was awarded the Pulitzer Prize in 2013. This represented a milestone, although other newspapers such as *The Guardian* or *El País Cali* were also experimenting with similar formats. The so-called multimedia journalism (George-Palilonis, 2012) implies a contemporaneous approach when narrating the story. Regarding genres, the adaptation of the story to cyberjournalism currently has a significant presence in the media and has been studied by researchers such as Larrondo (2009) and Domínguez (2013). The processes of journalistic innovation (Paulussen, 2016), as well as the emergence of media labs (Salaverría, 2015), are connected to the renovation of the multimedia narrative formats. Currently, digital journalism faces its future towards mobile news (Westlund, 2017) and the shape of the news is adapted to the navigation through mobile devices (Newman, 2018).

Within the contemporary media ecology, Deuze noted that "our media behavior always seems to involve some level of participation, co-creation and collaboration, depending on the degree of openness or closedness of the media involved" (2007, p. 247) . This way of seeing production and consumption impacts how users experience media works. Different perspectives on how interactivity impacts journalism and the role of the user are addressed by scholars, such as co-creative collaboration and audience participation (Malmelin and Villi, 2017; te Walvaart et al., 2018) and the media user as an updated definition of audience (Picone, 2017). In summary, interactivity proposes a new author-text-audience relationship (Cover, 2006) that invites to assess the development in new formats. Nevertheless, this interactive condition results in risks as well (Forceville, 2017; Rose, 2017). And furthermore, the development of participation –a term frequently used to designate examples of low interactivity– implies challenges regarding the digital divide, user's motivations and economic aspects (Literat, 2012) as well as the need of infrastructures for both structural (form) and executory (content) participation (Green, 2017).

## ***Interactive Documentary***

As a result of the confluence of documentary cinematography and the interactive medium, interactive documentary has continued its discreet evolution which started in the nineties, experimenting in the distribution media of each time period from optical to online. According to Aston and Gaudenzi, an interactive documentary is “any project that starts with an intention to document the 'real' and that uses digital interactive technology to realize this intention” (2012, p. 125). The controversial definition of the documentary still remains present, so a broad understanding of the reality-based storytelling is needed.

From 2010 onwards, it can be said that this subgenre of interactive non-fiction is nowadays in a state of arguable consolidation (Gifreu, 2013), although there are also some critical but promising views (Dovey, 2017). The format reaches recognition and legitimation, although there is still some debate regarding its name: i-doc, webdoc, web documentary and interactive documentary, the latter being the most popular. The significant hybridisation within these formats (Sora, 2015) shows the difficulty to establish an absolute categorisation and, at the same time, describes its richness. The conception of interactive documentary as a living organism (Gaudenzi, 2013), something which is still under transformation, allows the user to take on a leading role, both in decision making while they are watching the product and in their contribution to it. Furthermore, transmedia documentary (Irigaray, 2016; Renó, 2013) uses simultaneous media and languages, and parallel platforms for distribution where the story is expanded, seeking the prosumers' complicity (Scolari, 2012).

It is a format which several authors have tackled using different approaches in the last few years (Aston and Gaudenzi, 2012; Aston et al., 2017; Aufderheide, 2015; Favero, 2013; Forceville, 2017; Nash et al., 2014; O'Flynn, 2012; [Anonymous version]), such as the value of co-creation in activism (Rose, 2017), the political role of the citizenship and the social function of i-docs (Nash, 2017) and the development of participatory i-Docs –“emergent, non-linear, polyvocal narratives” (Green et al., 2017, p. 6326)–. There are three proposals for characterisation based on interactivity. Firstly, Kate Nash (2012) establishes three types of webdoc in a discursive oriented taxonomy: narrative, categorical and collaborative. Sandra Gaudenzi (2013) defines four modes of interaction based on a perspective that builds on cybernetic theory: conversational, hypertext, participatory and experiential, defining the role of the user, something which is especially relevant for this analysis. Arnau Gifreu (2013) shows the broader relation of navigation and interaction modalities, with reference to documentary and digital media evolution: fragmented, timeline, spatial, testimonial,

ramificated, hypertextual, preferential, audio-visual, sound, simulated-immersive, social or 2.0, generative-contributive and physical-experienced. The variety of proposals is related to the contemporary and changing way of expression, which is defined as complex and open (Gifreu, 2013).

### ***Interactive Non-Fiction in the Media***

Interactive non-fiction and interactive factual define the representation of reality in digital interactive platforms, a broader concept than documentary, usually understood as the classical and cinematographic definition linked to the celluloid registration of any aspect of the reality. The study of interactive documentary in the media –a narrative form within interactive non-fiction– is a topical issue and there has also been previous research focused on specific productions originated in the bosom of journalistic media (Freixa, Soler-Adillon, Sora, & Ribas, 2014; Sora, 2015). Sharing this area of study, it is necessary to highlight the report coordinated by William Uricchio (2015) in the MIT Open Documentary Lab, where he points out that journalism is undergoing a ‘process of redefinition’ in which the user and his or her experience should be a priority, as well as the search for collaboration in the production of this format in the media due to its capacity to spread knowledge and promote social change.

In the current situation, different approaches are required for the study of digital narratives. One of the most prevailing concepts in journalism is that of immersion (De la Peña et al., 2010; Domínguez, 2013) and an appropriate approach for the moment when the user adopts a level of control over the story as this is significant in interactive documentary and especially in virtual reality. Immersion translates into a more engaged experience due to the central position of the user within the scene; so the news media outlet reach the audience through an innovative way which has consequences on user’s commitment and the brand distinction. On the other hand, gamification has also become utilised; it is understood as the “use of game design elements in non-game contexts” (Deterding, Dixon, Khaled, & Nacke, 2011). Thus, docugame behaves similarly to a newsgame adopting a ‘procedural rhetoric’ (Bogost, 2007) associated with videogames. Again, gamification provides the user a different approach to news and reality which contributes to a more comprehensive and engaged consumption.

These multidisciplinary conceptions represent the heterogeneity of documentary works in the interactive media. There is a high level of interest amongst the researchers in this “sustained period of far-reaching and rapid change” (Franklin, 2016, p. 799) in journalistic activity.

Digital storytelling has entered numerous fields and they are linked to creativity in this developing scenario. Their importance is due to the exploration of “new ways of perceiving and interacting with stories in spaces that otherwise would be out of reach” (Barber, 2016, p. 12).

## **Methodology**

The objective is to know the characterisation of the interactive documentary produced by the media, under the hypothesis that there is a more complex and extensive use of elements than traditional news stories –which can also be improved by these features–. According to Deuze (2003), we consider the key characteristics of online publishing: hypertextuality, interactivity, multimediality. On the other hand, as the interactive documentary is a recent form of expression, we cover the point of view of the producers and the audience, to elaborate a non-exhaustive but necessary approach.

The methodological design is made up of quantitative (content analysis) and qualitative techniques (discussion group and in-depth interviews). Approaching from different perspectives is necessary due to the complexity of interactive documentary.

[Figure 1 near here]

Firstly, a selection of products was analysed. This selection involves six countries from 2012 to 2016. The sample (Table 1) has been designed seeking geographic and temporal representation from the main databases on interactive documentary and digital non-fiction narratives (MIT Docubase, interDOC, IDFA DocLab), taking into account its illustrative value, the prominent use of multimedia and interactive resources as well as the recognition in the reference festivals (IDFA, Sheffield Doc/Fest, World Press Photo Multimedia, Emmy New Approaches, One World Media, Prix Europa, among others).

[Table 1 near here]

A report sheet (Table 2) has been designed while taking as a point of reference the work of previous authors like Larrondo (2010) and Domínguez (2013) applied to the hypermedia report and special features, the definition of the function of the user considering non-linear narratives (Aarseth, 1994), the modes of interaction in interactive documentary (Gaudenzi, 2013) and the proposal of parameters by [Author]. The analysis considered both the characterisation of the product and the content, so we were able to assess how the features affect the story.

[Table 2 near here]

Following Krueger (1991), a discussion group was arranged to comment on the project *Párkinson, que tiembla el camino*. In the current phase of evolution of the format, it seems necessary to consider the users' view of a production of this kind in order to value its reception and to contrast with the formal proposal of the product, as well as to evaluate possible improvements and further possibilities for expansion.

The discussion group was set up through an online platform created and run by the researchers on a website where the users' anonymity was guaranteed. The eight participants, between 15 and 61 years old, were selected in order to cover a wide age range with representation for adolescents, young adults, adults and senior adults. It must be acknowledged that it is not a probabilistic sample and its results do not allow generalisations but do offer a preliminary and complementary approximation. The participants offered their ideas stemming from three suggestions made by the research team: (1) general opinion of the interactive format as a way to inform and experience news stories, (2) treatment and explanation of the topic and (3) the use of gamification in the project.

[Table 3 near here]

Finally, six semi-structured interviews were conducted with experts via e-mail between January and March 2017, which allowed for an expansion of the points of view gathered on interactive documentary from production to distribution, as well as its development in the media. The interview questionnaire included five groups of questions about the production itself (budget, team, statistics), the model of production and the collaboration between organizations, the contribution of interactive documentary to journalism, the consequences on the user experience, and the future of the format. Each group contained some open questions adapted to each specific case, so the interviewees were allowed to answer with flexibility. The interviewees were seven authors and producers involved in the projects of the aforementioned sample. They were selected –as directors or producers– due to their meaningful contribution to these interactive documentaries from media organisations and production companies, so they are able to reply appropriately as they are in charge of the project.

- Jeremy Mendes directed *Bear 71* for the National Film Board of Canada (NFB) in 2012, the institution where he works as director and interactive producer.
- Gerry Flahive was the producer of the National Film Board of Canada (NFB) until 2014, where he produced the serial project *Highrise*, directed by Katerina Cizek.



- Juliana Ruhfus is a journalist for *Al Jazeera English* and has been awarded for the direction of *Pirate Fishing*. More recently she has presented another interactive documentary: *#Hacked*.
- Louis-Richard Tremblay is a producer in the NFB Interactive, his works include *Do Not Track*.
- Claudia Reig and Àlex Badia are the directors of *Pàrkinson, que tiembla el camino* from the cooperative Barret Films.
- Miriam Hernanz is the head of the *RTVE* Laboratory for Audiovisual Innovation, the company which coproduced *Pàrkinson, que tiembla el camino*.

## Results

### *Five International Projects*

*Bear 71* is an interactive documentary produced in 2012 by the NFB and directed by Jeremy Mendes and Leanne Allison. It was awarded esteemed prizes such as the Sheffield Doc/Fest Innovation Award (2012). The project highlights the difficulties of man's coexistence with the infrastructures and the fauna in a story narrated from the point of view of a she-bear living in the Banff National Park (Canada). This documentary, in its native webdoc format, has approximately a 20-minute duration. It was presented as an installation at the Sundance Festival (2012), the same event where the virtual reality version was released in 2017.

The core of the whole experience is on an interactive map, which boosts the exploratory function. The user navigates freely and views different videos which correspond to the surveillance cameras in the park, at the same time, a linear story is developed using voice-over, music and ambient sound. This approach allows the selection of content, making use of the objects present in the interface and moving as a character in the scene.

*A Short History of the Highrise* is an interactive documentary coproduced in 2013 by The New York Times and the NFB, directed by Katerina Cizek within the *Highrise* project and won awards at several festivals such as the World Press Photo Multimedia Contest (2014) and the Sheffield Doc/Fest Innovation Award (2014). Gerry Flahive oversaw the production, while Helios Design Labs carried out the interactive development. This project covers the history of urbanism and its impact on current lifestyles, integrating the audience's collaboration. The webdoc has an estimated 40-minute length, taking into account the non-linear experience.

The story is based on four chapters of linear video and incorporates 126 photographs recovered from *The New York Times* archives. The design of interactivity corresponds to the hypertext mode and allows the user the possibility to explore. It is a co-authorship project that utilises visual material (photographs submitted by users) for the construction of the last episode, which reflects the contemporary urban lifestyle from multiple points of view.

Pirate Fishing is a docugame produced in 2014 by *Al Jazeera*, in coproduction with Altera Studio and directed by the journalist Juliana Ruhfus. This documentary constitutes a journey through an investigation of fishing piracy in Sierra Leone where the user is the protagonist of the story. The original format was linear documentary but a year later *Al Jazeera* released the interactive version through the web as the first newsgame in the medium, together with the linear components and broad textual information. It was awarded the One World Media – Digital Media Award (2015). It lasts approximately 85 minutes, although that can depend on the users' decisions.

*Al Jazeera* itself defines it as being an interactive investigation. *Pirate Fishing* establishes a visual environment and the video presents the main content of the story. Interactivity is introduced by the exploratory and role play function, in a system of narrative interactions which are the consequence of diegetic elements. Nonetheless, the most outstanding feature of this project is the gamification which reaches a greater level of engagement by the user due to the assignment of a role (journalist) and the research objectives presented from the beginning. The game includes a progress bar, a collection of 14 insignia which identify the achievements and as the experience advances, the game also provides the users with clues that they need to classify according to the value they hold for the investigation.

*Do Not Track* is a serial interactive documentary produced in 2015 by *Arte*, *Upian*, *NFB*, *Bayerischer Rundfunk* and other partners, such as *CBC Radio Canada*, *AJ+*, *Radio Télévision Suisse*, *Rue89* and *France Inter*. This project, directed by Brett Gaylor, talks about the risks of the unprotected privacy on the internet and its consequences, appealing to the critical vision of the topic. It is presented exclusively in the format of web documentary. It is a serial publication composed by 7 episodes which were released every two weeks between April and June 2015, something new in contrast to the majority of similar projects. Watching it in its entirety lasts about 95 minutes.

The key element in this webdoc is the connection and interchange of information between the documentary, the web browser and the Facebook profile: age, gender, location and likes on fan pages. In this project, the configurative function allows the personalisation of

the content, which transforms the documentary into an enriched individual experience, closer to a conversational mode. The system interprets the information taken from the user in order to get closer to his or her personality and applies this data to different situations, such as the prediction of the possible risks affecting health or financial credit.

*Párkinson, que tiembla el camino* is a web documentary produced in 2016 by Barret Films and *Lab RTVE*, directed by Claudia Reig and Àlex Badia. The project represents the challenge of the *Camino de Santiago* (St. James's Way) organized by the Valencian association of people affected by Parkinson's Disease and based on five personal stories which include brief interactive games related to the most common ailments of those affected by this illness. The interactive format, with an approximate length of 35 minutes, coexists together with a linear documentary broadcasted in the program *Documentos TV* in *RTVE*.

The exploratory function is set within a system of narrative interaction, guided by a storyline which is maintained from beginning to end. The main feature of this project is gamification, which offers a different perspective of the topic as well as giving the user prominence in the story by requiring them to take action and provide input. There are five games in total, one for each character, in which diverse situations and difficulties need to be overcome: jumping across obstacles, catching objects or keeping balance. The user gets a sense of the effects of this neurodegenerative illness through game dynamics (score, meters travelled and countdown) experiencing the difficulties personally. Their score is presented on a global ranking in relation to the rest of the audience as it is registered on Facebook.

### ***Development of hypertext, multimedia and interactivity resources in interactive documentary***

As it was established in the methodology, the analysis focuses on three key categories that characterise interactive documentary: hypertextuality, multimediality and interactivity. The hypertextual analysis of the projects is summarized in Table 4, where the diversity of the proposals is observed, especially regarding structure which, together with the fragmentation of content and navigation, contributes to the interactive experience. The implementation of links is emphasized, as these are intrinsic to making the users' trajectory possible; for example, in *Do Not Track*, about an 87% of the hyperlinks direct the user to other sites in order to learn more about the topics being presented, thus emphasizing the informative nature of the documentary.

The impact of a hypertextual proposal with such complexity in this medium is translated into alternative structures for the story. The user has the opportunity of getting

close to a certain reality with some control: depth, selection of content, navigation, etc. The hypertext makes it possible for the experience to be non-linear and individual, through the division of contents (in chapters or smaller units) and non-sequential access. Some risks can be found, such as difficulty understanding a non-standard navigation system, the loss of attention during navigation or the possibility of no return after consulting an external link. Nowadays websites usually show a broad development of hypertextuality, especially in terms of architecture, navigation, and external and internal links. In interactive documentary, a more advanced and complex display which coordinates the story has been identified.

[Table 4 near here]

The use of multimedia in interactive documentary (Table 5) represents the combination of different resources, with video retaining its importance. The audio-visual pieces can be the principal element of each chapter, as occurs in *A Short History of the Highrise*, or they can be presented as brief pieces of content with a length not exceeding 3 minutes, such as those featured in *Pirate Fishing* and *Do Not Track*. The text, maps and graphics are utilised together with interactive features, which are specific activities or brief games that require the user to participate.

The multimedia development involves more forms and languages within interactive documentary than the conventional offering in the media. Even in cases of transmedia strategies, there are greater displays of narrative platforms. The multimedia nature of a product can be reinforced by the user's means (webcam, user-generated content) or by resources provided by the medium itself (archive, programs, news). Currently, the media in question uses these means and resources and this format is recognised for their integration through the interface which works as an intermediary between the documentary representation and the user. The result is a conjunction of form, technology and the story.

[Table 5 near here]

Finally, in all cases the users' participation is reflected in the possibility of sharing the link of the webdoc on social media networks, commenting through the website itself or on external platforms in three of them. The most significant contribution to the expansion of the story, with user-generated content, is still an option that has not been fully explored. As it was mentioned before, the implementation of interactivity and the use of this denomination is complex. As Gaudenzi (2013) stated, the user "becomes a doer, rather than a viewer" in participatory projects, a degree that is not reached in general. The conception of *A Short History of the Highrise* stands out in this regard, with the participation of the readers of *The New York Times*.

Interactivity is the element with the greatest impact and where more possibilities to be developed and reinforced can be identified. Although the cases under analysis are, in this sense, conservative, they also present the user's renewed functions in non-linear narrative, among which Aarseth (1994) would define: exploratory, configurative, role-play and poetic. These functions have also supported the interaction modes proposed by Gaudenzi (2013), which we can organise in relation to the potential contribution of the users in ascending order: hypertext mode, participatory mode, conversational mode and experiential mode. As the author defined, in the hypertext mode the user can create paths through a closed data base; in the participatory mode the user is able to expand the database; in the conversational mode the user can create a world, its rules and user's actions; lastly, regarding to the experiential mode, the user can design experiences in a dynamic scenario.

In a media context, only the hypertext mode presents a significant development. Several levels of interactivity are thus left open to further exploration in pursuit of new experiences as has already been demonstrated in initiatives unrelated to the conventional media where there has been greater experimentation (*Digital Me, Quipu Project*). Sharing and commenting are available actions in a conventional interface in a medium; notwithstanding that contributing to the expansion of a story is at the same time: (1) a qualitative leap which makes a difference, (2) a challenge to manage from the news company and (3) an opportunity to give voice to the audience in specific products. In addition, managing these features represents important technical, human and economic efforts.

[Table 6 near here]

### ***User's Experience***

*Párkinson, que tiembla el camino* was the webdoc selected for the discussion group with eight participants as it was explained in the Methodology section. Through the conversation it became clear that interactive documentary is a media format that is now recognised amongst the users in the group and considered it to be attractive and enjoyable. This condition is a result of the empathy with the content (story and characters) mainly. The user doesn't value specific features such as interface, navigation or interactivity, but he or she recognises some positive factors linked to control (decision-making and deepening by clicking), fragmentation and access (short and diverse perspectives) and complementary voices (expert points of view).

One of the most valued aspects is the fragmentation of the content and the possibilities that a hypertextual structure with brief and well delimited chapters can offer. Although the

differential feature of this project is its gamification, the protagonists and experts' testimonies are the most important for the users. In fact, the incorporation of the game brought about a certain level of controversy. There were two main opinions; firstly, the game does not bring anything to the project, it is childish and reiterative; and second, the game provokes empathy and contributes to commitment. Although both positions were clearly defended, those who support gamification suggested a better integration and justification.

Regarding the game, I would say that I do find its meaning and aim. When I played it, I felt clumsy and frustrated, since you see that you want to continue overcoming obstacles, but it is impossible no matter how hard you try. It is a practical way to put oneself in the shoes of the characters you have in front of you. (User 3)

I don't think that, in general, the format contributes to understand better the illness. For me, it is a way of offering a more dynamic and enjoyable viewing. (User 4)

I think it helps in getting oneself committed. However, I miss a greater integration between the stories and the game. Perhaps, something that can be considered a more immersive strategy for the game. (User 1)

The users suggested improvements such as simulation in virtual reality of what the ill people experience, the inclusion of computer graphics which support the scientific argumentation, and which help in its understanding, or the encouragement for a reward significant to the progress in the webdoc. One participant also highlighted the scarce promotion that *RTVE* gave to this project, a fundamental issue in achieving greater visibility and to reach a wider audience, especially considering that this project was born from a linear documentary broadcasted by the public broadcasting company. Finally, the users detected problems in the reproduction of the project on other platforms, specifically in the interaction through mobile devices, which resulted in a less appealing experience.

The discussion group allowed to identify that the story is the main reason for a greater commitment, according to users. Nevertheless, they express that structure, navigation, interface, multimedia content and interactive features are closely related to their experience – although they don't use that terminology–. Users demonstrated that they are more demanding if they have previous experiences with interactive documentary. In addition, it has been detected that innovative formats cause expectations, which can easily lead to disappointment,

regarding, for instance, the integration of elements and the functioning of the interactive format.

### ***Authors and Producers' View***

The development of interviews allows an investigation on interactive documentary from the point of view of its authors and the media, a perspective which complements the study of the selected cases. Comparing the budgets of each project, three were found to be as follows: *Bear 71* (\$350,000), *A Short History of the Highrise* (\$150,000) and *Párkinson, que tiembla el camino* (€60,000 spent on the linear documentary, and €15,000 the webdoc).

Regarding the transmedia strategies in the television media, Juliana Ruhfus (director of *Pirate Fishing*) points out “the most important is working in an efficient manner with the existing television content and making use of it through the platforms” (2017). Her project is part of a previous linear audio-visual format, according to the remediation theory (Bolter, 2002) that illustrates the emergence of interactive documentary.

Although there are great differences in the economic disposal, all the production teams are multidisciplinary and involve between five and twenty people, the latter referring to *Do Not Track*. Regarding the consumption and circulation data of these projects, the details of *Pirate Fishing* can be highlighted: “83% of the visitors had never before been on an *Al Jazeera English* website and were first time visitors to our brand” (Ruhfus, 2017), something which seems to have a significant impact on new audiences.

Regarding RQ1, creators and producers consider that one of the key questions in the characterisation of the interactive documentary is the concept of interactivity, since “it is not seducing everyone” (Tremblay 2017). For Ruhfus, there are two differential aspects in potent and real interactivity: a completely immersive journey with personalised consumption of the information, and making the format part of the story meaning that the user is experiencing that which is being narrated, “[getting] the content and the format to deliver the story” (Ruhfus 2017). Although interactivity is the most distinguishing resource, the interviewees also highlight ‘the format’ or the combination of features and strategies to deliver the story. For instance, gamification does not entail the abandonment of journalism for the director of *Pirate Fishing*; “it is journalism presented in game format but it is still journalism” (Ruhfus 2017). In relation to the use of the game and interactivity, Jeremy Mendes (2017), director of *Bear 71*, emphasizes the cohesion with the story as a fundamental value in projects of this kind. The same was concluded by the users in the discussion group, as the aforementioned controversy emerged regarding the integration of the game with the story.

As Barber (2016) said, the media looks for new ways to tell stories –which is the purpose of RQ2–, even approaching entertainment with the use of game elements (Deterding et al., 2011) and procedural rhetoric (Bogost, 2007). Above all there is an interest in journalism and reaching new audiences through interactive storytelling. Ruhfus points out that she would like “to take investigative journalism out of the ivory tower and make it more accessible to new and younger audiences” (2017) and for the creators of *Párkinson, que tiembla el camino*, the format favours awareness and empathy with good-quality information. Interactive documentary is also presented as an alternative of deepening and context before the “avalanche of news and information (and a growing concern about ‘fake news’)”, according to the producer of the NFB, Gerry Flahive (2017). This idea is supported by the directors of *Párkinson, que tiembla el camino*, who define a webdoc, in this sense, as an educational tool, agreeing with Uricchio (2015) who supports its possibilities to inform and promote social change. The transfer of control and decision-making are highlighted elements for the interviewees, and also for the users who participated in the analysis of that project, which result in a better understanding of a complex, more active and first-person experience.

Collaboration between institutions and with users is becoming an essential model for the development of these productions. According to Louis-Richard Tremblay (producer of the NFB), *Do Not Track* comes from “an international collaboration on an international matter” (2017). In the case of *A Short History of the Highrise*, Gerry Flahive highlights the creative approach to the media archives as if it were a “collective memory”, which is complemented with “several thousand photos [that] were submitted by *The New York Times*’ readers from around the world” (2017). In addition, creators and producers understand public broadcasting services as a necessary driving force for innovation. The directors and the person in charge of the *Lab RTVE* insist on the vocation of the public service in these kinds of projects. Reig and Badia (2017), directors of *Párkinson, que tiembla el camino*, point out that the support of a public broadcaster is “fundamental in order to make the implementation of projects possible, some of which would be very difficult to fund in commercial ways”, referring to those new formats such as webdoc. Hernanz (*Lab RTVE*) declares that these types of co-productions “are a way of boosting projects external to the company but of social interest for the citizens” (2017).

Looking ahead, there is confidence in the evolution of interactive documentary. This evolution is possible in several ways, according to experts: the producers, the market and technology. On the one hand, the producers of this format will have to develop the type of



content that the user is willing to make an economic or temporal effort for. At the same time, Barret Films point at the convenient bet of the public media for “the new frontiers of languages and formats” (Reig and Badia 2017), which should be explored in order to make the market subsequently transform them into business. On the other hand, the democratisation of the development tools, which are becoming more accessible and less expensive, the production in the social networks and the penetration of platforms such as the smart TV open up new possibilities for the creation and commercialisation of interactive products.

## **Conclusion**

The development of interactive documentary has become prevalent within online media around the world in webdoc format and has begun to be recognised by the users. This format shows great potential in journalism, close to multimedia reportage, even more with the interactivity. Since 2010 an important volume of projects have been released in the media towards the consolidation of its production and, above all, towards diversification. It takes features from other interactive formats, such as videogames and virtual reality. These mutations make it increasingly difficult to understand interactive documentary as a genre properly. The absence of a clear definition makes it difficult to fully consolidate the concept. It presents fluid boundaries as a result of the context in which it has emerged, markedly determined by technology and convergence. This volatile state does not stop, since it has evolved from offline formats for computers to multiplatform and mobile online formats; therefore, its limits are becoming more diffuse. For that reason, it is classed as interactive non-fiction, a broader concept that considers the diverse forms of contemporary expression based on reality, as seen in the analysis and also developed in the media.

The characterisation and application of interactive documentary in media (RQ1) raises new methods to get informed, as well as the “interdependence” created between the user and the represented reality (Aston and Gaudenzi 2012). The context takes importance, it requires time for commitment and involves interactivity as a tool to boost engagement. The advanced hypertextual development and the multimedia visual character (highlighting the intensive use of hyperlinks and the prominence of brief videos) lay the foundations for an experience for a user willing to interact: choosing how they consume the information, what to watch and how to watch it, sharing, decision-making, performing actions on the story, exploring and personalizing. Interactivity, with different levels, is the differential value of these projects and the one with the greatest potential, being a condition used by creators and producers, resulting in enriched experiences, valued by the users as well.

One of the singular strategies is the gamification of news consumption as part of immersive rhetoric. It offers the user a role and allows for first-person experimentation and simulation. Both users and producers agree on the necessity of achieving narrative coherence when applying game-like strategies. The popularisation of social media maintains the concept of sharing which is intrinsic to the network and makes conversation and debate easier. The contributions of the audience and the construction of a community are generally channelled through these platforms, encouraging the expansion of the story towards limits predetermined by the authors.

The media finds new perspectives in interactive documentary (RQ2) which enrich the story, seeking coexistence with the production for the traditional support. This can be seen in specific proposals like the co-production program *Factoría de webdocs* by RTVE and broad experimentation in European and American online media. Thus, an encouraging impact of narrative innovation on the evolution of digital journalism is identified at the same time that it represents a way to achieve new audiences. The detail of 83% of new users in Al Jazeera English is a good example of this phenomenon, which supports the media's commitment to innovation in multimedia and interactive formats in search of a younger audience, used to consuming information on social networks, in incidental mode and being liquid between screens.

The format uses a multiplicity of resources, views and experiences. It is becoming more and more of a hybrid method of communicating stories and information. Furthermore, it considers the adaptation to the users and to the topic, with a deepening focused on the interactor. It offers an alternative method for the consumption of information, a more personal method, with an element of entertainment and permanently linked to the evolution of the interactive medium and communication technologies.

Interactive documentary redefines the author-text-user relationship, whose transformation generates new tensions, as identified in the analysis. Mainly, three areas with different perspectives are identified: the project development, its purpose and its effect. First of all, production is expensive, it has specific operating requirements, it is not completely adapted to mobile and, for users, it is sometimes not visible and accessible enough. In addition, interactivity does not seduce everyone, it is an over-employed term and, sometimes, used to describe low participation projects. However, there is an alternative and potentially more engaged experience for the user, for example through gamification. Its presence increases in journalistic projects, fleeing from becoming only a 'gimmick'. Second, the purpose of creators and producers is to spread the story without losing previous values and

principles, to try new narrative formulas and to reach new audiences. They also express their intention to open journalism and seek answers to the challenges of contemporary communication. The user, according to the discussion group, expects selective deepening, multiple points of view and interactive resources which are correctly integrated and justified in the story. Nevertheless, both sides agree that the most relevant thing is the story. Thirdly, the effect expected by creators and producers is engagement, the positioning of their brand and the volume of users (an interactive documentary reaching an audience milestone has not yet been identified), mainly; while the user, increasingly demanding, expects an experience that meets his or her expectations (understand, learn, entertain) and that converts the interactive promise into a real interaction. In the evaluation of the three areas where the author-text-user relationship must be balanced, the study of the user is a key factor and the approach from fields such as Human-Computer Interaction, where there are previous experiences applied to other formats (Schoenau-Fog, 2011; Szilas and Ilea, 2014; Roth and Koenitz, 2016), can enrich the study of interactive non-fiction.

[Figure 2 near here]

The format will not be exempt of challenge in the near future, but due to its nature, it has the capacity to integrate new resources and technological applications. Although the fear of being overcome by new technology exists, interactive documentary has the advantage of having transmedia qualities, which allows future adaptation to new forms of media multiplication and diversification, instead of being replaced by a dominant medium (Bolter & Engberg, 2016). Two key aspects that can be extrapolated to interactive digital communication are identified from the research carried out: the interactive promise and the participatory challenge. On the one hand, the development of interactivity beyond the selection of content is still exceptional; on the other, the term 'interactive' is widely used. This causes false expectations in users and the still pending development of the true potential of interactivity: the level of agency or significant action. Regarding the challenge of participation, several issues to be solved are identified: universal access limited by the digital divide, the democratisation of tools, the demand for infrastructure and platforms, as well as the economic and rights management of participation.

The search for a financially viable model of production and interactivity management are key topics to be explored according to the interviewed experts, with the objective of achieving a completed consolidation in the next years. The difficulty lies in the production of technologically sophisticated and expensive projects, because it needs multidisciplinary

profiles to participate, its production is time consuming and it has strong technical requirements. The lack of an obvious return puts the future of interactive documentary at risk. On the other hand, it is also necessary to pay greater attention to the format from the user's perspective, where more complex evaluations of the user experience are required from design to reception. The user is moving from a passive role towards a prosumer profile, so the creator of the interactive documentary expects him or her to participate. Precisely the concept of 'user' refers to a subject that takes part in the work, instead of being a spectator or reader, and whose reward is experience, especially reinforced with interactive and immersive resources.

From a critical approach, this format tagged as 'new' needs to be rigorously evaluated –from different areas such as Communication, Human-Computer Interaction, Literature or Psychology– to know also how it contributes to the audience in terms of awareness, immersion and empowerment. In interactive documentary and in digital narratives in general, the balance between promises of the authors, development of the format and expectations of the users is essential to achieve the expected result. The consequent experience depends largely on empathy with the story and the characters, as well as the influence of multimedia and interactive resources in enhancing the effect, but transparency and knowledge of the audience are essential when establishing a space for interaction and conversation. The current media ecosystem, defined by media culture changes, remediation and convergence, demand to assess the characteristics of interactive non-fiction beyond a technical turn concerning the present exploration.

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Table 1. Interactive documentaries selected in the sample. Prepared by the author.

	<i>Bear 71</i>	<i>A Short History of the Highrise</i>	<i>Pirate Fishing</i>	<i>Do Not Track</i>	<i>Párkinson, que tiemble el camino</i>
<b>Year</b>	2012	2013	2014	2015	2016
<b>Country of origin</b>	Canada	United States, Canada	Qatar	France, Canada, Germany	Spain
<b>Production</b>	National Film Board	<i>The New York Times</i> , National Film Board	<i>Al Jazeera</i>	<i>Arte</i> , Upián, National Film Board, <i>BR</i>	<i>RTVE</i> , Barret Films

Table 2. Summary of the analysis report sheet. Prepared by the author.

<b>Category</b>	<b>Parameter</b>	<b>Description</b>	
Hypertextuality	Structure	Architecture of the information	
	Division of the content	Chapters (designed in the product) or units (identifiable and accessible fragments) in which the content is divided.	
	Menus	Series of links which reflect the structure of the product and allow non-sequential access.	
	Navigation (instrument)	Resource used for access and navigation.	
	Hyperlinks	Total links within the product and quantification of external links.	
Multimedia	Identification of the used resources	Text, image, photography, video, audio, graphics, maps, user's own devices, interactive formats.	
Interactivity	Function of the user (Aarseth, 1994)	Explorative, configurative, role playing, poetic.	
	Mode of interaction (Gaudenzi, 2013)	Conversational, hypertext, participatory, experiential.	
	Mechanisms of participation	Share	
		Discuss	
Contribute			

Table 3. Profile of the users who participated in the discussion group. Prepared by the author.

User ID	Gender	Age	Profile
User 1	Female	29	Expert
User 2	Male	26	Undergraduate (another field)
User 3	Female	24	Professional (communication)
User 4	Female	22	Undergraduate (communication)
User 5	Female	24	Professional (education)
User 6	Female	15	Student
User 7	Female	48	Professional (another field)
User 8	Male	61	Professional (another field)

Table 4. Hypertextuality in the sample of interactive documentary. Prepared by the author.

	<i>Bear 71</i>	<i>A Short History of the Highrise</i>	<i>Pirate Fishing</i>	<i>Do Not Track</i>	<i>Párkinson, que tiemble el camino</i>
<b>Structure</b>	Reticular	Axial linear with axial arboreal	Axial linear	Axial arboreal	Axial linear
<b>Division of the content</b>	11 units	4 chapters, 45 units	4 chapters, 13 units	7 chapters	5 chapters, 16 units
<b>Menus</b>	3	1	2	3	2
<b>Navigation (instrument)</b>	Spatial (map)	Temporal (timeline) and thematic	Process (scroll and buttons)	Thematic (buttons) and temporal (timeline)	Process (buttons)
<b>Hyperlinks</b>	124 (6 external)	73 (9 external)	69 (15 external)	187 (163 external)	44 (15 external)

Table 5. Multimedia resources in the sample of interactive documentary. Prepared by the author.

<i>Bear 71</i>	Interactive map. Linear narration (voice-over). Video (76, brief). User's webcam.
<i>A Short History of the Highrise</i>	Linear video per chapter. Archive photographs (126). Interactive pieces.
<i>Pirate Fishing</i>	Text (instructions, context). Video (31, average length: 1' 59''). Map (interactive and static).
<i>Do Not Track</i>	Video (23, average length: 3' 3''). Graphics. Map (geolocation).
<i>Párkinson, que tiemble el camino</i>	Linear video per chapter. Games (5). Text (information brochure).

Table 6. Participation in the sample of interactive documentaries. Prepared by the author.

	<i>Bear 71</i>	<i>A Short History of the Highrise</i>	<i>Pirate Fishing</i>	<i>Do Not Track</i>	<i>Párkinson, que tiemble el camino</i>
<b>Share</b>	Link	Link	Link and achievements	Link	Link and achievements
<b>Discuss</b>	Tumblr	Yes	–	Blog and contact	–
<b>Contribute</b>	User's webcam (only live)	Collaborative annex (photographs)	–	Questions are put to the user	–

Figure 1. Methodological design. Prepared by the author.

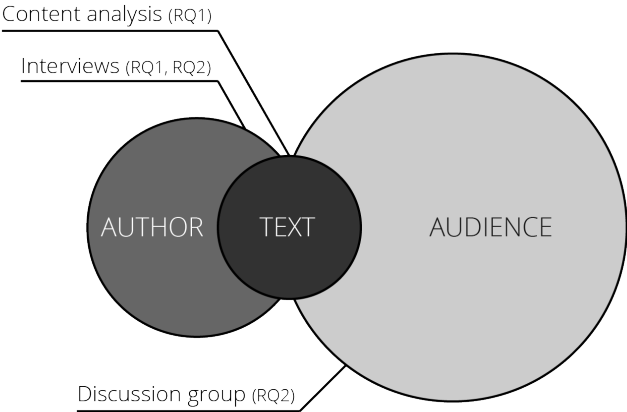


Figure 2. Towards a balanced author-text-audience relationship in interactive non-fiction. Prepared by the author.

