Production of a complex narrative: strategies used in the web documentary Young People and Images – Stories and Experiences in 360 Degree[1]

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Abstract

Contrary to the effervescence of concepts that characterize digital audiovisual narratives, the applicability of 360-degree language is still challenging, especially due to the lack of techniques and means that allow its creation by amateurs. Thus, considering this reality, the present paper aims to demonstrate paths that involve the production of an interactive, immersive and transmedia narrative, based on free resources available on the Web. In order to do so, theory and practice were joined, providing reflections on the creative process of the web documentary "Young People and Images – Stories and Experiences in 360 Degree". It is expected that the results achieved can contribute to the research and development of non-fiction audiovisual works on the web, with emphasis on those ones in 360 degrees.

Introduction

With the digitization and the offer of a range of narrative resources on the web, the documentary, an audiovisual genre that has as its essence the representation of realities, has been gaining new shapes and, consequently, becoming more complex. From a simple image record of the arrival of a train at the station, it has evolved into interfaces formed by a wide variety of links, which are filled with multiple contents and provides the public with the freedom of a non-linear and sole navigation.

In this scenario, there are numerous denominations that seek to characterize these new narratives, such as web documentary, interactive documentary, iDoc and transmedia documentary. Against this effervescence of concepts spread by different studies in the last decade, there is still a small number of such productions, mostly reserved for specialists - which can be explained by the lack of knowledge of techniques and means that allow creation by amateurs.

The exploitation of 360-degree images as the main language in non-fictional narratives is even more restricted, as it is an emerging imagery modality whose techniques are not yet widespread and the cameras still have relatively high costs. In this perspective, Longhi and Pereira (2016), when referring to immersive content in journalism, highlight that despite the existence of some works, these initiatives are still little explored. For Gifreu-Castells (2019, p. 65), the area of interactive non-fiction and transmedia in Brazil "presents solid bases, although it is in an incipient state due to the lack of public subsidies and private investment".

Thus, considering the gaps mentioned before, this paper seeks to demonstrate paths that involve the production of an interactive, immersive and transmedia narrative, using free resources available on the web. To this end, it is based on the web documentary Young People and Images – Stories and Experiences in 360 Degree, which has as its main support the online platform VeeR, directed to imagery content in 360 degrees. In methodological terms, this is a theoretical-practical study, based on a conceptual review of the topics investigated and the observations and experiments carried out during the performance of the work.

360-degree images: an emerging modality

Historically, human experiences have been observed in order to make visualities increasingly realistic, intense and immersive, like the frescoes of antiquity and panoramas in the 18th century. In the context of the convergent contemporary, however, the murals and large installations have given way to 360 degrees cameras, which are increasingly smaller and more sophisticated, capable of imaging environments completely.

It can be said that the main characteristic of the image in 360 degrees (photo and video) is to enable the full visualization of the scenery, from the user's interaction. About this format, researcher Raquel Longhi reflects comparing it with the traditional one:

Effectively, our idea of image has always been linked to a conception that it occupies a determined, defined and finite space. Parodoxally, however, when we talk about a fluidity in the image, especially in these new areas of the interface and the 360-degree image, for example, we see that the image is surpassing the limits of the frame, just as we get used to understanding it. This, in fact, is signaling us for a paradigm break in relation to the painting as the most defining element of the image, the most determinant. I venture to affirm, in this sense, that the image overflows the frame (MEISTUDIES Media Ecology and Image Studies, 2019).

In this sense, Claremont (2019, p. 10) explains: "360 allows us to capture EVERYTHING at once – what´s in front of the camera, behind the camera, above and below the camera, with the simple click of a button". Thus, nothing is hidden from the lens, which requires the producer to be properly concerned with what he wants to show. Another important aspect about this technology is the possibility of immersion

in the place of events, which can be intensified through the use of virtual reality headsets. However, it should be noted that the consumption of the 360 degrees image requires access to high-speed Internet and a longer period of contemplation compared to the traditional image; suddenly more obstacles to the popularization of this language, since today we are experiencing immediacy in virtual social networks. Claremont (2019) highlights:

Here lies the problem – such a small percentage of viewers have the time and attention to interact with 360 photos and videos beyond just a quick glance, as they browse their social media feeds and lightning speed. With attention spans getting shorter and shorter, requiring physical interaction from the viewer leaves your photo with a very small chance of getting viewed in it´s entirety! (Claremont, 2019, p. 14).

Still, from the editing process, it can be created photos and videos in 360 degrees in Little Planet or Tiny Planet format, which has attracted attention in virtual social networks due to its playful and non-interactive nature. Referring to the photos in this format, Claremont (2019, p. 15) points out: "the incredible thing about Tiny Planet photography is that it fits a full 360-degree view into one square photo". Thus, still in an incipient way, it is possible to observe images in 360 degrees interactive and non-interactive and to experience with virtual reality headsets or from the mouse/touch of mobile devices.

Costa (2017) classifies the cameras for capturing spherical images in three categories: the entry-level ones, more affordable, which use two optical sensors and generally rely on the smartphone for viewing and sharing content, such as Samsung Gear and Insta 360; the intermediate ones, which involve equipment with two devices, each with an optical sensor, making necessary to stitch the images in specific editing programs, such as Kodak PixPro SP360 and Nikon KeyMission cameras; and the advanced ones, which mix more than six optical sensors, such as Nokia Ozo and the Jaunt and Odissey solutions, from GoPro brand. Still, according to the author, the cost of a device that makes productions in 360 degrees varies depending on the corresponding category, reaching values between 200 and 60,000 dollars, which directly influences in terms of resolution, quality and available resources.

360-degree content can be found in different online spaces, such as in the operating system application stores, on websites of specialized companies and on the virtual social networks YouTube, Facebook and Instagram. The nature of these works is plural: they involve creations related to immersive journalism, sports practices, video clips, animations, games, among others. Regarding the production of images in 360 degrees, it is clear that this is not so close to amateurs, especially because cameras still have relatively high costs for the young population – the one most inserted in the circuit of digital images and virtual social networks. Following this perspective, Campos (2010, pp. 130-131) considers the image as a device that young people "dominates with mastery, knowledgeable of the visual symbols and codes of a globalized and rapidly changing world, familiar with technologies and experienced in re-adaptation of languages".

Returning to the research object of this study, the interactive web documentary Young People and Images – Stories and Experiences in 360 Degree, the 360 degrees language serves as its foundation, together with a non-linear structure, constituted of interactive and transmedia elements. Thus, considering the hybrid and experimental nature of this production, which explores different innovative media possibilities, it is necessary to reflect on aspects of the evolution of the documentary, articulating concepts that mirror from its genesis to new clothes that came with the emergence of digital technologies, with increasingly complex interfaces.

Web documentary: a portrait of interactive, transmedia and im-mersive narratives

Show life as it is. This mission can be considered the main feature of the documentary, which does

not prevent creativity in the whole process from making the difference in a production. Thus, each director puts his or her gaze on the film, making it increasingly authorial and difficult to fit into existing theories, mainly due to the possibilities arising from new technologies.

Traditionally, documentary is understood as a linear audiovisual production that deals with social realities. Its origin dates back to the first cinematographic projections in history, made by the Lumière brothers at the end of the 19th century who filmed real everyday situations, such as the arrival of a train at the station. Historically, numerous discussions surround the definition of the term documentary, motivated, above all, by the obligation or not to represent reality and the limits between non-fiction and fiction.

Among scholars on the subject, we can highlight Nichols (2005, p. 47), who defines the format as "a social representation of the world in which we live". In these lines, Renó and Flores (2018, p. 74) sustain that "documentary is considered a genre of film committed to reality", but they believe that this does not prevent the use of fictional images to portray a situation. Renov (2011, p. 3) also argues that there is a permanent relationship between the documentary and the world in which it lives, but points out a variation in the formula that uses editing for "a connection with video art or some other avant-garde form, experimental of making films, in charge of using the same approaches of "real" or personal material, but applied to their own interests".

In another perspective, Bruzzi (2000, p. 4) states that "a documentary will never be reality", therefore, it is a representational work, which does not invalidate it. Comolli's reflections (2008, p. 174) show that cinema and documentary are subjective and inextricably linked, that is, "cinema was born a documentary and it extracted its first powers (Lumière)". With this look, the author directs his arguments to present particularities that approach and apart cinema from journalism:

What brings it closer to journalism is the fact that it refers to the world of events, facts, relationships, elaborating, from them or with them, the filmed narratives; and what separates it from journalism is the fact that it does not disguise, does not deny, but, on the contrary, affirms his gesture, which is to rewrite events, situations, facts (...) (Comolli, 2008, p. 174).

Opposing the classic view that the documentary is a non-fictional work, Penafria (2018, p. 2) believes that any film can be considered a fiction, "since no film can effectively replace the lived experience of an event". Likewise, the author explains that any production can also be classified as a documentary, "since it is always cultural, political, social and/or historically dated and reflects the way of being and living in a given time".

Directing his eyes to the aesthetic development of the documentary, Baker (2006) attributes this evolution to advances in technology, whose effects were immense. In this sense, it becomes increasingly difficult to define the documentary form in traditional labels within the contemporary context. For Penafria (2014, p. 23), "the documentary is not defined, it is experienced; and the Internet has been the stage for this experimentation". Thus, from the digitalization, media convergence and democratization of access to technological means, a creative level has been reached with infinite narrative possibilities, and the productions that rely on the Web, like web documentaries, have even greater potentialities, such as non-linearity, interactivity and immersion.

It can be considered that the web documentary starts from the same proposal of the traditional documentary as to the fact of telling real stories; however, it adds resources made available by the Web that allow a non-linear and multimedia navigation, offering the user the freedom to interact with diverse contents (videos, audios, photos, texts, among others) and choose the paths you want to follow. Penafria (2014, pp. 22-23) assesses that the web documentary consists of a way of "refining and fine-tuning the new supports" that, aligned with the documentary, allow the creation of original works supported "in interactivity and in aesthetic innovations or renovations". The author also points out another neologism, iDoc (Interactive Documentary), which seems to be more extensive than the web documentary because

it highlights interactivity in different media and not just on the Internet. The web documentary is considered, however, as a form of interactive documentary. In the understanding of Paz and Salles (2015, p. 137), interactive documentaries are "interactive non-fictional narratives that use different media and platforms". Renó (2013) exposes:

A work that offers true information about something from real images and for social and cultural emancipation, but at the same time, builds it on an interactive platform, where viewers (who are now called co-authors) can choose, if not the end, at least the order of the fragments (Renó, 2013, p. 217).

In this way, the producer no longer determines the direction of the story, since the particular view of the interactor prevails. Thus, according to Paz and Maciel (2019, p. 51), these narratives enable different options for interaction and engagement, breaking the barriers between production, distribution and reception, and their interfaces promote "a kind of playful agency of people". The authors complement:

This is not a closed and pre-determined narrative by the team, but possible experiments. Narration and interaction are mixed in an open and indefinite process. In this sense, designing an interactive documentary is a bet on its own dynamics that it can unleash (Paz & Maciel, 2019, p. 51).

Regarding the format of digital interactive narratives, the authors estimate that there is no predominant pattern despite the existence of some more consolidated ones, however, one can observe the dissemination of hybrid works. Therefore, they consider creativity as the hallmark of this innovation. Also, it has been a common practice to use geolocation in interactive documentaries (Paz & Maciel, 2019).

A broader interactive documentary, with complementary content distributed on different online and offline platforms, which provides users with more information on the subject in question, is characterized as transmedia, aesthetics that Jenkins (2009) understands as a response to the media convergence. Renó (2013) highlights:

Transmedia documentary, more than a narrative built by real content (without going into merit and/or in the discussion of the role of the documentary genre as a truth teller), allows a real participation of the user not only in the navigation through the offered multiplatform content, but also from the distribution of these contents through social networks (Renó, 2013, p. 223).

In this perspective, Paz and Maciel (2019, p. 49) point out that "transmedia logic presupposes a set of content that crosses multiple platforms with narrative and aesthetic connections", in order to expand the narrative universe providing the user with additional experiences.

In the same way, emerging audiovisual productions bring virtual reality to the field of documentary. Paz and Jucá (2019, p. 12) affirm that, despite the immersive and volumetric narratives are not configured as a recent phenomenon, there is something new about the massification of the production, commercialization and availability of devices and content, expanding "the possibilities of producing and receiving immersive narratives through the use of adapted headsets for viewing 360° video or virtual reality". In this sense, Salles and Ruggiero (2019) clarify:

The digital world has opened the door to a great number of changes that have generated a reconfiguration of roles in the film and audiovisual industry. Without discarding the past and the present, the immersive future emerges as a construction full of challenges for creators and participants. Attention, empathy, users, prototypes and interactivity are some of the terms that begin to become central to audiovisual creation. We observed the transformation of linear stories into narrative universes, from audience to participants. Considering all these factors, we see that the audiovisual field has started an expansion towards experience design (Salles & Ruggiero, 2019, p. 85).

The authors also state that productions in transmedia, virtual realities and interactive experiences are distinguished by allowing the addition of different levels of complexity and new skills to audiovisual narratives (Salles & Ruggiero, 2019). Thus, it is understood that the object of study in question, the web documentary *Young People and Images – Stories and Experiences in 360 Degree*, can be considered a complex work, as it encompasses several platforms, resources and languages, structuring itself from an

interactive, transmedia and immersive narrative, using 360 degrees images, an innovative language that has been explored in immersive documentaries. In this sense, Gifreu-Castells (2020, p. 80) points out that currently the immersive documentary "consolidates itself as a form of innovative expression of the documentary genre, placing the interactive documentary in the background".

In this perspective, Longhi (2020) considers that there is a new level for reflections around imagery narratives, especially those more directed at journalism, due to the emergence of virtual reality technologies, 360-degree image, augmented reality and equipment like drones. The authoress adds:

The forms of production, availability and consumption of images derived from these new modes of capture bring many concerns about what, in fact, is happening and changing the ways of telling. And the complexity – of the image, of the narrative environments, of the interfaces and of the places and non-places occupied by the visualizing subjects, constitutes, today, a keyword to think the contemporary scenario of the narratives (Longhi, 2020, pp. 53-54).

Thus, in view of this new imagery ecology that emanates an unprecedented narrative complexity and has caused an stir in the field of documentary, the next pages of this study will provide the paths taken to produce an interactive web documentary with complex characteristics, in order to contribute to reflections on the ways of storytelling in the contemporary context.

The technological-narrative universe of the work Young People and Images – Stories and Experiences in 360 Degree

The web documentary in question presents testimonies and experiences of nine young people with digital images, highlighting their perceptions of 360 degrees language. As the main support, the VeeR online platform was used (https://veer.tv/), beyond YouTube (https://www.youtube.com/), Wix (https://pt.wix.com) and SceneVR (https://scene.knightlab.com/), as secondary, and two workshops as offline platforms, characterized as a transmedia project due to the use of more than one medium, with complementary content. To access the link (Webdocumentário interativo, n.d.) of the work, it is recommended to use the Google Chrome browser, which will avoid possible reproduction difficulties. Also, you can choose the resolution that best matches the Internet speed used (720p, 1080p, 1440p – 2K and 2160p – 4K).

Regarding the instruments for carrying out this project, the Kodak PixPro SP360 4K kit was used to record the images. This equipment is distinguished by being made of two cameras coupled by 180º wide angle lenses that together form the images (photos or videos) in 360 degrees. As a complementary material, a smartphone and a DSRL camera were used to capture traditional photos and videos, as well as an audio recorder and lapel microphone. To record the voiceovers, the Session Mixer HS-5 (Roland) and the SM58 microphone (Shure) were used.

In the editing stage, it was necessary to carry out a sewing process to obtain the stereoscopic image result. In this sense, the PIXPRO 360 VR Suite software – version 1.5.0.0 was used to merge the images[1] and, subsequently, the DaVinci Resolve 15 program for more elaborate cuts, placement of transitions, insertion of texts and audios[2], all free and available on the web. It was also necessary to use other free tools: Snapseed (Google's image editing application that allowed the application of artistic effects on created maps[3]), Logo Maker (application for creating logos[4]), Nadir Patch (website for inserting

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[1] The PIXPRO 360 VR Suite software (n.d.) is available for download on the web.

[2] The free version of the DaVinci Resolve 16 (n.d.) software, an update to the program used in this project, can be downloaded from the web.

[3] Used the version for IOS devices (Apple) (Google LLC, 2012).

[4] Used the version for IOS devices (Apple) (Bizthug Pte Ltd, 2019).

logos 360-degree images, https://nadirpatch.com/) and Audacity (audio editing software, https://www.audacityteam.org/). Also, Photoshop (Adobe image editing software – not free, which helped create the buttons) was used.

Transmedia script

A transmedia script was developed based on the methodological proposal created by Lovato (2018), which developed a model structured in four nodal points: world of history, user experiences, platforms and execution, detailed below.

World of history: the web documentary has as its theme the discussion about the importance of digital image in the daily lives of young people, showing their reactions and comments regarding, above all, the 360 degrees language. The characters chosen, all real, correspond to the age group between 15 and 24 years. The work was developed in two locations, Arica, in Chile, and São Caetano do Sul, in Brazil. In Arica, we opted for interviews with 5 young people from different parts of the city. Images of tourist spots in the region were also captured, offering the interactor additional content. Already in São Caetano do Sul, it was preferred to give 4 social communication students from a university in the city the feeling of using a 360 degree camera, so that each of them would capture their own images in a tourist spot in the city and, later on, learn to edit the materials, reporting at the end the perceptions about that learning. In addition, images of tourist places in the municipality were recorded. The presenter/researcher is present at all times in the web documentary, due to the participatory nature of the project and to avoid having to hide. The location is an important narrative aspect in the work because it presents a cartographic navigation system in its structure, following the studies by Arroyave (2016).

User experiences: this web documentary is intended for those who are interested in 360-degree language or intend to produce content of the type. Thus, it is a work that seeks to entertain and teach new technologies, showing steps inherent to the process of creating images in 360 degrees. To this end, online platforms were selected to host the materials that forms the web documentary – which can be accessed and shared free of charge, including smartphones, since all the supports used are responsive. To make the user experience more attractive, it was decided to use interactive elements, such as personalized buttons and links, which makes the interface similar to a game. Regarding the degree of involvement in the story, it was thought to offer the audience a non-linear narrative structure, in which users have the possibility to interact freely choosing the order of viewing the scenes. As for the forms of participation, the individual navigation process stands out.

Platforms: from the definition of the VeeR platform as the main media, integration with YouTube, Wix and SceneVR (online platforms) was sought, in addition to the accomplishment of two offline workshops that enabled the construction of a universe of complementary content, configuring it thus, a transmedia project (Infographic 1). Following, characteristics of each platform will be presented.

Infographic 1 – Narrative universe of the web documentary

Source: Produced by the authors

The Global Platform for Content in Virtual Reality – VeeR, of Chinese origin and created in 2016,

has the mission of being a locus for the diffusion of content in VR, in order to promote the works of the producers that integrate its community, offering to the users "tools, support and know-how needed to create immersive and impressive virtual reality videos" (VeeR, n.d. a). Among the products offered by the company there is the VeeR Experience (VeeR, n.d. b), a tool used in this web documentary. It consists of several resources, such as the insertion of hotspots to the scene (photo or video in 360 degrees), so that users have the option to click on other scenes, leaving the consumption process interactive and non-linear, and text creation, which allows the inclusion of decorative boxes. It is also possible to place audios on access points or enable a fixed soundtrack, present in all scenes. Another available function is the choice of the initial orientation when the user enters the scenes, contributing to the producer's narrative strategy, which can direct the public's eye towards the elements he intends to emphasize. To illustrate, screenshot 1 demonstrates the VeeR Experience editing screen, with an indication of the available resources and circular images representative of the contents.

Screenshot 1 – Viewing the edit screen
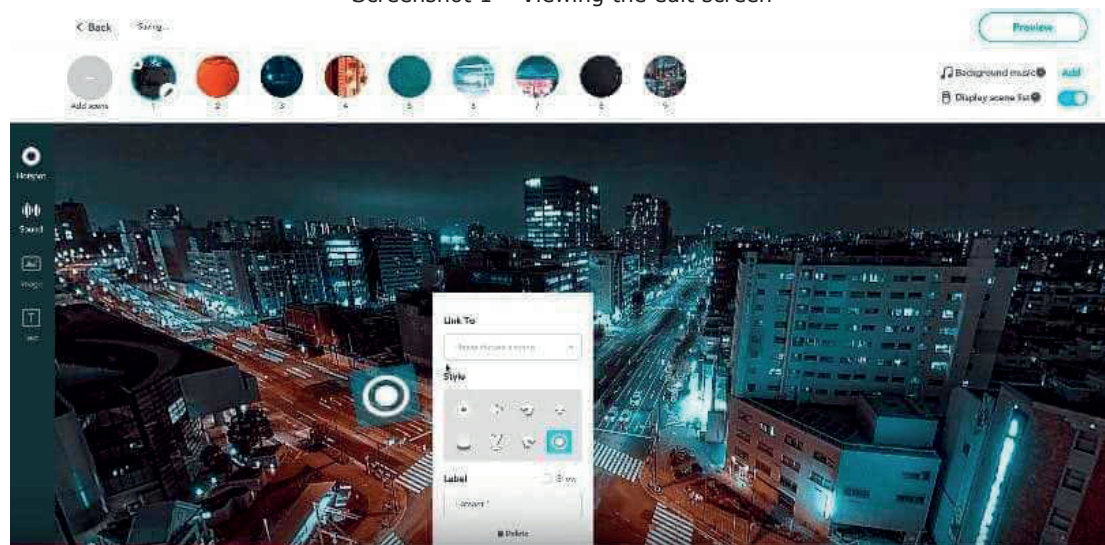
Source: Disclosure VeeR VR Blog (https://veer.tv/blog/how-to-create-vr-experience-with-no-coding/)

It is worth mentioning the transmedia character, provided by the Card resource that allows the incorporation of URLs (network addresses) to the interface. This option provides the user with the experience of accessing external content with other formats, since the VeeR tool uses, as a base, photos and videos in 360 degrees interactive. As for the video sharing process, the platform has several options, such as Facebook, Twitter and WeChat.

YouTube is a pioneering platform when it comes to free distribution of videos on the web, including 360 degrees. It was opted to use it in this work in view of the efficiency in its sharing system that involves different media, such as Facebook, LinkedIn and Twitter. This wide-reaching social network is formed by channels of varied content, which can be easily accessed. Thus, its use is part of a transmedia strategy to reach other users, in addition to those who integrate with the VeeR community.

Creator of internationally recognized websites, Wix has free resources that allow the creation of personalized and responsive online addresses. The facility to handle the templates provided by the platform, as well as the practicality of embedding external content and sharing through the links created, motivated its choice as a means of integrating the various contents of the web documentary.

The SceneVR platform allows the creation of interactive 360-degree photo galleries, which can be accompanied by texts, making it one more option of media explored in the project, above all due to the ease of incorporation in other online spaces.

As offline platforms, two 360-degree language workshops were held, as shown in image 1. The first was attended by 139 young people from a high school institution in São Caetano do Sul, in which

they sought to present to students concepts about the evolution of the image, from origin to the present, focusing on 360-degree production, ending with participants' experiences from the use of virtual reality headsets. The second workshop, with images shown in the web documentary, had the participation of four young university students who learned techniques for producing and editing images in 360 degrees.

Image 1 – Workshops (offline platforms)

| 1. Workshop with high school students | 2. Workshop with university students (product) |
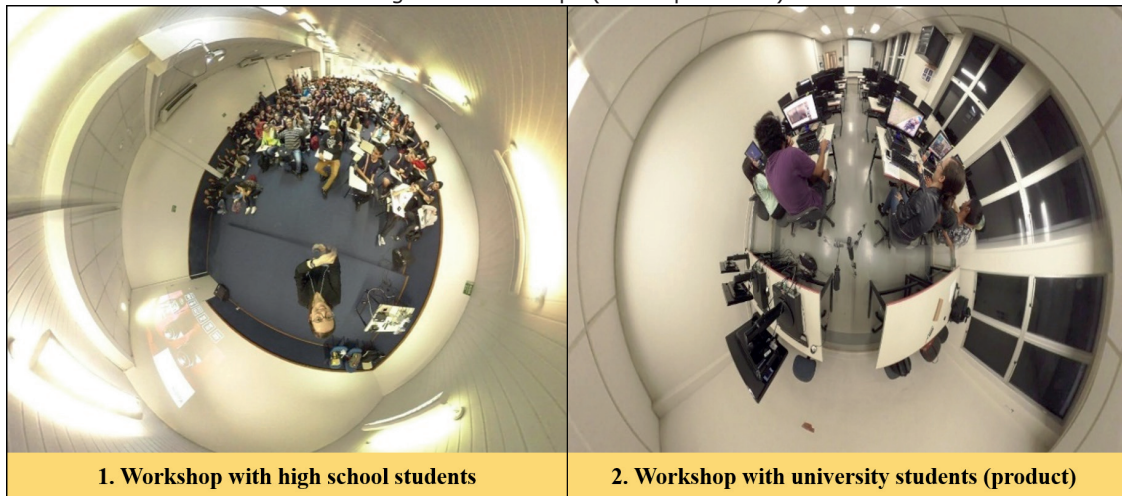
Source: Produced by the authors

Execution: to use the chosen online platforms it was necessary to register. In the case of VeeR, you can create your own support login and password or take advantage of the data on a Facebook account, while Wix allows you to register from Google and Facebook accounts, in addition to the platform-specific registration option. YouTube and SceneVR are accessed from Google accounts.

In the production of this web documentary, there was the support of CONICYT (National Commission for Scientific and Technological Research) that sponsored the authors' trip to the city of Arica, in Chile. Also, support was obtained from CNPq (National Council for Scientific and Technological Development), as well as from the research group The Visual Sign in the Media, led by Professor João Batista Freitas Cardoso, who made the camera 360 degrees available. It is worth mentioning that the other equipment used – tripod, audio recorder, lapel and digital mixer – are owned by one of the researchers. The web documentary soundtrack was created by Tiago Gois Falandes, who also assisted in part of the recordings.

Flowchart

In view of the great complexity of an interactive audiovisual work that requires, according to Gosciola (2003, p. 159), to think about a simultaneity of components, such as the "hierarchical levels of content", the "interface" and the "network links", he developed in the initial phase of production, a sketch was developed whose ideas were improved in the flowchart, as shown in flowchart 1.

Flowchart 1 – Interactivity elements
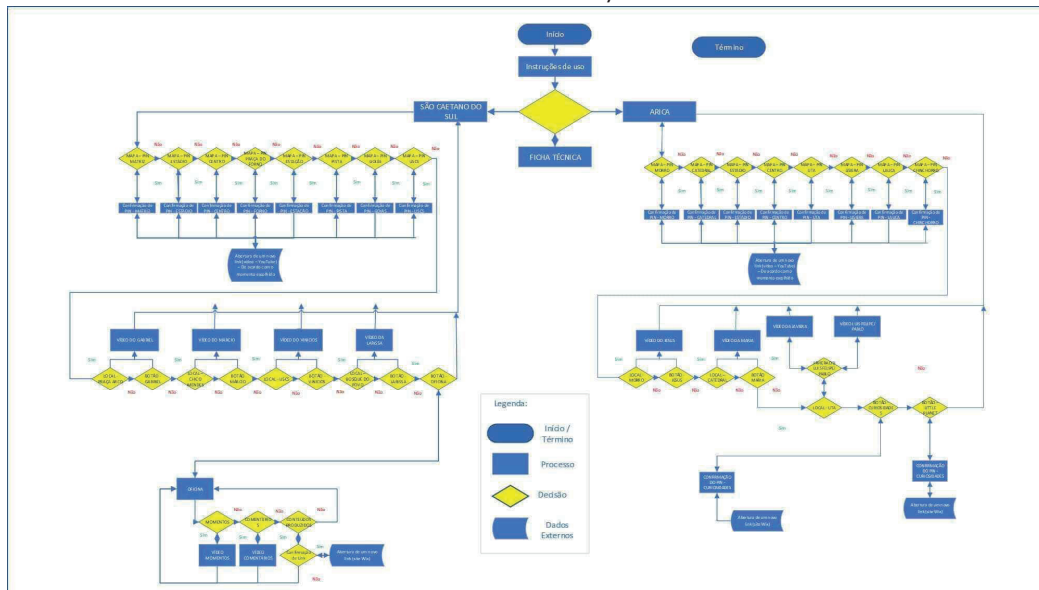
Source: Produced by the authors

Scenes presentation

The web documentary consists of 16 scenes, and the length of each video can vary between 25 seconds to 11 minutes and 13 seconds. It also features 69 elements, including hotspot, text, image and card, as well as other content (photos, videos and audios) on YouTube, Wix and SceneVR. As a narrative strategy, it was decided to direct the user's visualization when entering each scene. Buttons were also inserted that redirect to the initial scenes, which allows the user to select new navigation paths. To illustrate, images that represent scenes of the opening and buttons of São Caetano do Sul and Arica follow.

Image 2 – Screen that opens the web documentary (Start) and instructions scene
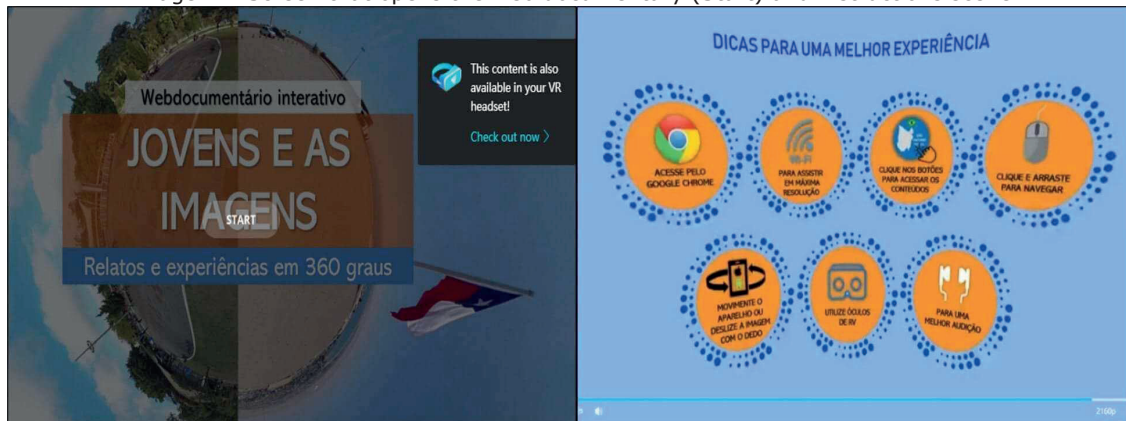
Source: Produced by the authors

After clicking on the start button, the user is faced with the mandatory opening scene of the web documentary, which provides tips for a better browsing and interactivity experience (Image 2). The need was felt to provide access guidelines due to the innovative character of this technology, whose particularities are still unknown to most, such as the action of moving the mouse to see the environments in full.

Image 3 – Presentation of the web documentary
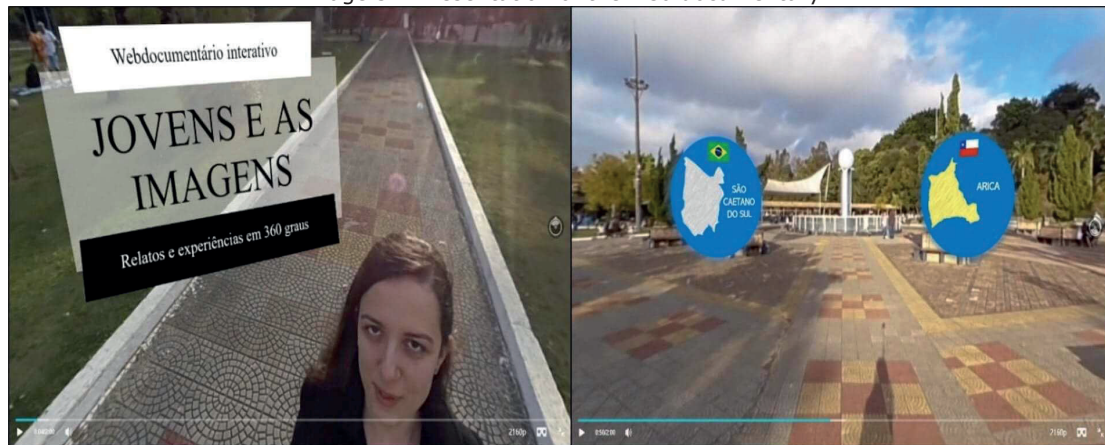
Source: Produced by the authors

The presentation scene (Image 3) brings the title and the introduction of the theme by the researcher, which indicates the access options. To navigate, it is necessary to choose one of the buttons that appear on the screen: São Caetano do Sul or Arica. You can also open the technical file.

Image 4 – São Caetano do Sul Opening
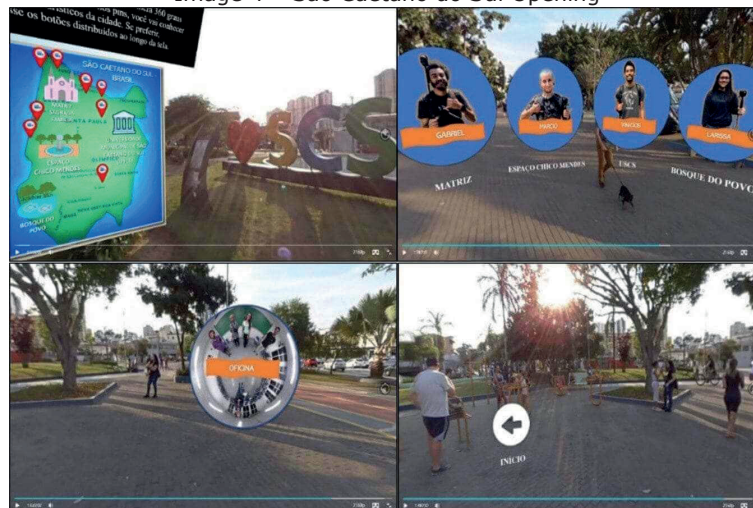
Source: Produced by the authors

When the São Caetano do Sul button is chosen, the user has access to the city map, with 8 pins and 4 locations. Four buttons with the photo of the protagonists also enter the scene, one referring to the workshop and the other in the shape of an arrow that redirects to the beginning. It is observed in the scenes that form image 4 the existence of two access systems: cartographic (map) and nodal (buttons). By clicking on the pins (8) distributed on the map, the user is taken to a single 360-degree video on YouTube that presents tourist spots in São Caetano do Sul. Each pin forwards to the section corresponding to the chosen place.

Image 5 – Workshop with university students

Source: Produced by the authors

Image 5 shows the development of the workshop with young university students, made in three stages: moments of the workshop, comments on the experience and content produced, represented by buttons in the entrance scene, giving options for the user to browse. It should be noted that the content produced by young people, photos and videos in 360 degrees, with emphasis on the Little Planet format, were inserted on a website on Wix.

When choosing the Arica button (Image 6), the structural idea is similar to that previously demonstrated in the scenes of São Caetano do Sul. The user is faced with an instruction text and the city map, with the indication of 8 pins and 3 locations to be explored. There are also 4 buttons personalized with the photo of the young protagonists, as well as two buttons that take you to other content on websites created in Wix; one about curiosities of Arica and the region, with traditional photos and audios, and the other with Little Planet images. It is also observed in this scene the existence of two systems: one for the location on the map (cartographic) and the other for the photos of each one (nodal). When accessed, the pins (8) highlighted on the map take the user to a single 360-degree video on YouTube showing Arica's sights. Each pin leads to the section concerning the chosen place, using the resource *to start in* made available by the platform.

Image 6 – Arica Opening
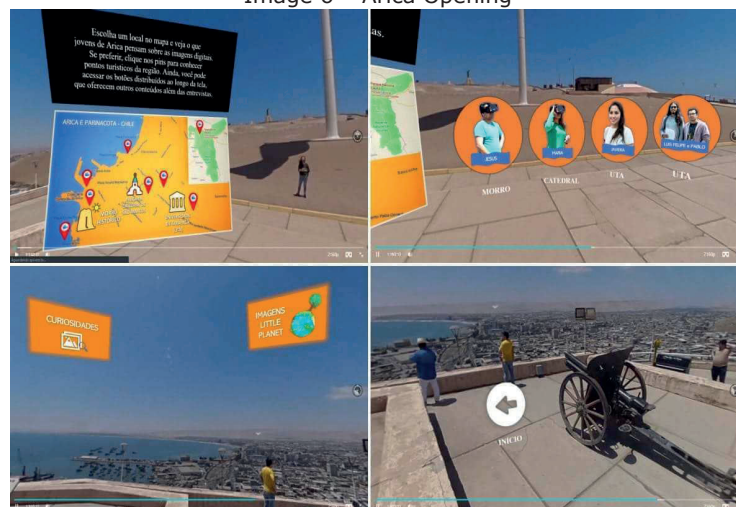
Source: Produced by the authors

In view of the need to translate the interviews conducted in Spanish into Portuguese, a button was made available within the scene corresponding to each of the young people who redirected to YouTube, where the same content with subtitles can be viewed. When entering the platform, you only need to enable the function that allows you to choose, among other features, the font size and color. It is important to note that the caption follows all the user's movements (Image 7).

Image 7 – Caption Portuguese

Source: Produced by the authors

According to Brown (2017), the results of the test carried out in 2017 by the BBC's national technical research department (BBC Research & Development) indicated that the most popular legend is that in which the text is always available, regardless of the location viewed.

Final considerations

This theoretical-practical investigation sought to present strategies used in the creation of an interactive, immersive and transmedia narrative, using free resources available on the web and the 360 degree imagery modality still emerging, which represents a challenge for producers who try this language. Thus, it is hoped that this study can contribute to the research and development of non-fiction audiovisual narratives hosted on the web, a format that is not very widespread in Brazil, both from the point of view of production and in the public interest.

The realization of the web documentary highlights important aspects about the production, editing and sharing of images in 360 degrees. Applications, software and platforms can be observed in virtual spaces that allow a closer approximation with these contents, access that a few years ago was restricted to large technology groups, especially in the games area. On the other hand, it must be taken into account that when the producer works with free web developers, he is subject to their terms and usage limits.

Finally, it is understood that this research brings in its content a look at the current stage of virtual reality and 360-degree images, as well as obstacles that still keep these innovations from the daily lives of most young people – for example, the cost of equipment, Internet connection problems, unfamiliarity of production techniques, in addition to the constant need and appeal to interact with images, which requires more time from the interactor and goes against the current media landscape guided by immediacy.

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