


RESEARCH

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**THE CONSTRUCTION OF SPACE IN THE DOCUMENTARY:
*RADIO ATACAMA (2014)***

**LA CONSTRUCCIÓN DEL ESPACIO EN EL DOCUMENTAL:
*RADIO ATACAMA (2014)***

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ABSTRACT

This article analyzes the creative process of the creative documentary film *Radio Atacama* (Cerdán (director), 2014) using a qualitative and quantitative methodology based on the theories of authors such as Csikszentmihaly, De Bono, Bordwell and Amount with the aim of describing the evolution of space in the editing process of the three working versions that are conserved of *Radio Atacama*. *Radio Atacama* is a film shoted locations of Bolivia and Chile. The postproduction process was done in Spain. It is an example of how an independent production can develop a project in the Ibero-American area by mixing European personnel and locations in South America. The convinience of the new audiovisual tecnology processes facilitate the development of a new Ibero-American cinema where creators have great creative freedom, without compromises on dates of delivery or contract arrangements with the distributors. The main objective of this article is to describe with detailed data the narrative evolution of *Radio Atacama* film, from the first version to the final cut. The secondary objective is to reflect on the creative process in the assembly of a documentary film and deepen in production, development and overall evolution of a project that was finally premiered at international film festivals.

KEY WORDS: creativity – editing – production – space – film – Chile – Bolivia.

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RESUMEN

Este artículo aborda el proceso creativo de la película *Radio Atacama* (Cerdán (director), 2014) desde una metodología cualitativa y cuantitativa basada en las teorías de Mihaly Csikszentmihaly, Edward De Bono, David Bordwell y Jacques Aumont con el objetivo de describir la evolución de los espacios de rodaje en el montaje de las tres versiones de trabajo que se conservan de la película *Radio Atacama*. *Radio Atacama* es una película rodada en Bolivia y Chile y postproducida en España. Es un ejemplo de como una producción independiente puede realizar un proyecto en el ámbito iberoamericano mezclando personal europeo y espacios de América del Sur. Las facilidades que ofrece la digitalización de los procesos audiovisuales facilitan el desarrollo de un nuevo cine iberoamericano donde los autores tienen una gran libertad creativa, sin compromisos de fechas de finalización u obligaciones de entrega a distribuidoras. El objetivo principal de este artículo es describir con datos concretos la evolución narrativa de la película *Radio Atacama*, desde la primera versión de montaje hasta la definitiva. El objetivo secundario es realizar una reflexión sobre el proceso creativo en el montaje de una película documental y profundizar en la evolución que sufre un proyecto que finalmente es estrenado en festivales internacionales de cine.

PALABRAS CLAVE: creatividad – montaje – producción – espacio – película – Chile – Bolivia.

A CONSTRUÇÃO DO ESPAÇO NO DOCUMENTAL: RÁDIO ATACAMA (2014)

RESUME

Este artigo aborda o processo criativo do filme Rádio Atacama (Cerdán (diretor), 2014) desde uma metodologia qualitativa e quantitativa baseada nas teorias de Mihaly Csikszentmihaly, Edward De Bono, David Bordwell e Jacques Aumont com o objetivo de descrever a evolução dos espaços de rodagem na montagem das três versões de trabalho que se conservam o filme Rádio Atacama. Este filme foi rodado na Bolívia e Chile e pós produzida na Espanha. É um exemplo de como uma produção independente pode realizar um projeto no âmbito ibero americano misturando trabalhadores europeus e espaços da América do Sul. As facilidades que oferece a digitalização dos processos audiovisuais facilitam o desenvolvimento de um novo cinema ibero americano onde os autores têm uma grande liberdade criativa, sem compromissos de datas de finalização ou obrigações de entrega para as distribuidoras. O objetivo principal deste artigo é descrever com dados concretos a evolução narrativa do filme Rádio Atacama, desde a primeira versão de montagem até a definitiva. E como objetivo secundário, realizar uma reflexão sobre o processo criativo na montagem de um filme documental e aprofundar na evolução que sofre um projeto que finalmente é estreado em festivais internacionais do cinema.

PALAVRAS CHAVE: criatividade – montagem – produção – espaço – filme – Chile – Bolívia.

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1. INTRODUCTION

Audiovisual works, regardless of their duration or focus, go through three stages that can be successive or overlapping: preproduction, filming and postproduction (Linares and Fernández, 2012, p. 20). The technological changes developed since the last decades of the 20th century to the present have facilitated, to a greater or lesser extent, each of these phases, with particular emphasis on filming and postproduction. These not only involve a certain cheapening of the material costs, but the reduction of the necessary personnel, greater mobility, ease of use, versatility and creative freedom. The passage from the negative to the video and, later, to the formats on memory cards or hard disks has facilitated the realization of audiovisual works for numerous directors. The television and cinematographic producers have taken advantage of these advances, facilitating their access to the different markets through the main financing channels. In the case of Spain, these are state subsidies and contracts with television channels (Cullera and Palacio, 2016, p. 34).

The Spanish State offers public aid for feature films or short films (on projects or made), distribution, organization of festivals or participation in them. In addition, there are grants by the European Community, such as the MEDIA program. At the Iberian American level, Ibermedia promotes cinematographic and television projects among its member states, 21 countries at present, in Europe and Latin America. To access the Ibermedia grants, the project must be a co-production between at least two countries affiliated to the program. There is also the possibility of financing through distributors, advances for the sale of rights, advertising revenues, capitalization of salaries and participation of profits (Linares and Fernández, 2012, pp. 36-39).

But it may be the case that some producers or projects lack the necessary requirements to access these routes, or they do not wish to do so. The requirements of the aforementioned aids require prior preparation and the presentation of "a synopsis, a treatment, a technical script with an anticipation of the off and exhaustive planning of the work with the needs for equipment, accommodations, trips, appointments, interviews, permits and all the documentation that serves to contextualize the project thematically" (Marzal and López, 2008, pp. 167-168). This happens in an indistinct way for works cataloged as fiction or documentary.

In these cases, self-production is an increasingly viable outlet, partly thanks to technological changes. Producers assume some economic risk in all production, either through their funds, asking for bank loans or through co-production with other companies to spread the expenses. In recent years there has been the case of short films and feature films produced by *crowdfunding*, in which individuals or companies decide to contribute capital in an altruistic way through *online* platforms or under the promise of obtaining a series of rewards (such as promotional material, passes for the film or copies of it in physical formats). This variety is reflected in production. According to the sample selected by the report "Iberian American Audiovisual Panorama" (2016), the budget for films ranged from \$11,000 to \$12,000,000 (p. 234). The production analyzed in this article, *Radio Atacama* (Cerdán (director), 2014) has an even lower budget and a production process that is certainly atypical.

Radio Atacama is a documentary short film of creation that portrays the life of Benito Paften, the last survivor of Pedro de Valdivia Saltpeter Office (Chile), dismantled in 1996 due to the contamination of a factory. However, the original idea of the project was something completely different. The creators intended to make a documentary about the imagination, through the testimonies and stories of various characters: the inhabitant of an abandoned town, a scientist and an artist. This project was entitled *Invisible Places*.

During the filming of this ambitious initial idea, the team was able to take advantage of "the advances of digital video. Not only because of the ability to pass through the camera unnoticed, but because of all the mobility advantages involved" (Taylor and Hsu, 2003, p. 15). The chosen camera was the Panasonic AG-HVX200. Presented in mid-2006, it offered a series of advantages that made it ideal for this project. The body, resistant and isolated, facilitates outdoor recording without worrying too much about its maintenance. The wide-angle lens allows recording in closed spaces while maintaining the amplitude of the visual field. In addition to its built-in microphone, it integrates two XLR audio inputs that allow you to attach higher quality and more specific microphones, such as tie- or barrel-like. Its weight and lens stabilizer allows recording in hand without sudden movements. And the last fundamental factor was the recording support.

In 2006, most cameras continued to use tapes, especially MiniDV and Betacam, either in SD or HD resolution. Panasonic patented the P2 system, which it continues to use in its professional series. It basically consists of a PCMCIA card formed by several SD cards. The camera has two P2 card accesses, so if one is full it keeps recording over the other without any discontinuity. The team decided to invest in the purchase of the camera, not only for the project but as a long-term investment. This also offers other advantages such as the fact that it "*can allow you time to improvise with the actors, you can edit several weeks or several months, review the material and re-shoot new plans. And, when you have your camera, you have time to master its handling. When you rent it, the urgency of its return can compromise the shooting*" (Taylor and Hsu, 2003, p. 54).

Another piece of equipment was a MacBook Pro computer from the mid-2010. Since the software that was chosen for post-production was Final Cut Pro 7, which is only available for Mac OSX, Windows or Linux laptops were discarded. The construction molded on aluminum also offered resistance to knocks and falls, and its components provided power enough to be able to carefully review the material without having to transcode it, decide if new shots were needed, make backup copies in the locations and edit in situ. Since both the computer and the camera had a FireWire 400 port, the copying process offered faster speeds than the USB 2.0 connection. Panasonic included software, called P2 Viewer, which allowed access to all the characteristics of the clips, review them and make copies free of transfer errors. The ease of copying to portable hard drives made it possible for these copies to be redundant, increasing safety in the event of data corruption or mechanical failure of the disks.

Kim Jihoon (2018) points out how the mobility and facilities of digital formats allow greater creative freedom, regardless of the budget of the production or the character of the work. The sum of these elements allowed the recording phase to be developed without any technical inconvenience in wild natural spaces or abandoned places like the Pedro de Valdivia saltpeter office, located 60 kilometers from the city of Tocopilla, in the region of Antofagasta.

The location of the Atacama Desert has had a relevant influence on the recent history of Iberian American cinema as the films: *Nostalgia de la Luz* (Guzmán (director), 2010), *Panic. The band that searched for the sound below* (Schneider, Echazarreta (directors), 2011), *From Thursday through Sunday* (Sotomayor (director), 2012), *Girls Quispe* (Sepúlveda (director), 2013), *Seafarers of the Desert* (Terreros (director)), 2013), *Pullay: the One-Night Musical Competition* (Ravlic (director), 2014), *The Wizard* (Pinochet (director), 2014), *The 33* (Riggen (director), 2015), *Non-certain Desert* (Cano Reyes (director), 2017) and *Toffee or Mint* (Justiniano (director), 1990).

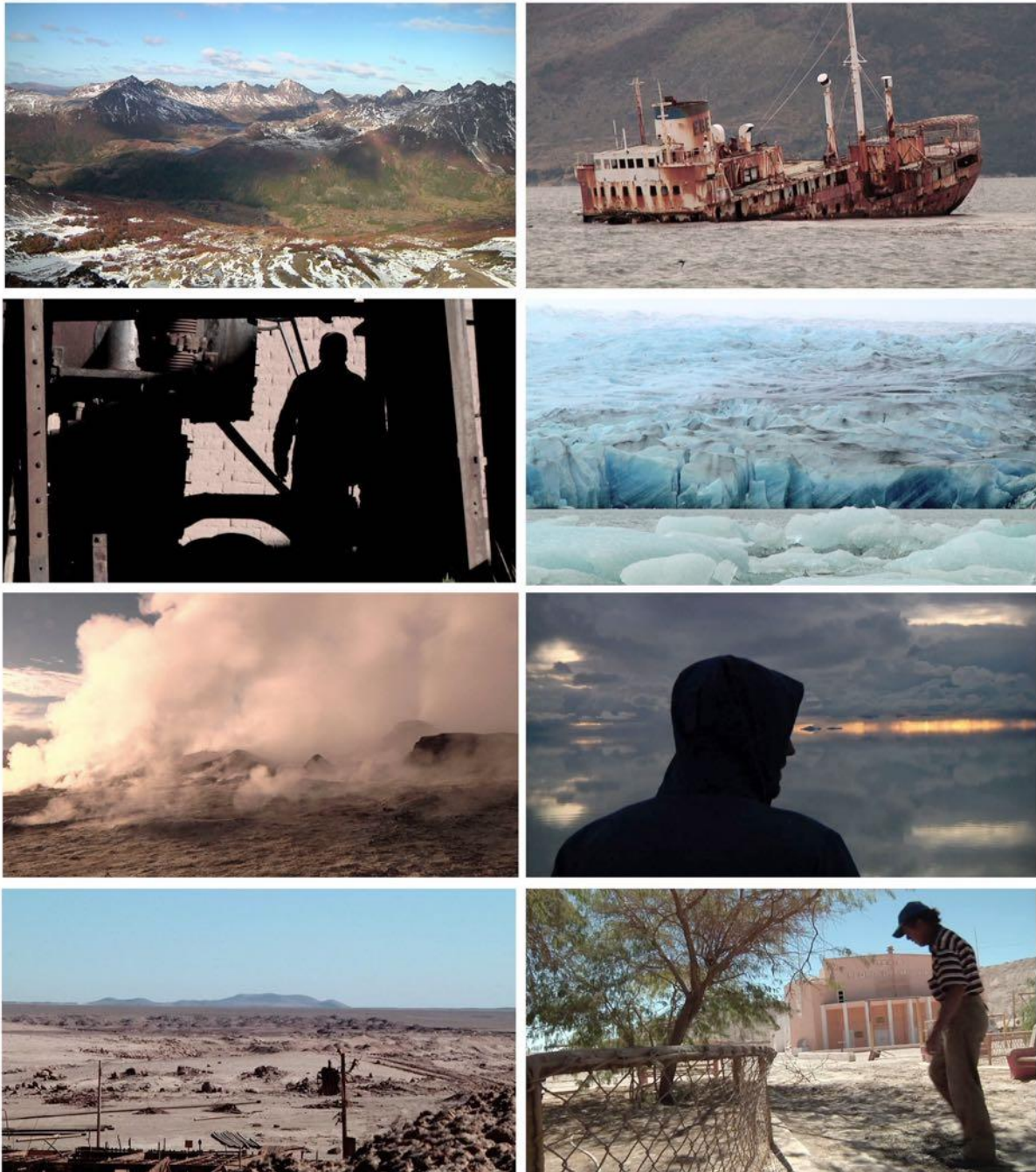


Image 1. Frames of the working versions of *Radio Atacama* corresponding to locations in Chile and Bolivia³.

Source: self-made.

Another location of the shooting was Torres del Paine Natural Park, located 300 kilometers from the Punta de Arenas City in the region of Magallanes, in southern

³ The frames correspond to the following locations, from left to right: Puerto Williams, Cape Horn, Uyuni train station, Torres del Paine Natural Park, Eduardo Abaroa National Reserve in Bolivia, Uyuni Salt Flat, in Bolivia, and Pedro de Valdivia in Atacama Desert in Chile.

Chile, as well as the island of Navarino, on the southern shore of the Beagle Channel and its town, Puerto Williams, the southernmost in the world. It was also the scene of the material shot that was discarded in *Radio Atacama* Cape Horn, where the creators of the film had access thanks to the collaboration of the Chilean Navy. In Bolivia, they shot in three locations: Eduardo Abaroa National Reserve, Potosí train cemetery, and Uyuni salt flat, the largest in the world with an area of ten thousand square kilometers. In that location, productions such as *Pirates of the Caribbean: The Curse of the Black Pearl* (Verbinsky (director), 2003), *Also the Rain* (Bollaín (director), 2010), *The Tree of Life* (Malick (director), 2011) or *Star Wars: the Last Jedi* (Johnson (director), 2017) have recently been shot.

Back to Spain, the team began to organize the material for its development. The project *Invisibles Places* was selected in DocsBarcelona 2013 in the section of *pitching*. This way consists in "the presentation of an idea or a script in order to obtain trust and financing for its development and sale" (Marzal and López, 2008, p. 39) before representatives of television, production companies and distributors. However, *Invisible Places* failed to capture the attention of any of these agents to produce the film. The lack of funding to complete this experimental film caused the cancellation of the project in 2013. Two years later, in just two days of editing, the director and the editor closed the final edition of a short film entitled *Radio Atacama* that started from a material apparently disjointed.

It took almost four years to complete this project, an extremely long period for the production of a short film. All funding was assumed by the authors (who acted as producers), including the acquisition of material, travel, filming and distribution costs. Its atypical nature and development distanced it from the requirements necessary to access grants. However, the film was selected by the distributor Marvin & Wayne as one of the best short films of the year (Brox, 2014), along with *Serori* (Collantes (director), 2014) and *A Whole Future Together* (Remón (director), 2014)). It premiered at the Hamburg Short Film Festival in 2015, was reviewed by Caiman (Medina, 2015) as one of the two most outstanding works of Aguilar de Campoo festival, along with *Elena Asins: Genesis* (Giménez (director), 2014), and received an honorable mention at the FIFE de Paris. It was also screened at prominent international festivals (France, Canada, Mexico, Spain, Switzerland, Portugal, Germany, China, South Korea and Croatia). Therefore, we consider it relevant to carry out an in-depth study of the creative process of a self-produced film that had a relevant impact on international festivals around the world.

2. OBJECTIVES

The main objective of this article is to describe, with concrete data, the narrative evolution of the film *Radio Atacama*, from the first editing version to the final one. The secondary objective is to reflect on the creative process in the montage of a documentary film and to deepen the evolution of a project that is finally released in international film festivals.

The object of study used in this piece of research will be three mounting versions of *Radio Atacama* that are preserved. The first is a teaser of the initial project, *Invisible Places*. The following are different cuts of the short film *Radio Atacama*. To illustrate the analysis, the authors will use frames of the shooting spaces that were discarded in the final montage of the film and those that remain in the final version (Image 1).

3. METHODOLOGY

We will use a qualitative methodology based on the theories of creativity of Mihaly Csikszentmihaly and Edward De Bono applied to the evolution of montage in relation to the spaces of the film. We will also complete the analysis with quantitative data based on the narrative parameters of the diegetic space and the shooting space, defined by David Bordwell, Jacques Aumont and Emeterio Díez Puertas. The authors will make a numerical compilation in each of the montage versions of the project to find out, with concrete data, the narrative and creative evolution of *Radio Atacama*.

4. DISCUSSION

Bordwell (1996, p. 99) and Aumont (1990, p. 240) agree that the audiovisual universe is composed of three different spaces. First, the one that corresponds to the place where the film is shot; second, the imaginary space that is composed of the diegetic universe of the film and, third, the space where the film is exhibited, such as a movie theater or a television set. In this article, for reasons of extension, the authors will focus only on the analysis of *Radio Atacama's* filming locations.

The first version that is preserved is the teaser entitled *Invisible Places*, which contains plans with the following filming locations: Pedro de Valdivia saltpeter office, Puerto Williams on Navarino Island, Cape Horn, Torres del Paine Natural Park (in Chile), and Uyuni Salt Flat, the train cemetery in Potosí and Eduardo Abaroa Natural Park (in Bolivia).

In the following table (Table 1), we present planes of each of these spaces in the teaser *Invisibles Places*.

Table 1. Shooting spaces in *Invisible Places*.

Shooting spaces	Number of planes
Pedro de Valdivia	23
Puerto Williams	8
Cape Horn	1
Torres del Paine Natural Park	6
Salar de Uyuni	5

Uyuni train station	4
Eduardo Abaroa Natural Park	2

Source: own elaboration.

The second version, which is now called *Radio Atacama*, is now a sixteen minute short film centered on Benito Paften, the last inhabitant of Pedro de Valdivia (Chile). This version maintains the same filming spaces as the previous version, with the exception of Cape Horn, which does not appear in any plane. Below we present the data containing the extracted data (Table 2).

Table 2: Spaces of shooting in *Radio Atacama V1*.

Shooting spaces	Number of planes
Pedro de Valdivia	120
Puerto Williams	11
Cape Horn	0
Torres del Paine Natural Park	2
Salar de Uyuni	24
Uyuni train station	6
Eduardo Abaroa Natural Park	1

Source: own elaboration.

The third, and definitive, version of *Radio Atacama* differs a lot, in terms of the filming spaces (Table 3), with the two previous ones. Only the following locations are maintained: Pedro de Valdivia (Chile) and Uyuni Salt Flat (Bolivia).

Table 3: Shooting locations in *Radio Atacama*.

Shooting spaces	Number of planes
Pedro de Valdivia	54
Puerto Williams	0
Cape Horn	0
Torres del Paine Natural Park	0

Salar de Uyuni	16
Uyuni train station	0
Eduardo Abaroa Natural Park	0

Source: own elaboration.

When comparing the data, an evolution is observed between the three montage versions towards the simplification of the places that are exhibited in the final montage of the film. While the version of the teaser and the first montage have planes of 7 and 6 different places, in the final version there are only 2.

According to Csikszentmihalyi (1998), creative processes occur through a series of interactions between three elements. The first is called field, defined as "*a series of symbolic rules and procedures. [...] Fields are located in what we usually call culture, or symbolic knowledge shared by a particular society*" (p. 46). In the case of this film, the field is audiovisual, specifically its cinematographic side. The second is called scope, "*which includes all the individuals who act as guardians of the doors that give access to the field. Its purpose is to decide if a new idea or product should be included in the field*". (p. 46). The agents of the scope to which *Invisible Places* aspired were film producers, distributors and representatives of television networks. And the third is the person: "*Creativity takes place when a person, using the symbols of a given domain [...] has a new idea or sees a new distribution, and when this novelty is selected by the respective scope to be included in the right field*" (p. 47).

As we analyze spaces, there are two groups of persons involved in their expression. The first one is the shooting team, formed by the director and operator Víctor Cerdán, and the producers Alberto Pérez and José Antonio Ayuso. And the second the editing team, formed by Daniel Villa and Víctor Cerdán. Since the creative challenge involved the transition from the feature film *Invisible Places* to the short film *Radio Atacama*, the persons (for creative purposes) are the last named.



Image 2: Photographs of the final locations of *Radio Atacama*: Uyuni Salt Flat (Bolivia) and Pedro de Valdivia (Chile).

Source: self-made.

The first phase of selection of spaces for the project of the sample takes shape during the montage process of the *teaser* of *Invisible Places*. This process responds to what De Bono (1986, pp. 28-29) calls vertical thinking, which is one whose direction has a defined path to achieve a specific goal. This implies that each step is progressive and, in order to reach one, it is necessary to go through the previous one. Once the team in Chile returned, we proceeded to digitize all the material. The cataloging was made based on the days of recording, which, due to the distance that separated each place, caused that they did not overlap each other, so that each block of intake was associated with a specific location. From there, a first attempt at narrative construction of *Invisible Places* began, whose synthesis reflects the *teaser*. In it the spaces and stories associated with them are mixed to create a piece as attractive as possible, joining the non-linear and suggestive narrative associated with this format of film promotion (Sánchez Noriega, 2002, p. 691). This piece was made with the intention of obtaining funding in the already named *pitching* of DocsBarcelona 2013. That is to say, from the post-production stage they began to follow the steps demanded by the scope (in this case the documentary film festivals

with financing sections) sequentially with a view to a defined objective. The critics received by the project and the failure in the search for financing caused the cancellation of the project.

It is at this moment where lateral thinking comes into play, necessary to achieve a change and restructure the film. De Bono (1986, p. 28) qualifies that lateral thinking does not imply that the creative process leads to an objective, or that it can even cause a distancing of the material on which one works. "*With lateral thinking, a specific direction is not followed, but a direction is generated*". In this case, distancing was carried out by stopping the project for several months, where all the tasks associated with it were parked. Csikszentmihalyi associates this phase with the second stage of the creative process, a process in which ideas are incubated more or less unconsciously to make new links between them (1998, p. 104). According to the same author, the first phase of the creative process, corresponding to awareness of the issue and the preparation to face it, took place during the aforementioned pitching and the meetings in which it was decided to cancel *Invisible Places* due to the low perceived viability of the project.

The third phase or component defined by this author is an act of intuitive revelation. The editing team decided to reduce the equity of the number of planes in each location or space to focus on two: Atacama desert and Uyuni salt flat. The title itself reflects this simplification and concentration of *Invisible Places*, where noun and adjective are in plural, passing to a title in singular, *Radio Atacama*. According to De Bono (1986, p. 88), this type of decision fits with the creative technique of splitting or division, by which one does not seek to break down the existing elements but to form news blocks, to fractionate them in any way "*that is shown to be efficient when its restructuration occurs*". The restructuration of *Radio Atacama* regarding *Invisible Places* is evidenced by the centralization of the story around Benito Paften and his place of residence, Pedro de Valdivia. This location accounts for 47% of the planes in the montage of *Invisible Places*, while it rises up to 74% in the first version of *Radio Atacama*.

The simplification of the filming spaces in the creative process of *Radio Atacama* editing reduced the film to two scenarios: Pedro de Valdivia and Uyuni Salt Flat. In the definitive version, the first location is present in 79% of the planes, and the Bolivian space in 21%. All locations unrelated (narratively speaking) to Benito disappear. Something similar happens with Uyuni Salt Flat. In the teaser of *Invisible Places*, it amounts to 10% of the planes and in the first montage of *Radio Atacama*, it increases to 14%.

The final version of *Radio Atacama* continues the reductive trend to the point of maintaining two locations: Atacama Desert and Uyuni Salt Flat, with 77% presence for the first and 23% for the second. The intention of the authors to convert the initial idea into something different is noticed. So the story is focused on Benito Paften and the collapsed space of Pedro de Valdivia. An oneiric space represented by Uyuni Salt Flat is added to this through the montage.

Through the shot material and montage, what Bordwell (1996), Aumont (1990) and Díez Puertas (2006) define as the film space is generated. That is, the one that may or may not correspond with reality, but that can configure a new space based on the plot and the universe of the film. In the case of the final montage of *Radio Atacama*, we find two well-defined film spaces. On the one hand, there is Pedro de Valdivia, which, according to the parameters of Díez Puertas (2006, p. 213), would correspond to the naturalist space. *"The scenic space imitates, to the tiniest detail, the world it describes and even revels in the atmosphere to make clear how the environment affects people. This is what happens in Novecento (Bertolucci, 1976)"*.

Also, what in the first montages were cryptic and unconnected sequences, in the final version, the location of Uyuni Salt Flat has a determining narrative function. In the climax sequence of the short film, the creators juxtapose both spaces (Pedro de Valdivia and Uyuni) and turn them into everyday life and daydreams. *"The scenic space reflects an unreal world, subjective or dreamy recreating real, highly stylized environments"* (Diez Puertas, 2006, p. 213). This is what happens in the 16 planes of *Radio Atacama* shot in Uyuni Salt Flat. This location becomes, through audiovisual montage, Benito's possible imagination or reverie. This confrontation of scenarios generates what Díez Puertas (2006, p 219) calls an ironic space. On the one hand, the protagonist is locked in an abandoned, crumbling and inhospitable place and, at the same time, he has visions in which a young man escapes towards a horizon where the sky is reflected on the ground, creating an immeasurable image of himself. From here arises the hypothesis that the authors, by reducing the filming spaces, concentrated the idea of a character who lives between reverie and ruins (Cerdán, 2016). The relationship between industrial and mining development and the abandonment of spaces has already been addressed by Chilean documentary makers of the 20th century, although from an urban point of view (Corro Penjean, Pablo, 2016, pp. 68-69).

From the point of view of production, this decision involves certain difficulties. On the one hand, it poses a risk by reducing the variety and visual dynamism of the story, especially taking into account the diversity of natural spaces filmed in Chile and Bolivia. On the other hand, from the point of view of production, a very high work and economic investment is discarded. It is, in a way, a failure in the planning of the work. Reducing the locations from seven to two means that, had the work been planned more clearly, considerable effort would have been spared. However, according to Walter Murch (2003, p. 37), one of the functions of the editor is to support these types of decisions that help to direct the film to a good port, since the editor lacks emotional or productive involvement with the material and it is easier to take this type of decisions: *"the editor should try to see only what is on the screen, which is what the viewer is going to do. Only in this way can images be freed from the context of their creation"*. In postproduction, where the editor and the director exercise the last part of the creative process, the mantra states that creativity consists in *"1% inspiration and 99% perspiration"* (Csikszentmihalyi, 1998, p. 104).

Despite the apparent disorganization of the montage of this project, the creative approach of Matilde Obradors' (pp. 166-167) cinematographic montage considers

that there are two types of films: on the one hand, those that respond to careful planning where montage pieces together the reconstruction of a script and the shots have been carefully cataloged and reviewed. On the other hand, those in which montage is a rewriting, even a discovery: *"the material begins to suggest its authentic existence, its content, independently of the intentionality that I wanted to attribute to it"*. Obradors adds that it usually occurs in documentary movies or creative documentaries, which was precisely the category that the distributor Marvin & Wayne decided to select the festivals in which it should compete. *Radio Atacama* is thus part of the current trend in which fiction and Iberian American documentaries begin to blur their borders. The categorization of this type of works entails certain difficulties, as pointed out by Faye D. Ginsburg (2006), Juan Carlos Arias (2010) and Carolina Larraín (2010).

This way, according to the methodology used, the effectiveness of the creative process of the person (in this case the director and the editor) in the scope (the cinematographic one) is measured by its access to the field (film festivals). From the selection by a distributor and the extensive international tour of *Radio Atacama*, it can be deduced that the agents of the field that it aspired to access (the selection committee and jury of the festivals) considered its inclusion there to be opportune. In addition to the factors pointed out so far, the fact that all the professionals involved had years of experience in their categories is an indispensable condition for the development of the creative process, since "a person cannot be creative in a field in which they have not been initiated" (Csikszentmihalyi, 1998, p. 47), coinciding with De Bono (1994, p. 233), who affirms that *"creative motivation and skill are present first and then the objectives are sought"*.

5. CONCLUSIONS

The use of purely digital means of production and postproduction facilitates, as has been observed in the example shown with the film *Radio Atacama*, the production of projects that move away from the requirements of the productions that access the main subsidies and grants. In addition, it is the digital nature of editing which has made this analysis possible, since, in the edition in photochemical support, each montage version involved undoing the previous one (since only one copy of each shot was made), so that only the final montage is preserved (Comolli and Sorrel, 2016, p. 191). However, the non-linear edition was initially called 'non-destructive editing', since the versions are virtual data, the original material is not modified with each sequence and different decisions can be considered in a parallel manner, involving addition, subtraction or changes in order (Utray, Armentarios and Benítez, 2015, p. 21).

Radio Atacama is a film shot in Bolivia and Chile and postproduced in Spain. It is an example of how an independent production can carry out a project in the Iberian American area by mixing European personnel and spaces in South America. The facilities offered by the digitization of audiovisual processes facilitate the development of a new Iberian American cinema where authors have great creative freedom, without commitments on dates of completion or delivery obligations to

distributors. Programs like Ibermedia also promote co-productions and more complex films, which imply more elaborate preproduction and a closer collaboration between countries and producers. However, these productions must comply with a series of deadlines determined by the help or signed commitments, which may compromise the authors' creation margin.

When using the creativity methods selected in *Radio Atacama*, we verify that all its phases are given in the construction of this Iberian American short film. Through the evolution of the montage of the film, we come to the conclusion that the use of lateral thinking is essential to overcome problems and make the best possible finish of an audiovisual work.

The importance of the selection of taxi spaces in the final result of the montage of the film is also demonstrated. In the example we analyzed, the use or the discarding of some of the filmed locations significantly modifies the meaning of the film. In the first two versions of the montage, the story is very ambiguous, only in the definitive version the authors manage to define with more precision the central conflict of *Radio Atacama*: Benito and his abandoned town versus his oneiric inner world.

6. REFERENCES

- Akitsu, S. y Collantes, P. (Producers) & Collantes, P. (Director). (2014). *Serori* [cinta cinematográfica]. Japón y España: Mizunonaka Films.
- Araya, N. (Producer) & Ravlic, Yerko (Director). (2014). *Pullay: la murga de una noche* [cinta cinematográfica: *Pullay: the Murga of One Night*]. Chile: Dinamo.
- Arancibia, A. (Producer) & Terreros, R. (Director). (2013). *Navegantes del desierto* [cinta cinematográfica: *Desert's Sailors*]. Chile: Ojo Chango.
- Arias, Juan Carlos. (2010). Las Nuevas Fronteras del Cine Documental: la Producción de lo Real en la Época de la Imagen Omnipresente. [The New Boundaries of Documentary Cinema: the Production of Realness in Times of an Omnipresent Image]. *Aisthesis*, 48, pp. 48-65.
- Aumont, Jacques. (1990). *Análisis del film* [*Analysis of Film*]. Barcelona, España: Paidós.
- Berrendo Pérez, Oscar, Serrano Fernández, Juan Antonio y Encinas Puebla, Enrique. (2016). *Panorama Audiovisual Iberoamericano*. Pozuelo de Alarcón, España: EGEDA.
- Bettaty, B. y Raymond, J. P. (Producers) & Echazarreta, B., Schneider, J. (2011). *Pánico. La banda que buscó el sonido* [cinta cinematográfica: *Panic. The Band That Sought the Sound*]. Chile: Ama, Jirafa Ltda. & Hibou.

- Bordwell, David. (1996). *La narración en el cine de ficción [Narration in the Fiction Film]*. Barcelona, España: Paidós.
- Brox, Óscar. (2014). Cinco años de Marvin & Wayne [5 Years of Marvin & Wayne]. *Détour*. Recuperado de <http://goo.gl/tSmK16>.
- Bruckheimer, J. (Producer) & Verbinsky, G. (2003). *Pirates of the Caribbean: The Curse of the Black Pearl* [cinta cinematográfica]. Estados Unidos: Walt Disney Pictures & Jerry Bruckheimer Films.
- Cerdán, Víctor (2016). Un modelo heurístico de análisis del cronotopo audiovisual "Radio Atacama" (2014) en R. Aras y E. Díez Puertas (Eds.). *Cronotopos audiovisuales iberoamericanos*. Madrid, España: Editorial Síntesis.
- Cerdán, V. y Villa, D. (Producers) & Cerdán, V. (Director). (2014). *Radio Atacama* [cinta cinematográfica]. España: Taifas Comunicación.
- Comolli, Jean-Louis y Sorrel, Vincent. (2016). *Cine, modo de empleo. De lo fotoquímico a lo digital, [Cinema: How to Use. From Photochemical Film to Digital Image]*. Buenos Aires, Argentina: Manantial.
- Corro Penjean, Pablo. (2016). La modernidad despoblada en el cine documental chileno: 1903-1933, [The Unpopulated Modernity in Documentary Film: 1903-1933]. *Univsum*, 31(1), pp. 67-80.
- Cullera Tenreiro, Carmen y Palacio Arranz, Manuel. (2016). *Producción y desarrollo de proyectos audiovisuales, [Production and Development of Film and TV Projects]*. Madrid, España: Editorial Síntesis.
- Csikszentmihalyi, Mihaly. (1998). *Creatividad [Creativity: Flow and the Psychology of Discovery and Invention]*. Barcelona, España: Paidós.
- De Bono, Edward. (1986). *El pensamiento lateral [Lateral Thinking]*. Buenos Aires, Argentina: Paidós.
- De Bono, Edward. (1994). *El pensamiento creativo, [Serious Creativity. Using the Power of Lateral Thinking to Create New Ideas]*. Barcelona, España: Paidós.
- De Dios, J. (Producer) & Sepúlveda, S. (Director). (2013). *Las niñas Quispe* [cinta cinematográfica: *The Quispe Girls*]. Chile: Dolce Vita Films & Fabula.
- Del Puy, M. y Jiménez, A. (Producer) & Giménez, A. (Director). (2014). *Elena Asins: Génesis* [cinta cinematográfica]. España: Malvalanda Producciones.
- Díez Puertas, Emeterio. (2006). *Narrativa fílmica. Escribir la pantalla, pensar la imagen, [Film Narrative. Writing on the Screen, Thinking About Images]*. Madrid, España: Editorial Fundamentos.

Cerdán Martínez, V., and Villa Gracia, D. (2019). *The construction of space in the documentary: Radio Atacama (2014)*

Domenech, L. y González, G. (Producers) & Sotomayor, Dominga (Director). (2012). *De jueves a domingo* [cinta cinematográfica: *Thursday to Sunday*]. Chile: Forastero, Cinestación & Circe Films.

Gardner, D., Green, S., Hill, G. y Pitt, B., (Producers) & Malick, Terrence (Director). (2011). *The Tree of Life* [cinta cinematográfica]. Estados Unidos: Fox Searchlight Pictures, Riverroad Entertainment, Plan B Entertainment & Brace Cove Productions.

Ginsburg, Faye D. (2006). Rethinking Documentary in the Digital Age. *Cinema Journal*, 46(1), pp. 128-133. doi: <https://doi.org/10.1353/cj.2007.0001>

Gordon, J. (Producer) & Bollaín, I. (Director). (2010). *También la lluvia* [cinta cinematográfica: *Even the Rain*]. España, Francia, México: Morena Films, Vaca Films & También la lluvia.

Grimaldi, A. (Producer) & Bertolucci, B. (1976). *Novecento* [cinta cinematográfica: *1900*]. Italia: Produzione Europee Associate.

Gutiérrez, M. y Razzak, O. (Producers) & Remón, P. (Director). (2014). *Todo un futuro juntos* [cinta cinematográfica: *A Future Together*]. España: Tourmalet Films.

Jihoon, Kim. (2018). Expressing Duration with Digital Micromanipulations: Digital Experimental Documentaries of James Benning, Sharon Lockhart, and Thom Andersen. *Cinema Journal*, 57(3), pp. 101-125. doi: <https://doi.org/10.1353/cj.2018.0033>.

Katz, R., McGurn, E. y Medavoy, M. (Producers) & Rigger, Patricia (Director). (2015). *The 33* [cinta cinematográfica]. Estados Unidos, Chile, Colombia: Phoenix Pictures, Half Circle & Dynamo.

Kennedy, K. (Producer) & Johnson, R. (Director). (2017). *Star Wars: Episode VIII. The Last Jedi* [cinta cinematográfica]. Estados Unidos: Walt Disney Pictures, Lucasfilms & Ram Bergman Productions.

Larraín Pulido, Carolina. (2010). Las Nuevas Fronteras del Cine Documental: la Producción de lo Real en la Época de la Imagen Omnipresente, [The New Boundaries of Documentary Cinema: the Production of Realness in Times of an Omnipresent Image]. *Aisthesis*, 48, pp. 156-171.

Linares Palomar, Rafael y Fernández Manzano, Eva (coord.). (2012). *Principios básicos de la producción audiovisual cinematográfica*, [Basic Principles of Cinematographic Audiovisual Production]. Madrid, España: OMM Editorial.

Cerdán Martínez, V., and Villa Gracia, D. (2019). *The construction of space in the documentary: Radio Atacama (2014)*

Marzal Felici, Javier y López Cantos, Francisco (coord). (2008). *Teoría y técnica de la producción audiovisual*, [Theory and Technique of Audiovisual Production]. Valencia, España: Tirant Lo Blanch.

Medina, Pedro. (2015). Cuidado y exigencia [Care and Demand]. *Caimán: cuadernos de cine*, 34(85), p. 62.

Murch, Walter. (2003). *En el momento del parpadeo*, [In the Blink of an Eye]. Madrid, España: Ocho y Medio.

Navarro, D. (Producer) & Cano, D. (Director). (2017). *Desierto no cierto* [cinta cinematográfica: *Uncertain Desert*]. Chile: Maceteros Producciones.

Obradors Barrada, Matilde. (2007). *Estudio de la práctica creativa en cine y publicidad*, [Study of Creative Practice in Film and Advertising]. Barcelona, España: Universitat Autònoma de Barcelona.

Olhaberry, J. P. (Producer) & Pinochet, M. (2014). *El mago* [cinta cinematográfica: *The Magician*]. Chile: Manota Films.

Prealdi, A., Rojas, J. y Vera, P. (Producers) & Justiniano, G. (1990). *Caluga o menta* [cinta cinematográfica: *Candy of Mint*]. Chile, España: Arcadia, TVE & Filmocentro.

Sánchez Noriega, José Luis. (2002). *Historia del cine. Teoría y géneros cinematográficos, fotografía y televisión*. Madrid, España: Alianza Editorial.

Sachse, Renate (Producer) & Guzmán, Patricio (Director). (2010). *Nostalgia de la luz*, [Nostalgia for the Light]. Francia, Alemania, Chile: Blinker Filmproduktion, WDR, Cronomedia & Atacama Productions.

Taylor, Thom y Hsu, Melinda. (2003). *Digital cinema*. Michigan, EE. UU.: Michael Wise Production.

Utray, Francisco, Armentarios, Manuel y Benítez, Anto J. (2015). *Postproducción digital. Una perspectiva contemporánea*, [Digital Postproduction. A Contemporary Perspective]. Madrid, España: Dykinson.

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