Digital Cinema in Chile and Latin America: Genealogies of a Change in the Audiovisual Culture of the New Millennium

El cine digital en Chile y Latinoamérica: genealogías de un cambio en la cultura audiovisual del nuevo milenio

O cinema digital no Chile e na América Latina: genealogias de uma mudança na cultura audiovisual do novo milênio

CAROLINA GAINZA, Universidad Diego Portales, Santiago, Chile (carolina.gainza@udp.cl)
WOLFGANG BONGERS, Pontificia Universidad Católica de Chile, Santiago, Chile (wbongers@uc.cl)

RESUMEN
En este artículo buscamos revisar hitos del cine digital latinoamericano y chileno que experimentan con las tecnologías digitales, con énfasis entre los años 2000 y 2017. Sostenemos que la principal transformación se observa en la ruptura con la linealidad y las nuevas formas de interacción con el usuario/espectador, lo que deriva en una experiencia estética diferente. Así, nuestro recorrido transita desde la transmedialidad y las diferentes formas de remediación, donde el elemento principal de experimentación es el propio medio, hasta obras audiovisuales que experimentan con el lenguaje de código para obtener obras que son imposibles de trasladar a los formatos antiguos.

Palabras clave: cine latinoamericano; cine chileno; formatos; tecnologías digitales; cine digital; estéticas.

RESUMEN ABSTRACT
This article aims to review some works of Latin American and Chilean digital cinema, with emphasis between 2000 and 2017. We propose that the main transformation takes place in the rupture of linearity and new forms of interaction with the user/spectator, which results in a different aesthetic experience. We will go from transmediality and different forms of remediation, where the main element of experimentation is the medium itself, to audiovisual works that experiment with code language to create works that cannot be translated to previous formats.

Key words: Latin American cinema; Chilean cinema; formats; digital technologies; digital cinema; aesthetics.

RESUMO
Neste artigo procuramos revisar o contexto do cinema digital latino-americano e chileno e suas experiências com as tecnologias digitais, com ênfase entre os anos de 2000 e 2017. Argumentamos que a principal transformação pode ser observada na ruptura com a linearidade e as novas formas de interação com o usuário/espectador, que resulta em uma experiência estética diferente. Assim, este trabalho transita a partir da transmediação e diferentes formas de remediação, em que o elemento principal de experimentação é o próprio meio, até obras audiovisuais que experimentam com a linguagem de código para obter obras que são impossíveis de serem veiculadas em formatos antigos.

Palavras-chave: cinema latino- americano; cinema chileno; formatos; tecnologias digitais; cinema digital; estéticas.

Forma de citar:
INTRODUCTION. CINEMA IN THE DIGITAL ERA

Computational devices and digital technologies have generated the emergence, during the nineties and in the new millennium, of unprecedented forms of audiovisual production that have changed the status and circulation of the cinematographic image and reception modes in contemporary cinema (La Ferla, 2009; Carlón, 2016; Comolli & Sorrel, 2016). Based on this, the questions that guide this work are: What is the condition of the cinematographic image in the digital age? How do digital devices affect the aesthetic experience of the subject? What features can we identify in digital cinema in the Latin American and Chilean context?

Almost all cinematographic production has some digital procedure nowadays. For several years now, the common format has been DCP (Digital Cinema Package), and the celluloid (in formats of 35 mm, 16 mm, 8 mm, Super8) has become an anachronistic materiality of cinema for amateurs. In general, the audiovisual territories to which the studies of the book edited by Jorge La Ferla and Safía Reynal (2012) are dedicated, have diversified and hybridized in such a way that we can identify multiple expansions of cinema towards other formats, supports and mediums. It is a phenomenon that began in the sixties and has a first important theoretical approach in the reflections of Gene Youngblood in his book Expanded Cinema (1970). In the digital age, expansive and remediation processes between analog and digital media intensify and increase (Bolter & Grusin, 2000). In this paper, we are mainly interested in works in which the digital format generates its own languages that allows us to delineate specific features of digital cinema. We refer to a type of cinema in which digital technologies and platforms are used as creative elements that produce a structure impossible to replicate in previous formats. For example, cinema in three or four dimensions, where there is a transformation of the status of the image and the experience of the spectator; interactive cinema, where it is possible to promote participatory experiences; animations, perhaps the first area where the digital had important effects, and the cinema of virtual reality, where the experience of the subject points to another bodily experience for the viewer, beyond traditional cinema. Based on these observations, we consider three main dimensions in the characterization of contemporary digital cinema: interactivity, hypertextuality and transmediality.

These features necessarily refer to a cinema that actively involves the audience. More than interpreting the work, the subjects are invited to explore it and affect it materially. As Arnau Gifreu (2013) points out: “The digital medium allows interactivity, but it is not just a cognitive interactivity, as for example in the case of a book or a play” — and we add, or as in the case of a film– “but also physical: in this new scenario, the user not only has the right to make decisions, but is invited to do so” (p. 24). In this regard, the story or narrative presented is not fixed, but the features of the digital format enhance the development of a narrative that can be intervened by the user/viewer through different levels of participation.

On the other hand, the digital format, as proposed by Lev Manovich (2005), allows a greater manipulation of images whose structure and appearance are based on computational processes, which affects not only their materiality, but also the forms of representation and the narrative itself. Thus, in digital cinema we find fragmented narratives, nonlinear and linked to the web, where the user is asked to build its own, to materially affect the works and to explore the different links, as well as to experience the immersion caused by certain digital techniques.

In this regard, we refer to the concept of digital aesthetics (Gainza, 2016, p. 239), where the aesthetic experience entails the possibility of manipulating the work, in different levels of participation, ranging from having some control over its progress, the experience of immersion, to the possibility of contributing to its construction. The manipulation is possible due to the characteristics of digital language: given its algorithmic and discrete condition, it allows reproducibility and the generation of identical copies. This explains the rise of remixes, samplings and all kinds of interventions and copies of images, videos, texts, among others (Manovich, 2005, p. 72). Gainza (2016) considers that the extended condition of digital works– fragmented, nonlinear and linked– along with the forms of manipulation of cultural artifacts in the digital age (which she calls cultural hacking) constitute two elements that define the digital aesthetic experience. This provokes in the subjects a desire to participate from the interactive experience, and, in addition, is linked to the creative uses of the new technologies through the possibility of the intervention of code
language. In this last point, digital technologies acquire new cultural meanings.

In this article we seek to go through experimentation with technologies from the review of global milestones, beginning with Latin American digital cinema to then reach Chilean digital cinema. In this genealogy, exploratory and non-exhaustive, the reader will be able to identify different forms of experimentation with digital technologies, from transmediality and remediation, where the main element of experimentation is the medium itself, to audiovisual productions that experiment with the code language to obtain works that are impossible to transfer to the old formats.

THEORETICAL FRAMEWORK. THE TRANSMEDIAL SITUATION

Russian ark (2002), by Alexandr Sokurov, The Tulse Luper’s suitcases (2003, 2004 and 2005), by Peter Greenaway, and Star Wars II. Attack of the clones (2002), by George Lucas, are, on a global scale, three emblematic film projects that show, at the beginning of the new millennium, very diverse uses of digital technologies as new modes of film production; the first two in the field of art cinema, the second in Hollywood cinema. Sokurov’s film, without putting aside the traditional format of cinema for theaters, consists of a single sequence shot filmed during 96 minutes in the Hermitage Museum of St. Petersburg, using a Sony HDW steadicam. By converting the light into bits, all the visual information goes directly to a hard disk, and the control of the production process and the editing of the images is immediate and not subsequent to the filming. This film by the Russian director, in which digital cinema manages to remediate and fuse theater, plastic arts, architecture and classical music in a complex and vertiginous staging, has symphony orchestras and 2,000 actors that populate the more than 30 museum rooms through which the camera wanders, which –during the final dance– becomes another character, and which is accompanied by a ghost narrator who tells several episodes of Russian history.

Welshman Greenaway, one of the most notorious contemporary advocates of the new ways of making expanded films, in the Youngblood line, says that “we can do a post-cinema that is interactive and a cinema that is multimedia, a cinema that seduces your eyes and your ears, and that ignores your other senses” (“Peter Greenaway dice que el cine de hoy”, 2008). The emergence of remote control in the individual use of TV in the eighties is for Greenaway a first main symptom of the rise of interactivity in audiovisual production. The Tulse Luper’s suitcases is an expanded and transnational project that has three feature films, a television series, museum installations and interactive platforms on the web. In very complex and surreal constellations, it tells the story of a traveler-prisoner writer and his 92 suitcases. Eduardo Russo (2009), in a study on the transformations of contemporary cinema, comments on the position of Greenaway— and also of another great pioneer, the French Chris Marker—regarding expanded cinema in the digital age, and points out the significance of the new mediums as a potential for expansion in the search for new aesthetics in the digital image, searches that we find in both experimental and expanded cinema and in contemporary audiovisual arts.

On the other hand, and in a certain way opposite to aesthetic experimentations, industrial blockbusters such as Jurassic Park (1993), Toy Story (1995), Star Wars (1999-2019) and Harry Potter (2001-2011) live on the special effects generated by new technologies and post-production work. These and many other projects carried out around 2000 inaugurate another plot of the transmedia era, in which narrative products migrate between different audiovisual formats based on digital technologies: film series, TV series, videogames, VJ’s. “Digital cinema”, says Ángel Quintana (2011), “has consolidated itself as a hybrid cinema that mixes the computer-generated image with the image captured from reality” (p. 108). This allows offering very diverse products in the audiovisual and transmedia market, but, as Quintana points out, the contemporary cinematographic spectacle mostly recycles classic formulas of storytelling; the commercial success of “creation through artificial bodies, cybernetic landscapes, synthetic lights and overwhelming effects” contrasts with the fact that “their proposals in many cases show a clear aesthetic failure” (p. 129).

In these new production circumstances, as Hjarvard (2013) points out, while analogue media could be associated with centralized forms of mediation and social control, digital media creates new agencies and allows more individualized accesses and uses. What seems relevant here is the emphasis
on the materiality of the media and its capacity to construct social realities. They are not identified as forms of mediation and transmission of messages and codes established from identifiable ideological patterns. Digital mediatization generates complex agencies whose analysis goes beyond a critique of the consumerist and capitalist society in which we live. As Bolter and Grusin argue in their book on remediation processes between analog media and digital media, “just as there is nothing prior to the act of mediation, there is also a sense in which all mediation remediates the real. Mediation is the remediation of reality because media themselves are real and because the experience of media is the subject of remediation” (2000, p. 63).

The media are real objects and are part of the reality we build, and, in this regard, they are not vehicles of representation of an alleged external reality. They themselves build realities—following the analysis of Niklas Luhmann (2000)—articulated with the realities constructed by other systems such as the economic and the capitalist, undoubtedly dominant in our hypermediated and technological era. It is therefore convenient to speak of “transmedia mediations” (Bongers, 2018, p. 132): the digital media of audiovisual communication create a social and cultural sensorium based on connectivity, convergence, interactivity, permanent availability, the programmability of any material in numerical codes (Manovich, 2005); some contemporary critics associate this situation with an anthropological mutation that produces new symbiosis between human beings and machines (Sadin, 2017; Berardi, 2017).

Other observers of this situation, such as Henry Jenkins (2008) and Carlos Alberto Scolari (2013), point to the birth of a new social and communicational figure: the prosumer, which leaves behind the old consumer of analogue media. Jenkins (2008), with a celebratory perspective that tends to omit the critical comment, describes the situation of convergence indicating

the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behavior of media audiences [...]. ‘Convergence’ is a word that manages to describe technological, industrial, cultural, and social changes, depending on who’s speaking and what they think they are talking about (p. 14).

In today’s media landscapes, whose protagonists are the mobile phone and other portable computing devices, we are all photographers and filmmakers, we all produce and consume content based on invisible numerical processes that we share with other users on the platforms for dissemination and circulation. Machado (2009) also points out the various constructions of subjects in the digital age. He names the active receptor subject, immersed in the narrative processes—Jenkins’ prosumer–interactor, dominant agent of the participatory situation. But there is also an anonymous subject (the subject-SE), “a program of automatic generation of narrative situations that dialogues with the first” (p. 122). That subject split between human and program is a subject born in the digital age. Sadin (2017) says:

Little by little, the one who dissolves is the modern subject, the one who had emerged from the humanist tradition and instituted the individual as a singular and free being, fully conscious and responsible for his actions. The power of the political based on the deliberation and the commitment of the decisions therefore crumbles, in order to progressively grant the statistical results and the algorithmic projections the responsibility of establishing and deciding the public elections (p. 30).

The transmedia situation generates artifacts and figures of multiple appearance in hypermediated constellations, launched in different platforms, supports, formats and mediums, by different agents that participate in the production, circulation and reception of these devices. Scolari (2013), with a more critical tone, resorts to the concept of intertextual commodity and applies it to transmedia narratives that are “strategies of cultural industries to capture new audiences” (p. 26). It is “a type of narration where the story unfolds through multiple mediums and communication platforms, and in which a part of consumers take an active role in that process of expansion” (Scolari, 2013, p. 46). It is these consumers, prosumers or interactors who lose, according to Sadin, their ability to make conscious political decisions, and are no longer fully free subjects. An unresolved doubt remains: To what extent do the mutations and transformations of the new agencies between human beings, technologies and machines allow us to make plausible evaluations and prognostics about human evolution?
BACKGROUND. LATIN AMERICAN DIGITAL CINEMA: PIONEERING EXPERIENCES

Before presenting a sample of Chilean digital cinema, we want to mention some pioneering experiments with digital technology in Latin America. The Chilean video artist Juan Downey is, at the regional level, one of the most outstanding references of experimental film and video. Since the seventies, his work has been characterized by a remarkable degree of reflection and experimentation on new formats and audiovisual media, and, as Pérez (2016) points out, he shares several features with the experimentations and poetic cinematography of Raúl Ruiz in those same years. Within the framework of El Ojo Pensante, his autobiography filmed in several episodes, J.S. Bach (1986) stands out, a work that was recorded in a video disc with programmed access for the intervention of the spectator/interactor. It is a project that precedes in a couple of years the CD-ROM Immemory (1998), by Chris Marker, a work that allows and demands the intervention and choice of the contents offered on the disc (fragments of texts, films, audios, etc.) by the interactor by creating a route of its own when navigating these artifacts. Downey’s work is available on the web and in digitized copies, but only the original video disc—and obsolete technology such as Marker’s CD-ROM—allows the interactive intervention game in the order of the story(ies).

Another singular project in several shots is Perón, sinfonía del sentimiento, a monumental history of Peronism, by Argentine filmmaker Leonardo Favio. It was filmed during six years, between 1994 and 1999, edited exclusively with material found in various archives, which the director, through digitization processes and applications of software programs, intervenes and mixes with paintings and drawings by visual artists, generating poetic effects. Perón is an enormous documentary, of 340 minutes, unfit for distribution and exhibition in theaters. In fact, the credits speak of a miniseries, a format intended for television broadcasting, and which, with the reissue on DVD in 2009 and its presence on Internet sites, is inserted into other logics of circulation. On the occasion of the 2009 reissue, Favio tells in the newspaper Página 12:

When I finished it, we decided it was not a movie for the cinemas. We launched it on video, sold it at the stores and broadcasted it in neighborhood centers, in unions. In very humble neighborhoods they put a little sign: ‘Today Perón, empanadas, wine’. There the militants saw the film and discussed (D’addario, 2009).

The making of the documentary coincides not only with the first phase of the New Argentine Cinema of the 90s, with whose aesthetic postulates Favio does not share almost anything, but also with the digital revolution of that decade and the introduction of new technologies in film production. The new procedures, however, surprise Favio, who tells his new experience in the following way:

The one who knows is the boss. But it was hard. First, the operator passed the images quickly and I said ‘no’, pass them as if they were a projector, because if not, I don’t understand anything. What do you gain by showing me you’re fast? I already know you’re fast. Pass them slowly, because you know I’m slow. That’s how I started and then I took control of all that. But it was not easy (Noriega, García, Schwarzbock, & Villegas, p. 5).

Favio expresses his astonishment at the digital technique, but also recounts his passage from traditional filmmaker to operator and editor of digital images. In the same interview made by El amante in 1999, he remarks the difference of working on a computer screen, in contrast to cinema filming that he had done before. Instead of going out on the street to film, now, with the computer and its editing program, he dedicates himself to reordering, restructuring, manipulating and reconfiguring the images found in several national archives to tell his epic version of recent Argentine history. Creative energies, so to speak, move from the search and production of new images to the reordering of existing images.

In some fiction films produced around 2000 in Latin America, the introduction of digital technologies in filming and editing serves for developing new forms of production, new languages and special effects. The Argentinean Fernando Spiner produces Sleepwalker (1998), one of the few films representatives of science fiction in the country. Many scenes are computer-generated and produce the effect of an estrangement in line with the story. The Mexican Arturo Ripstein films in digital Such is life (2000), a version of the Medea myth that takes place in Mexico City. It is one of the most interesting experiments with the format in the region, inspired by the mobile video camera used in the Dogma 95 projects. Ripstein emphasizes in this work the difference in the materiality of the digital that produces more immediacy and rawness, he looks for new textures and languages to create a new digital cinematographic poetry. The film, evidently, produces constant tactile effects, generates sensations of confinement, of a direct and without distance voyeurism, with a camera that moves through the spaces always in search of tragedy.
In Chile, the case of *L.S.D. Lucha social digital* (2000), by the Chilean actor and director Boris Quercia, stands out: it is the first Chilean film done entirely in digital format, presented at the 2000 edition of the Valdivia Festival. What is interesting about the project is, in the first place, the director’s insistence, expressed in several interviews, about the ease of use of digital cameras that allows a low-cost filming and without major technical complications. Secondly, the potential of the unfinished character of the work also stands out: the projections before a critical audience can lead to transform the product into later editions of the material, done with computers.

There are other pioneering examples of digital experimentation, such as Pachito Rex, *I’m leaving but not for good* (2001), by the Mexican Fabian Hofman, a film in which a curious and comical presidential candidacy is staged, introducing and mixing computer-edited scenes that generate distortions and special effects. We can conclude this short overview by saying that in the cases of Favio, Spiner, Ripstein, Quercia and Hofman, in analogy with Sokurov’s project, what stands out is the experimentation with materiality and digital formats that allow the construction of new images and new transmedial poetics, phenomenon accompanied by similar trends in the industrial cinema that looks mainly for new special effects. On the other hand, Downey represents the *expanded cinema* and video line that we also observe in the projects of Peter Greenaway and Chris Marker.

To close this section, we would like to mention an expanded film project of 2017, in which a different digital aesthetic stands out, unprecedented at a Latin American level: the film-installation by Alejandro González Iñárritu, *Flesh and Sand* (2017). It was awarded at the recent 70th Cannes Festival, after having been exhibited at the Fondazione Prada in Milan, at the Cultural Center of the University of Tlatelolco in Mexico City and at the Los Angeles County Museum of Art (LACMA). It is an audiovisual work to be experienced in an immersive way through virtual reality techniques. Its duration is six and a half minutes and allows the viewer—a denomination that does not seem to work in this type of projection—to immerse in the experience of a migrant. González Iñárritu (2017) says in the film’s website:

I’ve experimented with VR technology to explore the human condition in an attempt to break the dictatorship of the frame—within which things are just observed—and claim the space to allow the visitor to go through a direct experience walking in the immigrants’ feet, under their skin, and into their hearts (par. 4).

Thus, the cinema experience is completely modified. Digital technologies have another language, to which González Iñárritu seems to refer in his description, which he seeks to appropriate. Visitors can no longer be called spectators, because their role is not to watch a screen. Or, if we do not want to fall into the passive-active dichotomy, in traditional cinema the spectator plays an active role in the generation of meaning but does not participate in the film. On the contrary, in the film-installation of González Iñárritu, visitors are urged to live an experience in the first person, where they not only interpret and generate meanings, but actually act and are part of what is told. The above is linked to the digital aesthetic experience proposed by Gainza (2016), described at the beginning of this paper, one of whose most important elements is the interactivity that digital technologies enable. In the case of digital cinema, the pleasure of experience is not found in the contemplation of moving images or the creation of meaning but is linked more strongly to the possibility of participating and having a role in the development of the story.

**CASE STUDIES ANALYSIS. CHILEAN DIGITAL CINEMA: TRANSFORMATIONS AND NEW EXPERIENCES**

Evidently, the interactive installation of González Iñárritu is a culmination of the experimentation with the digital format in the *expanded cinema* of Latin America. To approach the Chilean experiences, we now refer to the research developed by Carolina Gainza4, which compiles eight Chilean audiovisual works that experiment with digital technologies. Among them we would like to focus on four: *Papá o 36 mil juicios de un mismo suceso*, *Quipu*, *V.O.S.E.* and *MAFI*. The first corresponds to a hypertext feature film and the other three belong to the field of interactive documentary.

*Papá o 36 mil juicios de un mismo suceso* (2006) is a feature film directed by Leonardo Medel that circulated in CD format. The film presents as its main axis the
Digital Cinema in Chile and Latin America

GAINZA C., C. & BONGERS, W.

story of Miguel, a university professor who maintains a relationship with Lucía, his student, until his daughter discovers them. However, this central story is ramified in its possibilities, and there are multiple outcomes and combinations of the scenes. This happens because the movie is programmed so that we access a different version of the story each time we put the CD on. In this regard, it can be defined as hypertext fiction, due to its multiple ramifications. Each time the film starts, different narrative lines are randomly generated, configuring up to three million different versions.

Clearly this film could not be presented on the big screen because it was intended to be seen in a digital format, both for its hypertext structure and for the level of interaction required from the viewers/users. This is one of the main features of what we understand by digital cinema, which refers to a type of audiovisual experimentation in which both digital technologies and digital platforms (web, social networks) are used as creative elements that produce a structure that cannot be replicated in the older formats. Although this film exists in CD, the digital language allows the implementation of a branched structure, where the viewer can access a work that, in each projection, will be different.

Although in this work the role of the spectator does not change, since he/she cannot interfere in the outcome, what is modified is the experience, because there is no sequence of events or a unique ending. However, unlike the collective experience that involves the theater in traditional cinema, which dialogues with individual interpretation, the experience that Papá represents is exclusively individual. In this regard, we observe a kind of fetish with technological experimentation that loses sight of the relationship with the viewer and places him/her at a consumption level. The question derived from this experience is that of the product tailored for the consumer, who perceives the illusory experience of choosing in a context where his/her choices are limited by the programmer’s control, in this case, of the predetermined scenes. In this sense, when analyzing the operation carried out in this film, the criticism of Manovich (2005) makes sense: “Interactive media asks us to identify with the mental structure of another person. If the film viewer, man or woman, coveted and tried to emulate the body of the movie star, the computer user is asked to follow the mental path of the designer of the new mediums” (p. 109).

Unlike the above, the genre that we will now address –interactive documentary– is not limited only to experiment with the digital language or the medium. This is perhaps the genre that has experimented the most with languages and digital media, to generate, among other things, a collective experience and, in several cases, a collaborative one, of the documentation of reality coming from the audiovisual. Regarding its definition, although it is a contemporary discussion where there is no unanimity about its scope, we can find some elements that differentiate the interactive documentary from other documentary forms. Sandra Gaudenzi (2014) points out that “any project that starts with the intention to document the real and that does so by using digital interactive technology can be considered an interactive documentary” (p. 282). To this she adds that it is a new form of documentary that uses interactivity to position the user within the documentary, which demands that the users “play an active role in the reconstruction, representation, and negotiation of the facts it wants to convey” (p. 282). In this definition, she coincides with Arnau Gifreu’s proposal (2013) that we pointed out in previous pages: it is not enough for the user to interpret the narrative, but he/she must physically intervene in it. Gaudenzi (2014) points out that the type of intervention that the user performs will derive in different types of interactive documentaries, such as docuweb, docugame, collaborative documentaries, or educational documentaries, among others.

When Gaudenzi affirms that the interactive documentary represents a new form of documentary, she refers to the fact that it is not an evolution of the traditional documentary. Gifreu (2013) delves into this aspect, pointing out the insufficiency of the evolutionary criterion to account for the specific features of interactive documentary. The author is emphatic in pointing out that its characteristics make it a new way of accounting for reality from non-fiction audiovisual. These features are: the director’s loss of control over the flow of the work, which places him/her in an assistance role regarding the interactor; interactive, nonlinear, hypertextual and multimedia narrative, which translates into a “nodal and bifurcated scheme of narrative discourse” (Gifreu,
GAINZA C., C. & BONGERS, W.  
Digital Cinema in Chile and Latin America

2013, p. 156); a user that makes decisions and that relates to the work at an interpretative and physical level at the same time, which transforms him-her into an interactor, participant and that actively contributes to the development of the documentary; finally, it is a system that can change constantly in the relationship both with the medium and with users.

In the compilation made by Gainza it is possible to observe that most of the works correspond to this genre (web, digital culture Chile). *Quipu* (2015) is perhaps one of which most accounts for the features mentioned above. It is an interactive documentary directed by María Ignacia Court and Rosemarie Lerner, both founders of Chaka Studio, an interdisciplinary collective that produced the *Quipu* project. This project aims to give visibility to the testimonies of women and men sterilized in Peru during the Fujimori government. The testimonies of those affected that were collected arrive at a web archive, through a telephone line enabled in the places where they live. On the other hand, users can interact leaving their own opinions and testimonies. The *Quipu*, a system of knots made of strings used by the Incas to transmit messages, is a metaphor for the networks that are created through the interaction between the messages of those affected, their communities and the users who listen and share these messages, as well as the interaction between all these actors through the communication system generated in the project.

In *Quipu* we can appreciate the appropriation of digital language regarding the networks that they create, but also in the audiovisual field, since it allows the voices of those affected to tell their story. It is a documentary that, due to its level of interaction, could not have been done in a format other than digital. On the other hand, technologies and social networks acquire another meaning, being used to make visible the problems of a marginalized community and subjects abused who have been pushed away from the spaces of power.

*V.O.S.E* (2014), directed by Rosario González, takes advantage of the manipulable feature of the digital language as an element to involve the users/operators that visit this interactive web documentary. To access the full documentary, the visitor must click on the explore link located in the center of the home screen, in the lower right corner. Another way to explore it is through the menu in the lower left corner, where the users can choose their own path to see the different resources.

The game played with the subtitles invites the visitors to become aware of the relationship between words and the meanings that images acquire. By intervening the subtitles, they play with the idea of the intervention of meaning: the images acquire, indeed, different meanings from the interpretation that both the interviewees –like Céline Pimentel and Enrique Vila-Matas– and the users make of them. Users can subtitle GIFS and share them; they are called to collaborate by intervening the cinematographic images from what these evoke to them. In a certain sense, we can interpret the game as a staging of the subject-SE, of which Machado (2009) speaks, a divided subject that generates narrative and significant situations between human and program.

MAFI (2012), *Mapa Fílmico de un País*, in charge of a non-profit group dedicated to documentary recording, seeks to build a film map by capturing documentary images from different parts of the country. Different Chilean filmmakers have participated in this task; it was conceived as a project especially for the web, as Josefina Buschmann (2017), MAFI’s content director, points out: “It was born from the idea of audiovisual creators who are beginning to think about how to position cinematographic contents on the web, how to get the cinematographic content out of the cinema, generating works that allow us to reflect on the national reality” (p.1). On the main page of the website we find the records available in MAFI, where users can explore the micro documentaries in different ways. In the upper right corner, they can navigate by subjects and in the black strip on the left they can explore the records through a map of Chile.

Although MAFI’s proposal does not seek to experiment –in audiovisual terms– with the digital language and it remedies, in the sense of Bolter and Grusin (2000), elements of the first cinema, since it uses conventional fixed shots of approximately one minute, the uses of the digital become relevant by putting these records on the web available to users, where the images overlap and the construction of the general picture of the image of the country is in their hands. As Buschmann says: “MAFI started with forty shots, and now we have two hundred and fifty. Maybe, it was easier to understand before, but now it’s like navigating infinitely” (p. 9). In this regard, the images
of the Chilean territory are constructed collectively and collaboratively, from the different ways in which users navigate and signify them.

In the Chilean digital cinema and audiovisual experiences studied, one of the main features is the rupture of linearity. This is accompanied in the interactive documentary of a different, more participatory conception of user intervention, called to manipulate, interact, collaborate and build the puzzle that these productions put in their hands. In interviews with the directors and managers of these projects, available at culturadigitalchile.cl, we can see how everyone agrees that the web and digital languages allow them greater freedom, both in terms of the ways in which stories and narratives are constructed through images as in the relationship with users, called to intervene the works not only in their meaning but to act materially on them and, in the case of documentaries, to collaborate. In these works, we observe hybrid audiovisual experiences that even question the very definition of cinema. On the other hand, as we pointed out, they actively involve the audience and create a collective and collaborative spirit. Beyond interpreting the works, the subjects are invited to explore them and to intervene them materially. In this regard, the story or narrative presented is not fixed, but the characteristics of the digital language enhance the development of a narrative that can be manipulated by the user through different levels of participation.

On the other hand, it is interesting that the documentary genre is the one most prone to experiment with digital language and that it emerges as a fertile territory of new aesthetics and audiovisual experiences compared to industrial productions that see the digital as a mere instrument to increase the number of special and spectacular effects. Perhaps this prevalence of documentary in digital cinema has to do with the need to capture a voice, especially in the case of Quipu, where the author loses control over the narrative and its construction remains in the hands of the users involved. The voice of the author, who tells a story or directs it, fades in front of the appearance of other voices that tell and redirect that same telling of the story in a collaborative act of participation.

This is exactly what Gainza’s (2016) proposal refers to regarding the aesthetic experience of digital, whose components have to do with breaking linearity and with the possibility of intervening the works delivered by the code language, as well as the definitions of interactive documentary by Gaudenzi (2014) and Gifreu (2013). According to the examples seen, digital cinema cannot be defined only as that which exists in digital format. In these examples we talk about works where the digital format expresses a specific language that allows delineating specific features of the expanded cinema that uses that language.

CONCLUSIONS

At the beginning of this paper, we posed three questions, which refer to the condition of the cinematographic image, the aesthetic experience and how it affects the subject, and the features of digital cinema in the Latin American and Chilean context. Based on the last point, we consider that—as we have observed in relation to other technologies, such as photography, cinema, radio and television—the adoption of the language of a new media, paraphrasing the title of Lev Manovich’s book (2005), goes through different moments. In our overview of some of the milestones of Latin American digital cinema it is possible to observe that, at first, the adoption of digital technologies focused on a change of format and the search for new poetics in the materiality of the image, both in the process of filming as in post-production, but not in an identification and appropriation of the specific language of digital technologies. This can be seen in the pioneering digital cinema of Favio, Spiner, Ripstein, Hofman and Quercia, which we presented as paradigmatic examples.

In what we could identify as a second stage, already in the context of experimentation with the language of new media, we can place, in the Chilean case, Leonardo Medel’s feature film and the interactive documentaries that, by incorporating the interactive and participatory element of interactors, resuming, updating and varying some visionary projects at a regional level, such as those of Juan Downey, show a higher level of experimentation. The film-installation of González Iñárritu represents, perhaps, a third moment in the new works with digital languages, which inaugurates the exploration of new paths at the junctions between cinema and virtual reality. Of course, in this overview it is pending to identify and analyze other Latin American examples that allow to establish these three moments identified in our journey through the new experiments using digital technologies in cinema.
As for the aesthetic experience of the subjects, we have indicated that these, in terms of Machado (2009), should no longer be called spectators, but rather interactors. Especially in the interactive documentary it is possible to observe what Gainza (2016) calls digital aesthetics, i.e., the interactive and extended feature—hypertextual—enabled by the digital language, with special emphasis on its potential to be intervened by users. As noted by Gaudenzi (2014) and Gifreu (2013), this type of work requires a subject that participates and intervenes the documentary. This speaks of an aesthetic intrinsic to digital language, characterized by its possibility of being manipulated and that, in this regard, generates a desire for participation in the users, who seek to intervene the works. The case of Flesh and Sand is paradigmatic: the participants experience in first person the experiences of migrants seeking to reach the United States, which is not only an individual experience, but also connects with a collective experience of the migrant subject. In these interactive works, the subject is positioned not as a spectator of a reality, but as part of it.

Regarding the question about the condition of the cinematographic image, Jorge la Ferla (2009) points out that the digital confronts the cinema “with a reality in which, in the best of cases, it is only possible to conceive for a short time more traditional processes of filming and exhibition” (p. 17). And Arlindo Machado (2006), in another seminal text on the situation of contemporary cinema in the audiovisual territories as a whole, states: “Hybridization and the convergence of the media are processes of intersection, of transactions and of dialogue; they imply transit and provisional movements, they also involve the tensions of the converging hybrid elements, parts that tear and do not completely fade” (p. 88). Considering the transmedia and digital situation, Ángel Quintana (2011) also stresses that “the multiple mutations of the image have proposed a transformation of the concept of the audiovisual as a system of expression” (p. 167). The cinema, for several decades, is no longer the dominant media to produce moving images. It is part of a set of digital audiovisual territories in which the fragmented image in bits produces effects in the eye and in the look that provoke another type of perception and experience, whose study is still in its infancy. Cinema has become a territory of exploration and experimentation of new materialities between the analogical and the digital, between the individual and the collective, and between traditional and novel forms of production and reception of images. In these circumstances, transmediality, interactivity and hypertextuality are the concepts that we proposed here to approach a conceptualization of contemporary digital cinema in Chile and Latin America.

**FOOTNOTES**

1. Some of the theoretical reflections of this article have been developed in the Fondecyt Regular No. 1180771, *Cartografías de la literatura digital latinoamericana* [Cartographies of the Latin American digital literature], project funded by CONICYT and directed by Carolina Gainza. The project is part of the Research Laboratory on Digital Culture of which both authors are members.

2. In the hypermediated and transmedial context, art can find its meaning in the reorganization, reinterpretation and critical reconstruction of the materials found in the various cultural archives. Nicolás Bourriaud (2012) calls this artistic work post-production: the intervention and transformation of existing images, sounds and artifacts into a relational aesthetic that constructs new social realities.

3. Let us also mention the emblematic audiovisual project in digital format of Jean-Luc Godard, *Histoire(s) du cinéma* (1989-1998), whose realization largely coincides with that of Favio’s documentary on Perón. In four and a half hours and several episodes, Godard tells the story (and death) of film in images and combines the intervention in the film archives with a particular digital poetry. The two projects are symptoms of the transformations of cinema produced in the digital age. In any case, in the words of Bill Nichols (1997), *Perón* is a documentary in an exhibition mode, mixed with a poetic-epic mode.

4. Research funded by CONICYT (Chile), corresponding to the Fondecyt Project Initiation into Research: *Cultura digital en Chile: literatura, música y cine* [Digital culture in Chile: literature, music and film], whose results are available at http://culturadigitalchile.cl/
REFERENCES


Downey, J. (1986). *J.S. Bach*. Chile: Juan Downey.


Machado, A. (2006). *Convergencia y divergencia de los medios* [Convergence and divergence of the media]. In J. P. Pereira González, M. Villadiego Prins, & L. I. Sierra Gutiérrez (Coord.), *Industrias culturales, músicas e identidades. Una mirada a las inter dependencias entre medios de comunicación, sociedad y cultura* [Cultural industries, music and identities. A gaze to interdependences between means of communication, society and culture] (pp. 73-88). Bogotá: Pontificia Universidad Javeriana.


Pérez, F. (2016). *La imagen inquieta, Juan Downey y Raúl Ruiz en contrapunto* [The disturbing image, Juan Downey and Raúl Ruiz in counterpoint]. Santiago: Catálogo.

Peter Greenaway dice que el cine de hoy está hecho por y para “iletrados” visuales [Peter Greenaway says that today’s cinema is made by and for visual “illiterates”] (2008, October 10). *La Tercera*. Retrieved from http://www.latercera.cl


Ripstein, A. (2000). *Así es la vida* [This is life]. Mexico: Wanda Visión S.A.


ABOUT THE AUTHORS

Carolina Gaínza Cortés, sociologist and master in Latin American Studies from the Universidad de Chile and Ph.D. in Hispanic Languages and Literature from the University of Pittsburgh. She is currently an assistant professor at the School of Creative Literature at the Universidad Diego Portales, directs the Regular Fondecyt project Critical Cartography of Latin American Digital Literature (2018-2021) and participates as a co-researcher in other projects related to digital culture.

Wolfgang Bongers, holds a Ph.D. in Literature and Intermediality from the University of Siegen, Germany. He is currently Director of Research and Postgraduate Studies and associate professor of Literature and Film at the Faculty of Arts, Universidad Católica de Chile. He coordinates and manages national (Fondecyt) and international research projects on the impact of audiovisual media in the Latin American cultural field and on the relationship between archives and memories of the 20th and 21st centuries.