

**INTERACTIVE AUDIENCES: viewers\users' engagement in  
National Film Board of Canada's interactive documentaries**

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Porto, 2018



**INTERACTIVE AUDIENCES: viewers\users' engagement in  
National Film Board of Canada's interactive documentaries**

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A Dissertation

Presented to

The Faculty of Engineering

Department of Informatics

University of Porto

Porto, Portugal

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In Partial Fulfillment

of the Requirements for the Doctoral Degree

in Digital Media

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by

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July 2018

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Keywords: interactive documentary; National Film Board of Canada, participative audience;  
phenomenology; psychoanalysis.



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## ABSTRACT

This thesis explores the audience's engagement and perceptual experience of interacting with interactive documentaries. The aim is contributing to a discussion about how interactivity and new technologies promote new spectatorship performances and subsequently affect the spectator's subjectivity.

Through a phenomenological (and post-phenomenological) approach, the investigation discusses the user's perceptual and embodied experience of interacting with a *corpus of study*, selected from the National Film Board of Canada's portfolio. The research delves into the descriptive analysis of interacting with three digital objects, each one of them corresponding to a different mode of interaction and therefore engaging the audience in a particular way. The hyperlink interactive documentary *Bear 71* is scrutinized as a panopticon of surveillance, merging linear sound with the interactor's non-linear navigation through surveillance footage. *Fort McMoney*, as a conversational interactive documentary with a rhizomatic and complex structure, opens the possibility of exploring a spatial narrative and playing with reality. In its turn, *A Journal of Insomnia*, with a participative interactive mode, provides a collective portrait while engages the interactor in a self-reflexive portrait.

Throughout the investigation, I consider the interactor and the digital object as two interrelated and dependent entities that influence and shape one another. As fragmented, multilinear and dynamic forms, interactive documentaries provide the audience with the agency of manipulating and developing the narrative, while conversely engender in the interactors what I address as *ways of affection*. I propose eight digitally disrupted and induced sensations, or *senses of*, for describing how interactive documentary affects users during the interaction performance.

Considering the self-centered and sometimes self-referential nature of interactive documentary, its derivative objects also afford a particular way of portraying the Self and confronting the viewer with her or his self-being. The Lacanian psychoanalytical formulations provide a framework for analyzing the interactor's virtual experience and how the audience observes and is observed within the digital environment. As a mirror, the digital screen reflects back to the interactor her or his own image and traps her or him into the Digital Gaze, a *myse-en-abyme* between the Self and the Same.

## RESUMO

Esta tese explora o envolvimento e experiência perceptual da audiência durante a interação com documentários interativos. Pretende-se contribuir para uma discussão de como a interatividade e as novas tecnologias promovem novas formas de espectralidade e consequentemente afetam a subjetividade do espectador.

Através de uma abordagem fenomenológica (e pós-fenomenológica), esta investigação discute a experiência perceptiva e incorporada do utilizador ao interagir com um *corpus* de análise, selecionado a partir do portfólio do National Film Board of Canada. A pesquisa apresenta a análise descritiva da experiência de interação com três documentários interativos, em que cada um corresponde a um modo de interação diferente e, portanto, envolve o público de forma distinta. O documentário interativo do modo hiperlink *Bear 71* é examinado como um panóptico de vigilância, combinando som linear com a navegação não-linear do interator através de imagens de vigilância. *Fort McMoney*, enquanto documentário interativo conversacional com uma estrutura rizomática e complexa, abre à audiência a possibilidade de explorar uma narrativa espacial e de jogar/brincar com a realidade. Por sua vez, *A Journal of Insomnia*, com um modo interativo participativo, proporciona ao utilizador a participação num retrato coletivo enquanto o envolve num auto-retrato reflexivo.

Ao longo desta tese o interator e o objeto digital são examinados como duas entidades inter-relacionadas e inter-dependentes que se influenciam e moldam mutuamente. Enquanto objetos fragmentados, multilineares e dinâmicos, os documentários interativos proporcionam ao utilizador a possibilidade de manipular e moldar a narrativa, enquanto inversamente induzem nos interatores o que eu denomino de *ways of affection*. São propostas oito sensações ou sentidos induzidos, denominados *senses of*, digitalmente disruptivos, para descrever a forma como o documentário interativo afeta os utilizadores durante a performance de interação.



Considerando a natureza auto-centrada e por vezes auto-referencial do documentário interativo, estes objetos digitais também oferecem uma forma particular de retratar o Eu e confrontar o espectador com seu próprio ser. As formulações psicanalíticas Lacanianas fornecem um método de análise da experiência virtual do utilizador e permitem considerar a forma como a audiência observa e é observada dentro do ambiente digital. Tal como um espelho, o ecrã digital reflete a imagem do espectador e captura-o no Gaze Digital, um *myse-en-abyme* entre o Eu e o Mesmo.

## ACKNOWLEDGMENTS

Looking back at my Ph.D.'s journey I realize how much I evolved as an academic by virtue of all the various experiences, knowledge, and challenges I found along the way. Somehow, this dissertation tries to sum up the personal growth and evolution, as well as the critical thinking I achieved during this expedition. Although a Ph.D. is frequently compared to a pilgrimage, despite all the ups and downs, I must confess the path was more pleasurable than painful. Even during the writing process, that often becomes a lonely walk, along the road I met many different people, in a variety of places, who supported and encouraged me.

Firstly, I would like to express my sincere gratitude to my advisor Prof. João Mário Grilo, for the continuous support during my Ph.D. study, for his patience, motivation, and immense knowledge. His guidance helped me throughout the research and writing process of this thesis and specially challenged me to expand my theoretical framework. Besides my advisor, I would like to thank Prof. Gonçalo Leite Velho for his insightful comments and encouragement, but also for the hard questions which incentive me to widen my research from various perspectives.

I'm profoundly grateful to the *National Film Board of Canada*, especially to the Vancouver's studio producers and creators, for accepting me as a visiting researcher and sharing their experience and expertise in documentary film. Their creative minds and cutting-edge works were an insightful contribution to understanding the interactive documentary realm.

My sincere thanks to the University of Texas at Austin, particularly to the Radio, Television and Film department, for accepting me as a visiting scholar. Inside and outside the classroom walls I meet many interesting people who helped and inspired me. I'm particularly grateful to Prof. Sharon Strover, who sponsored my application, to Prof. Andrew Garrison for accepting me in his documentary production class and notably to Prof. Lalitha Gopalan for the insightful and meaningful conversations, as well as for introducing me a distinctive way of "reading" books and moving images.

I also thank the doctoral program host institutions, both the University of Porto and the New University of Lisbon, where I found many professors and fellow colleagues who stimulate discussions and with whom I shared sleepless nights of work.

These acknowledgements would not be complete without mentioning several other people that, in different ways, contributed for the development of this research, such as Katerina Cizek, Kate Vollum, Sergiu Raul Suciu, Professor Nuno Correia, and particularly Sara Marques, whose help in the final phase allowed me respecting the deadline.

Last but not the least, I'm genuinely grateful to Sofia, Rui and my mom for all their support and understanding regarding my absence and temper over the last four years. They are my life companions who inspire and challenge me to Think Big. Thanks for believing, even when I seriously doubted myself.

This research was funded by the Portuguese Foundation for Science and Technology, which provided me with a fellowship with the reference number SFRH / BD / 93138 / 2013. I'm very grateful, and I feel privileged to have been supported by FCT to learn, create and disseminate new knowledge in Portugal and abroad, in such an emergent topic as it is interactive documentary.

January, the 5th of 2018

Patrícia Nogueira

Porto, Portugal

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## INTRODUCTION

Since the early days of Cinema, documentary film has been engaging audiences in a particular way through a re-presentation of the lived world. More than pursuing entertainment as many fiction films, documentary fosters an artistic and creative form of portraying the encounter with the so-called “reality”. Sometimes offering observational records, other times imagining poetic likenesses or envisioning *avant-garde* essays, in any case, the indexical relation with the lived reality provides a certain truth, which captures the audience’s attention and interest. Also relevant, the evolution of documentary film and technology have been tied together and emerged side by side.

Over time, maybe due to a lack of professional equipment or low production budgets, documentary film gladly embraced the new equipment available and pushed the development of new technological devices for providing creative approaches to reality. Overall, the genre managed to establish inventive ways of portraying the subject matters, relying on a tradition of experimentation (Nichols, 2001, p. 83), and breaking ideological, aesthetic, and technological frontiers. Such constant quest for novelty and experimentation allowed non-fiction film to reinvent itself and presenting a refashioned view of the world. If in the late 1950's the portable 16 mm cameras with synchronized sound afforded observational approaches, prompting the *cinéma vérité* style, after the 1970's the democratization of means with the introduction of the VHS tape, substantially cheaper than celluloid, allowed that a considerable number of new filmmakers were able to express themselves. Such democratization also allowed filmmakers giving a voice to civil movements, like Feminists, LGBT, and Afro-Americans, who found in documentary film a way of conveying their ideas and thoughts.

At the same time, the Cuban director Julio Garcia Espinosa (1979) predicted “the possibility for everyone to make films”. In the manifesto “For an Imperfect Cinema” he asks:

What happens if the evolution of film technology (there are already signs in evidence) makes it possible that this technology ceases being the privilege of a small few? What happens if the development of videotape solves the problem of inextricably limited laboratory capacity? (Espinosa, 1979)

By then he was far from imagining DSRL cameras, home editing systems and a distribution channel available for anyone with a broadband internet connection. Over the last twenty years, the documentary realm has been subjected to unforeseen reconfigurations. The non-fiction works spread across platforms and venues, traveling from movie theatres to art galleries, museums and, noticeable, to the internet. While documentaries produced for more conventional spectatorship venues, as film festivals and movie theatres, delve into new ways of subjectivity and blur the boundaries between reality and fiction, new venues and novel media platforms provide fertile ground for exploring the form, the aesthetic and the agency. By introducing interactivity in this new media formats the audience is provided with a certain degree of control over the narrative and the story.

Beyond the production conditions, the true revolution for documentary film lays on the audience’s new engagement procedures with the filmic object. The expanded practices of production, distribution, and reception challenge the relationship of the audience with the screen, and consequently with the object and the filmmaker, and accelerated the emergence of interactivity, which has been in development since the 1960’s. By introducing interactivity to the narrative and shifting away from typical viewing experiences, interactive documentary introduces unpredictability to the form and provides the audience with the opportunity of engaging with the artwork in active ways. Spectators moved well ahead of their sat place and partially overcame the gatekeeping constraints impose by linear forms. Audiences are no longer viewers, they become agents, role-players in the narrative, contributing and actively participating in both the creation and the fruition of the artworks.

Considering the novelty of the field of study, so far research on interactive documentary realm has been identifying the broad array of forms, compositions, and aesthetics, and trying to

establish a terminology for addressing the malleable digital objects (Almeida & Alvelos, 2010; Gifreu, 2013; Whitelaw, 2002). Other investigations move a step further by identifying how the contents are distributed and organized through the documentary's architecture and trying to classify categories of interaction based on the structures behind the interface (Galloway, McAlpine, & Harris, 2007; Gaudenzi, 2014; Nash, 2012). Such studies have been essential as a fundamental base for framing and clarifying the unsettled realm as well as for classifying and describing the broad and heterogeneous multimedia objects. Nonetheless, the most profound transformation in interactive documentary is the audience's position, insofar as the spectator achieves the role of an active participant in the construction of the narrative and may be regarded as an intervener in the process, challenging the author's sole authority over the artwork.

Surprisingly, as regards the audience's analysis, few research works have been developed and published. Beyond the mainstream assumption of claiming the virtues of an active and autonomous audience, Kate Nash (2014c) undertook an empirical study by observing and inquiring participants who accepted interacting with a digital documentary and answer her research questions. However, it is my understanding that the disruptive position of the spectator in interactive documentary cannot be fully grasped through a self-report testimony. Notwithstanding such investigation may partially disclose the audience's behaviors, the emotional engagement happens mostly at an unconscious level, and the interpretation of the perceptual interactive experience remains fairly, not to say completely, unexplored. As a sensory and perceptual form, interactive documentary encompasses conscious and unconscious involvement and places the interactive spectator between an experience of disembodiment, through what Don Ihde (2002) considers an "extended body"<sup>1</sup>, and a body that is nevertheless dependent and subjected to a mediated experience. Furthermore, the interactive documentary's experience remains phenomenologically and philosophically undertheorized, insofar as the spectator and the digital artifact are considered individually, as separated entities from one another.

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<sup>1</sup> For Don Ihde (2002) the "extended body" is a form of bodily experience, mainly perceived in online environments, where not only the human body acts through technological devices but also signifies itself through that same mediated experience.

Therefore, my motivation for undertaking this research was to understand how such revolution in the documentary genre affects the reception conditions; particularly, how the audience engages with interactive documentary and how interactivity influences the viewing and interacting experiences in documentary film. Consequently, arises as the primary objective of this research investigating the audience's perceptual and sensory experience when interplaying with interactive documentaries. To achieve such goals, I intend to go behind the back of the spectator for grasping the multidimensionality of experiences and perceiving how the audience and the interactive documentary shape one another. Equally crucial for the comprehension of the audience's unconscious felt experience is analyzing the interactive latent meaning behind both the multimedia object and the interactive actions. As interactive documentary is a self-centered experience, psychoanalysis may serve as an appropriate consideration for investigating the audience's position within the interaction process. Concretely, it may help perceiving how technology shapes our lived first-person experience. Furthermore, delving into concepts such as Subjectivity, which has been crucial for the documentary's critical theory, the Self and the Gaze may contribute for enlightening the viewers' identification onward the procedural interaction experience.

This research unfolds through three parts, each one of them devoted to a crucial element of investigation for accomplishing the research goals:

First, the dissertation introduces and examines the relevant background for explaining the topic approached. I start, in chapter 1, by presenting a general overview of the documentary film realm, exploring the fundamentals of documentary and the evolution of its interactive form. As a fuzzy and novel field, we must define what we understand for interactive documentary within this research, avoiding misunderstandings and assuring a common base for discussion. In chapter 2 I present a theoretical unpacking of spectatorship theories for unveiling possible approaches and present previous research work developed. Outlining an account of spectatorship theories, both from typical film viewing and interactive experiences, not only provides an understanding of how the spectator has been portrayed over time, as also sustains the discussion about the complex and disruptive position of the new form of spectating documentary. Furthermore, the genealogy of approaches to spectatorship and specifically to interactors of digital documentaries, supported by a historical contextualization, provides further insight into the field of study. After establishing the

basis for discussion, within chapter 3 I establish the *corpus of study* and determine the methods for analyzing it. Following Sandra Gaudenzi's taxonomy for differentiating modes of interactive documentary (Aston & Gaudenzi, 2012), three digital objects were chosen, each one of them corresponding to one mode of interaction. I also define the theoretical approach for accomplishing the research goals, specifying phenomenology, and post-phenomenology, as well as psychoanalysis as the combination of meta-critical theories that serve the purposes of this investigation.

Second, the dissertation is devoted to recounting the descriptive experience of interacting with the documentaries selected as the *corpus of study*, with a detailed and nonetheless broad examination of three interactive documentaries selected accordingly with its mode of interaction, as well as reasoning the significance of such interaction. In chapter 4, the hyperlink interactive documentary *Bear 71* (Allison & Mendes, 2012) is analyzed through the lenses of a panopticon digital object. The documentary is a combination of a linear soundscape with a non-linear navigation structure, compounded mostly by images captured by surveillance cameras. It also explores the intersection between wildlife, humans, and technology, raising awareness about the pervasiveness of technology in our daily lives. Chapter 5 describes the experience of interacting with the conversational interactive documentary *Fort McMurray* (Dufresne, 2013b). As a game-based documentary, the artwork provides a first-person point-of-view of an explorer who searches solutions for the sustainable development of the Canadian region of Fort McMurray. The complex and rhizomatic interactive structure allows a multidimensional analysis of the interaction process with semantic meaning. Chapter 6 is devoted to the participative interactive documentary *A Journal of Insomnia* (Choiniere, Lambert, Duverneix, Braun, & NFB, 2013), where the spectators have the opportunity of becoming participants in the narrative by including their contents. Besides four stories produced by the National Film Board of Canada, *A Journal of Insomnia* comprises a digital and expansive database with the testimonies of all the participants, allowing not only a self-centered interactive experience but also an identification with the Self-depicted on screen.

Third, the dissertation demonstrates how the technological mediation of interacting with documentary compels the audience towards a sensory and affective, nevertheless illusory, experience and even influences the interactor's subjectivity. Through a phenomenological

(Merleau-Ponty, 2002; <sup>2</sup> Sobchack, 2004, 2016) and post-phenomenological (Ihde, 1990, 2002) investigation, in chapter 7 I focus my attention in the microperceptions (Ihde, 1990), as structures of sensory perception in the bodily dimensions of experience, translated as *senses*. I argue the objects of interaction *affect* the viewers by inducing them bodily felt sensations and shaping their subjectivity. As so, the sensuous encounter between the interactor and the digital documentary provides a virtual gratification for the spectator's performance. I identify and describe such sensations and propose a taxonomy for addressing the felt experience of interacting in digital environments. In chapter 8 I delve into a psychoanalytical examination of the audience's subjectivity, suggesting and scrutinizing the concept of Digital Gaze.

Hopefully, this research will contribute to encouraging more significant and substantive discussion around the audience's experience in interactive documentary and opening new venues of research within the procedural experience of interacting in digital environments. Although new research continually emerges focused upon new forms of documentary, the investigation of these innovative and still relatively uncharted artifacts is a challenge that needs to be addressed at all the multiple levels of their construction and reception. This dissertation further expands the efforts by approaching more critically the audience's engagement and interpretation in interactive documentary through a philosophical reasoning. Also demonstrates that a greater understanding and analysis of the audience's perceptual embodied experience in digital environments may contribute to opening new lines of investigation within digital media.

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<sup>2</sup> Merleau-Ponty's *Phenomenology of Perception* was originally published as *Phénoménologie de la perception*, in 1945 by Édition Gallimard, Paris.

## PART I

### BACKGROUND AND FRAMEWORK





## CHAPTER 1

### SETTING THE FIELD

In order to talk about interactive documentary, one must define what it means this core concept, before move on analyzing the genre and its field of study. As regards interactive documentary, some research and theories have been published over the last years (since the beginnings of 2000's, to be precise), undertaken by scholars with various backgrounds, from social sciences to a more technological field of study and, of course, cinema. Each one of these researchers, depending on their field of study, is necessarily approaching the subject matter from different perspectives. Therefore, we find a miscellaneous of definitions and understandings about what is interactive documentary.

Taking advantage of the jumbling and novel field of study, some scholars tend to enclose several multimedia works that, although have an interactive component and represent the world, consist in mere conglomerations of media in a digital platform. Whereas Whitelaw (2002) states that "true stories may be the crucial 'content' that makes for a compelling new media experience" he also stresses that most of the interactive documentaries (at least back in 2002) are mere "remediations"<sup>3</sup> of documentary film language, using new media platforms as a mechanism for delivering chunks of traditional documentary. Instead of reproducing the conventions of the traditional, linear, documentary, interactive documentary should "offers its own ways of playing with reality".

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<sup>3</sup> Bolter and Grusin (1998) define "remediation" as the appropriation of content, form or aesthetics of one medium into another. Remediation is a distinctive characteristic of new digital media, since they are constantly remediating its predecessors, like internet which borrows its contents and formats from video, photography and print. Likewise, interactive documentary becomes a "remediation" of both documentary film and internet by borrowing the aesthetics and form of non-interactive documentary and interactivity from the internet.

With a cinema background, in documentary film to be precise, I'm approaching interactive documentary as a cinematic event shaped by technology. I do not consider interactive documentary as the single and only evolution from linear documentary, but more as a transfiguration, a change in outward form and appearance. Whereas I acknowledge there are substantial differences between linear documentary film and interactive documentary, I must argue that some documentary features must remain in the interactive works to consider them documentaries. I mean, interactive documentaries are substantially different from linear film and technology plays a crucial role in this emergent field, but the allure for new technologies and all its potentials have been garbling documentary film. As Almeida and Alvelos (2010) point out, the word "documentary" has been used abusively to describe any multimedia piece with video features, regardless its nature, aesthetics, approach and authorial perspective.

In order to consider the use of interactivity in a documentary work, foremost we must understand if the subject matter is suitable for interact with and secondly what will the interaction strategy add to the documentary's concept. Therefore, in the following pages, I investigate interactive documentary recovering what substantiates documentary film unique. Foremost, I begin by accounting the historical essence of documentary film and then will move on discussing how interactive documentary is framed in this dissertation.

### **What is documentary film**

"Dear John Grierson, thanks for the word documentary."

The opening sentence of Mark Cousins's postscript documentary (Cousins, 2015) in "The Story of Film: An Odyssey" assigns the authorship of the word "documentary" directly to the mythical film theorist and producer John Grierson. In 1926, addressing the film *Moana*, by Robert Flaherty, Grierson, under the pen name *The Moviegoer*, wrote: "Of course *Moana*, being a visual account of events in the daily life of a Polynesian youth and his family, has documentary value" (Grierson, 1926, p. 25). Jack Ellis and Betsy McLane believe that Grierson was thinking of *Moana* as a factual and authentic record that could serve as evidence of a certain reality, and perhaps

“thinking of the French use of *documentaire* to distinguish serious travelogues from other sorts of films including mere scenic views” (Ellis & McLane, 2005, p. 3).

By the time, Grierson used the word documentary as an adjective and only later, in the “First Principles of Documentary” (Grierson, 1934), he adopted the term to address a genre, arguing that documentary should have an indexical relation with reality, while presenting a socio-political perspective, and it should make use of dramatic fiction techniques to engage the audience throughout the film. The two fundamentals defined by Grierson may be considered as conflicting with each other, but documentary film’s vitality profoundly relies on the tension between these two foundations.

The tension between a representation of reality and the filmmaker’s subjectivity encompasses several debates, engaging practitioners and theorists. Philippe Dubois, for instance, addressing the representation produced by photography and drawing on Baudelaire’s writings, states that a work of art can’t be simultaneously artistic and documentary, since art is defined as a way of evading from reality (Dubois, 1983, p. 33). Carl Plantinga tries to narrow the Grierson’s definition, proposing a characterization of the genre, as an “asserted veridical representation, that is, as an extended treatment of a subject in one of the moving-image media, most often in narrative, rhetorical, categorical, or associative form, in which the film’s makers openly signal their intention” (Plantinga, 2005, p. 114). This pursuit of a certain "truth", claimed by Plantinga, is contested by other authors, as it is too restrictive and leaves aside films like *Nanook of the North* (Flaherty, 1922) since the Flaherty's movie reenacts most of the scenes and even though is considered the first documentary film in history. Brian Winston considers acceptable a "sincere and justified reconstruction" (Winston, 2005, p. 182) in documentary, as the camera produces a mediated reproduction of truth anyway. Winston also highlights that “the issue of such ‘actual’ or ‘pure’ (as it were) is morally uninteresting” and that documentarians are allowed to be “creative” although must behave ethically (Winston, 2005, p. 181).

Ethical issues are of major significance in documentary film. Bill Nichols (2001, pp. 1–19) underlines this concern, not only in respect to the social actors who perform in the films, but also as a commitment with the audience, who expects to be given "true stories" when watching a documentary and, therefore, believe in the representation on the screen. Unlike fiction films, in

documentary, we assume the characters and events exist elsewhere, and our engagement within the narrative depends on this implied contract we establish with the filmmaker. Therefore, more than a pursuit of the truth, documentary should present an honest re-presentation of the subjects (both the social actors and the topic).

However, we can't ignore the importance of authorship in documentary film practice. The authorial perspective about the subject matter is the key element for distinguishing the documentary genre from other forms of non-fiction films, such as journalism newsreel, homemade family movies, and scientific descriptive records. Although documentary film is deeply rooted in the concept of indexicality, very often portraying life events, Bill Nichols notices that documentary "is not a reproduction of reality, it is a representation of the world we already occupy" and, more importantly, "it stands for a particular view of the world" (Nichols, 2001, p. 20). Also, Michael Renov points out that documentary form is "the more or less artful reshaping of the world", struggling "to find its place within the supposed conflict between truth and beauty" (Renov, 1993, p. 11).

Grierson acknowledges that "Documentary is a clumsy description" (Grierson, 1934, p. 19) and Bill Nichols struggles to work in a definition, addressing the word as a "fuzzy concept" (Nichols, 2001, p. 21). Nevertheless, most theorists express their agreement, quoting John Grierson when he states that documentary film is "the creative treatment of actuality" (Hardy, 1946, p. 13). What is exciting about documentary film is that the genre is not looking for truthiness or a faithful representation, but pursuing an artistic perspective of the world, engaging the audience in the authorial point of view, and achieving its voice:

The fact that documentaries are not a reproduction of reality gives them a voice on their own. They are a representation of the world, and this representation stands for a particular view of the world. The voice of documentary, then, is the means by which this particular point of view or perspective becomes known to us. (Nichols, 2001, p. 43)

The artistic and creative freedom of the authors may bring to the table a "clumsy" and "fuzzy" concept, but the genre has always been evolving, and documentarians have been approaching "reality" in multiple perspectives, contributing for a diverse and broad array of viewpoints and aesthetics. Documentary film seems to be more inclusive, embracing the

differences, than ruling out the heterogeneity. Over time, different theorists have been presenting frameworks to analyze and categorize the multiplicity of subjectivities alive within the documentary practice.

While other authors, as Erik Barnouw (1993)<sup>4</sup> and Michael Renov (1993), present categorizations of the filmmaker's subjectivity, Bill Nichols (2001) proposes the most acknowledged framework to identify documentary films, with six modes of documentary, according to the film's styles and approaches.

Nichols follows the chronological development of documentary's aesthetics, starting in the 1920's with abstract films, overflowing the avant-garde experimental styles entangled in the surrealist and modernist movements. These Poetic Mode documentaries are produced mostly with images framed in strong compositions, mixed, juxtaposed and overlaid, with a rhythmic and appealing montage, creating visual metaphors and seductively engaging spectators through emotional figurations of the surrounding world. Such approach allows the film creating a unique imagery, either through the induction of a reality or exclusively through the form. Far enough from an emphatic representation of a photographic record, films such as *Regen* (1929) and *The Bridge* (1928), by Joris Ivens, *Paris qui Dort* (1924), by René Clair, and *Le Retour à la Raison* (1923), by Man Ray, play with the poetic experimentation potentials of filmmaking.

With the rise of political tensions in Europe, during the pre II World War period, and the transition from silent to sound film, documentary was captured in social propaganda, pursuing the aim of "educating" the audience through disseminating information and persuasion. Diverging distinctly from the poetic aesthetics, the documentary films framed within the Expository Mode present a logic and linear structure, typically with a voice-over narration to conveying arguments about a given reality.

Within such approach, the spoken word prevails over the imagery, and the shots are often merely illustrative of the rhetorical discourses, rather than allowing the potential of scenes composed of image fragments, edited for reaching the ultimate exponent of the cinematic narrative. Works such as the documentary series *Why We Fight* (Capra, 1952) and the film *The Plot That*

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<sup>4</sup> Documentary: a history of the non-fiction film was originally published in 1974 by Oxford University Press.

*Broke the Plains* (Lorentz, 1936) seek, foremost, maintaining narrative continuity based on the oral argument, through the omnipresent and omniscient “voice of God” commentary to persuade the audience (Nichols, 2001, p. 105). Other examples of this documentary mode may be found in *Night Mail* (Smith, 1935), produced by the John Grierson’s film unit GPO, and *Blood of the Beasts* (1949), by Georges Franju, as well as in the National Geographic’s style and BBC’s *Wildlife Specials* (ongoing since 1995).

In 1958, Michel Brault and Gilles Groulx directed for the National Film Board of Canada the film *Les Raquetteurs* (1958), inaugurating a new and very particular aesthetic approach. A fluid camera work combined with mostly direct sync sound, without any voice-over neither interviews, conveyed in the audience the feeling of no interference, as the authors were attempting to refuse any “imposed truth.” In the following years, the technological development of the 16 mm portable cameras and the Nagra sound recorders allowed new ways of subjectivity. Films like *Primary* (1960), by Robert Drew and Richard Leacock, and *Lonely Boy* (1963), by Wolf Koenig and Roman Kroitor, as well as Frederick Wiseman’s documentaries, can be framed within the Observational Mode. Such documentaries tend to simply observe, as a “fly on the wall”, portraying the subjects in long sequence shots, with only a few cuts, trying to respect the duration of the lived reality, and, therefore, providing the viewers with the feeling of being “transported” to the place where the film takes place and of witnessing the events first hand, without the camera and the director’s mediation.

Bill Nichols raises several ethical issues regarding the observational mode, as the documentary films that follow such approach are as crafted and constructed as the ones framed under different modes and, furthermore, provide the audience with a false feeling of an unbiased account. Partly to resist the myth of no intervention, documentarians embraced social sciences methods to accomplish what they considered a more honest representation of subjects. Participatory Mode documentaries actively engage with the subjects in their environment for extended periods for allowing the filmmaker “going native”, and openly present the filmmaker’s role in the filming process. The author Bill Nichols considers that such approach induce in the audience “the sense of bodily presence, rather than absence”, locating the filmmaker “on the screen” (Nichols, 2001, p. 116). The documentary becomes not a representation of a particular world, but a portrait of the encounter between the film crew and the subjects represented.

Stressing this idea of representing the encounter between the filmmaker and the film's subjects, Jean Rouch and Edgar Morin filmed several talks with Parisian friends and acquaintances, provoking reactions and including these moments in the film. *Cronique d'Un Été* (1961) not only captured what seems to be unmediated moments of reality in the streets, like a *flâneur*, as also inquires the documentary form itself. With such approach, unveiling the director's interventions, Jean Rouch believed to attain a more truthful representation of the world, which he entitled of *Cinéma Vérité*.

Moving on further with this idea of unveiling the cinematic apparatus in the film itself, the Reflexive Mode turns the focus of the documentary to the film's construction process, interrogating the cinematic representation. The filmmaker draws attention to the intervention operated during the filming process, using reflexive techniques to approach the subject. Reflexive mode documentaries contradict the classical "suspension of disbelief" (Coleridge, 2009)<sup>5</sup>, by focusing on the cinematic dispositive and raising the viewer's awareness for the fact that he/she is watching a film and, therefore, a constructed reality. Bill Nichols mentions as examples certain sequences of *The Man with a Movie Camera* (1929), when Dziga Vertov reveals the camera operator filming and when his wife, Elizaveta Svilova, cuts and edits film strips. We may also consider documentaries as *...No Lies* (1973), by Mitchell Block, and *Santiago* (2007), directed by João Moreira Salles, as framed within Reflexive Mode.

Whereas Participatory Mode focuses on the subjects and in the Reflexive Mode the director turns to the audience, Performative Mode highlights the filmmaker's experience, through a combination of poetic and rhetoric arguments. The director's thoughts and experiences become the core of the subjectivity, underlining the complexity of our knowledge of the world, and featuring its subjective and affective dimensions. The documentarians also merge real events and scenarios with imaginary situations, blurring the boundaries between fiction and documentary film. Issues as past experiences and memories, emotional engagement, values, and beliefs are all topics at stake in the stylistic construction of the Performative Mode documentaries.

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<sup>5</sup> The term "suspension of disbelief" was originally coined by the poet and philosopher Samuel Taylor Coleridge in 1817, to address the state or willingness to suspend one's critical faculties and believe in something surreal.



By holding a more personal perspective, the Performative Mode was quickly embraced by minorities, like LGBT, Feminists and Black artists, who found in the documentary, pushed by the fast-paced technological democratization, a way to reach the audience and questioning the mainstream political and social conventions, advocating their ideas. The film *Tongues Untied* (1989) is a documentary using the director's Marlon Riggs narration, as a semi-biographical essay, reciting poems and enacting scenes to address the audience about the black, gay identity. A significant number of Performative documentaries are also self-representation works, as they emplace the director's life (present and past events) and experience at the core of the narrative. Patricia Aufderheide (1997) entitles these films of self-investigation as "first-person documentaries", since they present the first-person voice in testimonial mood, as essayistic diaries, and engage the viewer into the world of the filmmaker.

The modes proposed by Bill Nichols are not consensual and have been criticized, especially by Stella Bruzzi (2000) who considers them too rigid. For Bruzzi, the main problem of Nichols' "family tree" is imposing a false chronological evolution on what is essentially a theoretical paradigm. Also, Bruzzi considers the recent documentaries are predominantly hybrid and eclectic, more introspective and subjective, and undermine any effort of compartmentalizing these documentaries.

But as Nichols himself notes "not all documentaries exhibit a single set of shared characteristics. Documentary film practice is a realm where the aesthetics have been changing over time. Alternative approaches are constantly attempted and then adopted by others or abandoned" (Nichols, 2001, p. 21). Specifically, the most recent documentaries present a fluidity between modes and even if one of the modes is prominent in a particular documentary, it becomes common that each film may incorporate characteristics of more than one mode. Moreover, although a mode of documentary film may be related to a specific period, documentarians may keep expressing themselves using the same aesthetics and approaches over time.

While the documentary's narratives will keep evolving in new forms and approaches, following the triad's filmmaker – film – audience paradigm described by Nichols (2001, pp. 25–41), non-fiction stories also drifted from movie theatres and television sets to digital, virtual, media and found new ways of interacting with the audience. The process of digitization not only allowed

the migration of some documentaries from analog media to digital platforms, as lead to the fragmentation of film and provided the audience the ability for shaping the narrative, organizing a personalized story, or even contributing with contents for the ultimate documentary work. In short, we may identify two parallel evolution lines for documentary film: on one hand linear documentary will keep evolving and finding new ways of subjectivity in movie theatres, on the other hand by merging documentary film and interactivity we establish new means of communicating with the audience, providing the viewer with new and different experiences.

### **What is interactive documentary**

If the documentary film realm doesn't collect consensus among scholars, interactive documentary presents itself even more unsettled, not only because has a relatively short lifespan but also by its malleable configuration. Add on interactivity to documentary introduces complexity to the critical discussion around the genre, beginning with the semantics itself. "Web documentary", "locative documentary", "docu-game" "transmedia documentary", are all catchy expressions used to identify the genre, with their nuances regarding specific aspects of the digital works.

Kate Nash, for instance, addresses the field as "webdocumentary" and "webdoc" (Nash, 2012), considering works that are multimedia, interactive, and sometimes cross-platform. Nash also points out three aspects of interactivity that may be relevant for the audience, when we implement an interactive component into a documentary: "control over content, the ability to contribute and the framing of user contributions and, finally, the ability to form relationships and present one's case" (Nash, 2012, p. 200).

However, in my perspective, although internet is intrinsically related with the expansion of documentary film to an interactive form, interactive non-fiction works are not necessarily web-based. Notwithstanding the importance of medium specificity, interactive documentary should be regarded as a genre, with its form and aesthetics, regardless of the platform where the work is distributed. We should take into consideration works as *Immemory* (1997), by Chris Marker, as an example of an interactive documentary that is not hosted on the World Wide Web. Exploring the

personal and collective memory, the avant-garde French director presents a collection of documentary still images, videos, paintings and extra features, gathering the contents in a CD Rom. The viewer is allowed exploring, navigating, choosing and overlaying materials, providing the feeling of a tour through memory in the apparent disorder of the imaginary, stressing the importance of memory and oblivion in the digital age.

Therefore, within this dissertation, the core field of study will be addressed as "interactive documentary", following Mitchell Whitelaw (2002), and considering it's the most proper term to describe the digital interactive works we analyze within this dissertation. As interactive documentary we understand a non-fiction work that is a re-presentation of the world we inhabit, with an indexical relation with the subjects represented, conveying an authorial perspective about the subject matter and, such as Galloway highlights, "that uses interactivity as a core part of its delivery mechanism" (2007, pp. 330–331).

Mitchell Whitelaw (2002) describes interactive documentaries as works that open up the narrative's structure, which is at the core of non-interactive documentary, and challenge the principle of narrative coherence. Instead of providing a single unfolding prolonged path to fruition, interactive documentary presents a multilinear structure of divergent and alternative routes, encompassing an array of choices. Such structures may be compared to a maze (Eco, 1984, pp. 80–81), a multicursal labyrinth, with several navigable branching paths and multiple possible pathways in which it can be transversed. In the case of a more complex and less centralized navigation architecture the analogy can be a network or, as Deleuze and Guattari call it, a Rhizome (2000)<sup>6</sup> of multiple non-hierarchical nodes with no beginning and no end. In a rhizomatic design, information (or contents) is always in between, as an assemblage of items instead of a causal-effect organization of episodes, resisting to a chronological progression.

While the structure of a film is determined by the sequence of its elements, in an interactive documentary, moving towards postmodernism, the story is fragmented in dispersed pieces to allow

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<sup>6</sup> Rhizome is a term originally used by Deleuze and Guattari in 1974, later revised in *A Thousand Plateaus*, addressing a multiple, non-hierarchical and non-centralized entry and exit points in data representation and interpretation.

the manipulation and navigation through the segments. Interactive documentary disrupts the narrative logic and follows the Lev Manovich's concept of *database*:

As a cultural form, database represents the world as a list of items, and it refuses to order this list. In contrast, a narrative creates a cause-and-effect trajectory of seemingly unordered items (events). Therefore, database and narrative are natural enemies. Competing for the same territory of human culture, each claims an exclusive right to make meaning out of the world. (Manovich, 2001, p. 199)

In order to allow the navigation through a multilinear story, the interactive documentary's creator must divide the film into small pieces, fragment the story and disrupt the linear unfolding narrative. This postmodern form of documentary film presents some critical problems, namely questions as "granularity" (Miles, 2014) and "temporality."

Since interactive documentary is compound of discrete elements, the granularity (Miles, 2014) of the digital object may interfere in a cohesive meaning. In other words, "if we explode and open the structure, how can we be sure that the story is being conveyed" (Whitelaw, 2002) and that the pieces will create a significant meaning? Filmmakers must understand "how things that are fragmentary wholes can be presented and related to each other in a way that enables the production of a new and comprehensible whole" (Miles, 2014, p. 71). That is, the navigation throughout the non-linear structure still needs to convey a story and the intended point-of-view.

Furthermore, as Adrian Miles points out, the granularity of interactive documentary may comprehend self-contained parts "to the extent that they make sense by themselves as is" (Miles, 2014, p. 74) providing their closure. Therefore, an interactive non-fiction story may comprehend a combination of fragments with a fixed duration while allows the navigation through contents, creating a malleable and personalized temporality. Whereas each viewer is free to interact with the documentary's contents, manipulating the documentary's flow and altering the length of the narrative, in most interactive documentary works still watches some linear segments throughout the experience.

Consequently, interactive documentaries blur the boundaries between linear and non-linear narratives, "heterochrone" and "homochrone" experiences (Gaudreault, Marion, & Barnard,

2015), within the same artwork. Instead of presenting themselves under the “heterochrone thesis”, in which the time of reception is independent from the medium and determined by the media utterance itself, or the “homochrone antithesis”, in which the media program a fixed duration of reception, these new media objects moved forward “to reach a synthesis we might describe as polychrone” (Gaudreault et al., 2015, p. 79). The temporality of the narrative becomes malleable and manipulated in the moment of reception, comprising various rhythms which intrude in time instead of succeeding one another in space.

By introducing interactivity to documentary, we are providing to audiences greater power and autonomy, since these artworks demand from the public a physical action to activate all the features available. This is, in fact, a consequence of the emergence of new technologies, according to Jenkins (2006b). No longer confined to watching and interpreting, the viewers are allowed to modify, interact with, choose from and contribute to the creation of a different narrative, a narrative that is rebuilt each time it is accessed. Interactive documentaries may be compared to what Umberto Eco coined as “open works” (1989). Addressing the aesthetics of some literature and music performances in the 1960’s, Umberto Eco states that the poetics of openness marks a profound shift in the relationship between artist and public, requiring of the audience a higher degree of collaboration and involvement than had ever been required by traditional art (Eco, 1989, pp. 1–23).

Not only “the viewers themselves can be given the opportunity of choosing what material to see and in what order” (Miller, 2004, p. 345) as they can manipulate, re-arrange and contribute with contents for the documentary. More than an “emancipated spectator” (Rancière, 2014)<sup>7</sup>, in interactive non-fiction films we face a participatory audience who shares an intersubjective process of meaning-making since the interactive works combine multiple perspectives into a shared point-of-view. In interactive documentary realm, we are closer to what Laura Mulvey considers a “possessive spectator”, who holds power to select his favorite scenes, retaining on the moment to possess it (Mulvey, 2007, pp. 161–180). Since nowadays the spectator may interfere in the film’s

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<sup>7</sup> The “emancipated spectator” was first published as *Le spectateur émancipé*, in 2008 by Edition La Fabrique.

flow, discontinuing its straight development in non-linear courses, and freezing the movement in image, for Mulvey the viewer achieves the domination of the film's narrative (Mulvey, 2012).

Albeit we are moving on from a narrative domination to an experience generation, by eliminating a fixed sequence of events, interactive documentary doesn't eliminate narrative. The alignment of fragments still grants the perception of a time-based sequential experience and affords the audience with "cinematic ways of seeing the world, of structuring time, of narrating a story, and of linking one experience to the next" (Manovich, 2001, pp. 78–79). In interactive documentary, when the user navigates throughout the contents it is also constructing an ephemeral narrative with a beginning, a middle and an end, creating a sense of continuity. In such structures, as Jewitt argues, "there is no internal grammar to be broken — there is no essential 'wrong order' because there is no prior reading path" (Jewitt, 2004, p. 187). In an interactive documentary, the viewer enjoys several paths and possibilities of access, fostering a process of participatory meaning-making.

Overall, Interactive documentary presents us with new relationships between audience and text, as it disturbs the established paradigm of authorship that has been fundamental for the documentary realm, according to several theorists (Barnouw, 1993; Ellis & McLane, 2005; Nichols, 2001; Renov, 1993). Not only interactive documentary intrudes into the production practices and stresses the filmmaker considering and conceptualizing the artwork from a different perspective, as interactivity refashions the articulation between director and spectator. Thus, the role of the spectator is changing in unprecedented ways, and since the audience's interpretation is the aim of this dissertation, we will proceed to explore the theme in the following chapters.

Such as Lev Manovich notes "by passing these choices to the user, the author also passes the responsibility to represent the world and the human condition in it" (Manovich, 2001, p. 44). Notwithstanding the director may be partly giving up the control over her or his artwork, passing onto the viewers the ability to shape the narrative and including their own contents, we must acknowledge the creator still is an essential element in the communication process. It's up to the author defining the theme and the reality represented, setting the rules for the interaction experience, designing patterns and roadmaps, and providing the platform for the interaction. After

all, the filmmaker becomes a curator who settles the guidelines for participation and only allows audience to interfere in certain aspects of the work.

In the case of these new digital artifacts, we must make a distinction between the narrative, which represents the virtual path followed by audiences to access the content, and the content itself. As most multimedia works, interactive documentaries tend to combine still with moving images, diegetic and non-diegetic sound, graphics, text, data visualization and animation, all in the same documentary, and sometimes displayed simultaneously. When such juxtaposition of images occurs, we encounter what Lev Manovich has called the "spatial montage" (2001, pp. 322–326). Instead of an unfolding sequence of shots presented on the screen one at a time, interactive non-fiction works place several frames or layers of media contiguously or overlapping as "an alternative to traditional cinematic temporal montage, replacing traditional sequential mode with a spatial one" (Manovich, 2001, p. 322).

More than a convergence of media (Jenkins, 2006a), interactive documentary plays with the combination of media languages, which provides the intermediality of the interactive experience. The work becomes a combination of different types of media, merged to culminate in intermedial cinema, layering images and sounds as a process of transfiguration of both the medium and the language. The audience is encouraged to interplay between media as may interchange among the juxtaposition of several layers of textual and non-textual meaning which overlap during the interaction and interpretation processes. Drawing upon Ágnes Pethő's writings on intermediality (2011), the viewer navigates in the "heterotopia" space in-between the border zone across media, as a passageway from one media towards another (2011, pp. 42–43). Although Pethő describes "heterotopia" as an *impossible place*, the intermediality across media may be brought to the audience's consciousness employing self-reflexive practices, which raises the awareness for the media language itself.

The wide variety of forms within interactive documentary, just as previously described, has allowed the genre to develop new modes of subjectivity, new approaches to its subject matter and new relationships with the audience. The works produced over the last 15 years present an array of aesthetics challenging practitioners and scholars to identify styles and patterns across the genre. The emergence, changeful and uncertain form of interactive documentary compelled some

attempts to make sense of this field of study, as well as to define it, proposing taxonomies to classify its nuances.

Drawing on McMillan's "traditions of interactivity" (McMillan, 2002), Dayna Galloway (Galloway et al., 2007) proposes four categories considering the communication between audience and interface in interactive documentary: the passive-adaptive, the active-adaptive, the immersive and the expansive categories. Within the "passive-adaptive category" (Galloway et al., 2007, pp. 331–333) the documentary's content is constantly changing and adapting to unconscious responses from the users, such as biometric levels. For Galloway, such category "would be heavily reliant on technology that is capable of acquiring and constructing useable data based on the viewer's physical reactions to the narrative" (Galloway et al., 2007, p. 331). Although the passive-adaptive category apparently demands an insanely amount of documentary segments, the development of Artificial Intelligence could create an evolving model, generating content "on the fly" throughout the experience.

On its hand, the "active-adaptive category" (Galloway et al., 2007, p. 333) presents a collection of contents and demands from the user a physical action to input her or his choices, to display the documentary's contents. While physically interacting with the documentary, the audience can "both exploit and achieve an informed awareness of the procedures for exploring, altering and experiencing content" (Galloway et al., 2007, p. 333). Although such category may also include an Artificial Intelligence component, the number of options is typically limited to a range of contents available.

As for the "immersive category" (Galloway et al., 2007, pp. 333–334) is regarded, the audience is placed into the world represented and is absorbed into the narrative, achieving a state of "suspension of disbelief" (Coleridge, 2009). Nevertheless, for Galloway, while the user forgets about the "real" world, he is also "empowered with the ability to navigate and interact with the environment through actual physical interactions" (Galloway et al., 2007, p. 334). In order to enhance a sensorial immersiveness, it is suggested the use of immersive technologies, as Virtual Reality and Augmented Reality. The author also considers the immersive category is the pinnacle of engagement of the four proposed.



Finally, comparing the interaction model with Wikipedia, Galloway proposes the “expansive category” (Galloway et al., 2007, pp. 334–336). Within the expansive systems, the audience is invited to contribute with contents for a collective documentary, with varying degrees of collaboration, from manipulating and re-arranging the contents to uploading user-generated content. The most significant feature of the expansive category is that the system “is driven by its users, with rules, content and potential methods for interaction emerging from the community” (Galloway et al., 2007, p. 335), and fostering a multiplicity of subjectivities about a determined subject.

On her turn, Kate Nash (Nash, 2012) approaches interactive documentary’s specificities by analyzing the different categorical structures, looking for patterns across several web-based documentaries and categorizing the interactive works under the following taxonomy: narrative webdoc, categorical webdoc and collaborative webdoc. For Nash, “narrative webdocs” (2012, pp. 203–204) are stories structured in a multilinear way, struggling to combine non-linearity with the director’s control of narrative. The interactive documentaries under this category, while present a non-linear chronology of events, allowing the audience to select documentary's segments, also include central key contents to guide the users through a specific story and create a causal effect throughout the experience. In the author's words, "the narrative webdoc is structured so as to facilitate narrativization" (Nash, 2012, p. 203), similar to what happens in non-interactive documentaries. The narrative webdoc’s structure can be found in interactive stories supported in a journey’s strategy in which the users embody the character’s role and follow a sequence of events to achieve a final purpose, such as *The Whale Hunt* (Harris, 2007) and *Prison Valley* (Dufresne & Brault, 2010).

Whereas narrative webdocs try to hold control of a particular narrative's sequence, “categorical webdocs” (Nash, 2012, pp. 204–206) are collections of contents with no intention of telling a story. “In the categorical webdoc the temporal ordering of elements is less important than the comparisons and associations the user is invited to make between the documentary’s elements” (Nash, 2012, p. 205). Usually, the items are compounded by theme, location, subject, or another filter, and the users dive in the digital archive until they exhaust their curiosity. Documentaries as *Out My Window* (Cizek, 2010a) and *Waterlife* (McMahon, 2009) may illustrate the categorical webdoc group. Both the narrative webdocs and the categorial webdocs may be framed under the

"active-adaptive category" proposed by Galloway since the two Nash's models demand an action from the audience to input an order and get an answer from the system.

Third and finally, the collaborative webdocs (Nash, 2012, pp. 206–207), such as the name highlights, gather user's contributions in various forms about a pre-determined theme, fostering an intersubjective perspective about the subject matter. The audience may be called to contribute with video and photography contents, testimonials, and even in the editing process. In these works, the director or team of creators provide a platform for the documentary and establish the rules for participation, and the community offers the contents to feed an evolving archive, similar to the "expansive category" suggested by Galloway. "The meaning of the documentary for those who participate is bound up with the relationships that form through their contributions" (Nash, 2012, p. 207). The *Goa Hippy Tribe* (Devas, 2011), an interactive documentary using the social media platform Facebook for assembling contributions through the internet, is the main example quoted by Nash to represent the collaborative webdocs.

Lastly, just as Bill Nichols (2001) defined the fundamental modes of documentary for traditional non-fiction films according to their aesthetic approach to reality, Sandra Gaudenzi (2012) proposes her own modes for classifying interactive documentaries, taking into consideration the kind of interactive strategy behind each digital work, such as the "conversational mode", the "hypertext mode", the "participative mode" and the "experiential mode".

Gaudenzi frames under the "conversational mode" (2012, p. 126) any documentary that establishes a "dialogue" between user and computer, creating the feeling of an endless conversation. Such as in some video-games, the audience is placed in a virtual world and has the illusion of navigating freely through an environment of infinite contents. This kind of documentaries is based on Human-Computer-Interaction and inspired by Andy Lippman's concept of interactivity. As stated in his interview with Stewart Brand (1987), Lippman considers that interactivity should be grounded in five fundamental principles: (i) interruptibility, i.e., the action can be interrupted at any time by the user; (ii) graceful degradation, i.e., an unanswered question should lead to a smooth transition; (iii) limited look-ahead, i.e., the platform should respond in real time to the user's orders; (iv) no default, i.e., the conversation must seem unpredictable and not

based on formatted responses; and (v) impression of infinite database, i.e., the interaction must seem endless, to cause a perception in the user that possibilities extend to infinity.

Although the “conversational mode” proposed by Gaudenzi implies an external input to activate the navigation through the contents, the kind of interactive system involved in such mode is similar to the category suggested by Galloway as passive-adaptive.

According to Gaudenzi, the most common interactive strategy for documentary is the “hypertext mode” (2012, p. 127). In this type of works, audiences are invited to trace their path through multiple narrative choices, triggering hyperlinks to jump from one content to the other. Similar to a CD or DVD menu structure, audiences can access a pre-existing archive of videos and other content in the order of their choice, navigating through the options available in a pre-existing database. Gaudenzi traces this kind of interactivity to the project *Moss Landing* (Florin, 1989) when Apple Multimedia Lab gathered videos from the Moss Landing town (California) in a CD-Rom. Both the narrative and the categorical webdoc’s structures, suggested by Nash (2012), as well as the active-adaptive category by Galloway (2007) share similarities with the hypertext mode described by Sandra Gaudenzi.

“With the increasing popularity of Web 2.0 platforms, documentary makers are increasingly inviting content created by fans” (O’Flynn, 2012, p. 142) allowing audiences to participate in the documentary’s narrative, adding opinions, stories and even uploading video content. The documentaries that hold the possibility of gathering multiple inputs were defined by Gaudenzi as operating in a “participative mode” (2012, p. 127). Fed by Glorianna Davenport’s concept of “Evolving Documentary” (Davenport & Murtaugh, 1995), Gaudenzi considers multiple possible ways for participation when the user is called “to create an open and evolving database” (Aston & Gaudenzi, 2012, p. 127). In essence, the participative mode is outlined in the “expansive category” (Galloway et al., 2007, pp. 334–336) as well as in the “collaborative webdoc” (Nash, 2012, pp. 206–207).

Another mode of interactive documentary proposed by Gaudenzi is the “experiential mode” (2012, pp. 127–128). Such works base their interaction strategy on the emerging geolocation technologies that offer personalized information and content according to the audience’s geographic location, also known as *locative media*. These digital documentaries place

the user in a physical place, between the virtual and the physical, triggering in the users an affective relationship with surrounding environment and creating “an experience that challenges their senses and their enacted perception of the world” (Aston & Gaudenzi, 2012, p. 128). Although the "immersive category" proposed by Galloway comprises the use of virtual and augmented reality to interact with the documentary's content and the "experiential mode", proposed by Gaudenzi, doesn't, both categorizations present a mediated interaction with the real world, using technology to enhance the audience's ability to experience the space.

Albeit the three taxonomies proposed by Dayna Galloway, Kate Nash and Sandra Gaudenzi are not equivalent, we may draw a parallel regarding their similarities:

Table 1. correlation between *modes* (Gaudenzi, 2013), *categories* (Galloway, 2013) and *categorical structures* (Nash, 2012) of interactive documentary.

<b>Modes of documentary</b> by Sandra Gaudenzi	<b>Categories of documentary</b> by Dayna Galloway	<b>Categorical structures</b> by Kate Nash
Conversational mode	Passive-adaptive category	
Hypertext mode	Active-adaptive category	Narrative webdoc Categorical webdoc
Participative mode	Expansive category	Collaborative webdoc
Experiential mode	Immersive category	

Whereas Sandra Gaudenzi and Dayna Galloway frame their studies through an interaction perspective, encompassing both the navigation structure and the process of interacting with the audience, Kate Nash presents a categorization based on the arrangement of contents within the interactive documentaries resulting in a more restricted analysis.

In spite of the conversational mode and the passive-adaptive category diverge in the sort of agency provided to the viewer, since Gaudenzi's mode implies a physical action for displaying the documentary's contents and Galloway's category is based in unconscious inputs, as bio-feedback, both definitions are supported by a Human-Computer-Interaction design and comprise an evolving structure generated in real-time by the computer, fostering in the audience the feeling of endless contents.

As regards the hypertext mode, the active-adaptive category and the narrative and categorical webdocs are concerned, all the interactive documentaries outlined within these categories present a digital archive of contents, providing the audience a multilinear navigation, regardless the non-linear architecture model that supports each work. In any of these four classifications, the documentary's creator offers a platform with a closed database of contents and

allows the audience to interact with the artwork, following pathways using triggering hyperlinks to activate his choices.

The participative mode, the expansive category and the collaborative webdocs may be considered the same form. The three terminologies proposed by their authors correspond to a collaborative work in which the viewers are invited to contribute with contents for an interactive documentary's evolving database.

Lastly, the experiential mode presents some variations when compared with the immersive category. While Sandra Gaudenzi considers as experiential interactive documentaries the artworks that place the user physically in a certain geographical space, allowing him an interaction with the surrounding environment, Dayna Galloway includes within the immersive category documentaries that use virtual reality and augmented reality devices to enhance in the audience the feeling of presence in the world represented in the documentary. Nonetheless, the documentaries framed within both categories explore the relationship of audience with a space whether the viewer is displaced for a physical environment or to a virtual world. Also, both definitions infer the audience uses technology in order to interact with the space and activate events within the experience.

The three studies present an evolution, following the development of interactive documentaries form, and may be regarded as complementing each other. Notwithstanding the importance and contribution of each one of them, within this dissertation, we will address the interactive non-fiction works using predominantly Sandra Gaudenzi's classification, i.e., the modes of interactive documentary, since we understand this taxonomy is the one that allows a closer reading of the audience's interaction with the digital works.



## CHAPTER 2

### FROM SPECTATORSHIP TO INTERACTIVE AUDIENCES

Sitting at my desk, using the mouse to click on the computer screen; curled up on the couch, swiping my finger across the tablet; bent over the cell phone at the subway station, listening to the soundtrack on my headphones. These are the natural environments for merging with interactive documentary. It's quite a different description from the one that Roland Barthes shared in his essay "Leaving the Movie Theatre" (1975). In the office, in the waiting room, in the subway, there's no "twilight reverie", there's no "darkness", no state of "hypnosis", as Barthes describes his theatrical experience (1975, p. 419).

Not only does Interactive Documentary change the spectator's role, by providing her or him the chance to interact with the contents and participate in the narrative construction, it disrupts the cinematic experience itself. We must acknowledge that different modes of exhibition shape the spectator's perception and interpretation of the film. When we sit in a movie theatre, as spectators, we are absorbed by the world represented on the screen, and accept the rules of engaging emotionally with the images and sounds projected. On the other hand, in interactive documentary the spectator is surrounded by non-related film stimulus and is frequently requested to take an action within the narrative, interrupting a certain state of "suspension of disbelief" (Coleridge, 2009).

#### **Watching and Interpreting**

While the audience in interactive documentary has been portrayed as active rather than passive due to the form demanding a physical action from the viewer, more conventional spectatorship theories of non-interactive cinema never considered audiences as completely passive



either. Judith Mayne, for instance, believes that “spectatorship is not only the act of watching a film, but also the ways one takes pleasure in the experience, or not” (1993, p. 1). Meanwhile, Edgar Morin (2005)<sup>8</sup> states that the spectator projects him or herself onto and identifies with what is being seen, and thus charges it with an entirely personal value. In watching a film, a second movie rises in the mind of a spectator; and the number of films can be multiplied by the number of spectators. Therefore, “the issue of spectatorship is particularly pertinent and problematic for discussion of the cinema and its apparatus since motion pictures depend upon so many technological, industrial and perceptual factors” (Cook & Bernink, 1999, p. 323).

However it was only after the 1970s that moviegoers become central to the study of film and its effects. The cinematic spectator deals simultaneously with both audio and visual content, processing and interpreting the film both at conscious and at unconscious levels and embracing processes of perception, meaning, and attention. Researchers have considered audiences from manifold perspectives, including social, economic, geographic and psychological conditions. The subject, or spectator, emerged as a fundamental element to film theory when Althusser’s notion of “interpellation” (1971) was adopted. This notion leads to an understanding of the viewer as subject responding to a pre-existing structure, i.e. a film, which “interpellates the spectator, so constituting him or her as a subject” (Lapsley & Westlake, 1988, p. 12). In a political perspective,<sup>9</sup> the viewer becomes a subject shaped by and responding to cinematic devices, constituting the viewers as ideological subjects.

From a structuralist perspective, films were considered as structures with self-contained meaning, autonomous from the spectator’s perspective and from the reception conditions. Drawing upon Ferdinand Saussure’s language model for analyzing the textual structure of narrative Roland Barthes (1970) analyzed the short story “Sarrasine”, by Honoré de Balzac. Barthes distinguishes how the author engages the readers in specific ways, organizing the story’s meaning and driving the receptors throughout the narrative. Additionally, Barthes proposed five different codes of meaning, producing an innovative analytical model that refused a single unifying thematic

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<sup>8</sup> Edgar Morin’s book *The Imaginary Man* first appeared in 1956, when the moviegoing experience was generally neglected for scholarly consideration.

<sup>9</sup> Althusser drew his concept of “interpellation” in the Marxist theories which look at the subjects as an ideological result of state control.

meaning within the filmic narrative and introduced a return to a more structuralist form of narratology. For Barthes, the narrative presents a plurality of coded connotations and, turning his attention to the reader, Barthes acknowledges that the receptor of the narrative entails the subjectivity of a “plurality of other texts, of codes which are infinite or, more precisely, lost” (Wolfreys, 1999, p. 34).

Moving beyond structuralism, Barthes wrote a personal statement as moviegoer, describing his feelings and thoughts during and after the cinematic experience, recorded in “Leaving the Movie Theatre” (Barthes, 1975). In it he describes a state of hypnosis, in the psychoanalytical sense,<sup>10</sup> when he sees himself in the darkness of the theatre between anonymous bodies:

I am confined with the image as if I were held in that famous dual relation which establishes the image-repertoire. The image is there, in front of me, for me: coalescent (its signified and its signifier, melted together), analogical, total, pregnant; it is a perfect lure. (Barthes, 1975, pp. 347–8)

Glued to the screen, “lost, in the engulfing mirror” (Barthes, 1975, p. 349), Barthes confesses his fascination with the narcissistic cinematic experience which exceeds the image projected.

Although the parallel between film and language is broadly accepted among structuralist authors, there are those who debate its synthesis. Christian Metz (1991)<sup>11</sup> also analyzed film under the language framework of semiology, as a communication process which organizes its codes according to a set of cultural rules. However, Metz would not establish an equivalence between words and moving-images. He argued that, unlike a language in the strict linguistic sense, Cinema cannot be broken down and analyzed shot by shot to uncover rigorous grammar and syntax rules. Instead, cinema should be investigated as a *langage*<sup>12</sup>; films construct their own meaning systems

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<sup>10</sup> Whereas Roland Barthes always had an ambiguous relation with psychoanalysis, his text “Leaving the Movie Theatre” (1975) is imbued with psychoanalytical concepts, especially Lacanian terminology, as the “state of hypnosis”, the trio of “RSI (Real-Symbolic-Imaginary)” and the “mirror stage”.

<sup>11</sup> Christian Metz’s book *Film Language: A Semiotics of the Cinema* is a translation from his work *Essais sur la signification au cinema*, originally published in 1968 by Klincksieck, Paris.

<sup>12</sup> Christian Metz draws this distinction upon the concepts developed by the linguistic Ferdinand Saussure, who distinguishes *langue*, the individual utterance of the linguistic and grammar rules, from *langage*, the meaningful

through the articulation of sequences of shots and the organization of images into a narrative structure. Metz proposed a filmic syntax to analyze and classify segments of the narrative, with a taxonomical scheme of binary oppositions (Metz, 1991, pp. 119–146) that quickly became a landmark for film analysis. He called this work the “*grande syntagmatique*”.

After the mid 1970s, film criticism adopted the post-structuralist view of the subject (as understood through the writings of the psychoanalyst Jacques Lacan (2006)), and turned its attention from the cinematic text to analyzing the encounter between the text and the viewer, as well as trying to understanding the subsequent effects of movie going. Judith Mayne (1993) establishes a parallel between this shift in focus of film and literary criticism towards the reader, and the similar trend in philosophy towards the subject. Mayne also states that “the move from structuralism to post-structuralism is generally seen as one of the most significant shifts in contemporary critical theory” (Mayne, 1993, p. 17).

Christian Metz was one of the authors who adopted a post-structuralist approach after his “*grande syntagmatique*”, along with Jean-Louis Baudry and Laura Mulvey. Drawing upon psychoanalytical theories, these three film theorists turned their attention to the cinematic institution and its apparatus, investigating how the spectators create meaning during the film-watching experience. For them it is the subject, or spectator, who gives meaning to the object, i.e. the film, while experiencing nuances of pleasure, such as fantasy, desire and dream. Central to psychoanalytic theories of spectator is the “mirror stage”<sup>13</sup>. This is the psychological stage, as described by Jacques Lacan (2006), in which a child recognizes her or himself in the mirror and creates an identification with its own image, developing the notion of Ego. In the psychoanalytic theory of the spectator, this stage is compared to the concept of screen-mirror<sup>14</sup> in which the spectator identifies oneself with the movie screen.

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use of the language to communicate a message. For Metz (1991), film may be analyzed as a discourse, towards a “language of art”, which produces meaning for the spectator through a filmic discourse.

<sup>13</sup> The concept of the “mirror stage” was firstly outlined by Lacan at the Fourteenth International Psychoanalytical Congress at Marienbad in 1936. Whereas by the time he considered the mirror stage as a moment in the life of the infant, in the early 1950’s he argued that such moment represents a permanent structure of subjectivity.

<sup>14</sup> The concept of ‘screen-mirror’ elaborates around how the spectator identifies oneself within the movie, either with the camera (primary identification), with the screen or with the characters. Nonetheless, this concept is

From this perspective, the meaning of the text is not something contained within the text that needs to be uncovered; instead, it must be constructed by the spectator from cues provided by the text. Jean-Louis Baudry (1974) states that, while facing the cinema screen the spectator returns to a childish moment, projecting an ideal self in the mirrored image. However, Baudry does not establish a direct correlation between screen and mirror, since the screen reflects images but not “reality” (1974, p. 41). For him, the screen-mirror creates a filmic “ego” through which the spectator projects the Self in the film world. Likewise, Christian Metz (1982) believes that identification is the “primal form” of recognition for the spectator in the film diegetic world and that this regressive state to an early age may help the viewer dealing with the formation of his own subjectivity, as proposed in the *Imaginary Signifier* (Metz, 1982). However, for Metz, the spectator’s identification also lies outside the screen-mirror, allowing the viewer a certain degree of freedom to find her or his space within the world represented on screen.

Laura Mulvey (1975, pp. 6–18) extends the identification process by considering that during the watching process the spectator interplays “the matrix of the imaginary, of recognition/misrecognition and identification, and hence of the first articulation of the ‘I’, of subjectivity” (Mulvey, 1975, p. 836). Mulvey also devoted her research to female representation in film.<sup>15</sup> By analyzing classic Hollywood movies, she identified the female bodies on the screen as objects of desire for the voyeuristic masculine pleasure, activating in the spectator what she has coined as the “male gaze”.

In this subject-apparatus spectatorship theory the viewer is analyzed as producing meaning at an unconscious level, framing the individuals under a structure of the spectator’s “subjectification”. However, Judith Mayne (1993) refuses labeling the spectator as a subject, a unified audience constructed by the film. Mayne underlines the difference between “subject” and “viewer”, as she believes that subjects are not real people who attend movies, but rather a position

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central for the psychoanalytic theories of spectatorship which believes the spectator is provided with the illusion of power and control over the screen images, positively contributing for a coherent and omnipotent Ego.

<sup>15</sup> Laura Mulvey’s essay “Visual Pleasure and Narrative Cinema” (1975), originally published in 1975 in the influential journal *Screen*, is widely accepted as one of the foundational texts in feminist film theory.

constructed by the institutions of cinema. Therefore, “spectatorship occurs at precisely those spaces where ‘subjects’ and ‘viewers’ rub against each other” (Mayne, 1993, p. 37).

Emerging as a reaction against the psychoanalytic-semiotic theoretical paradigm, the 1980s saw cognitivist scholars look at spectators as individuals capable of producing meaning at a conscious level. Combining an empirical approach and flourishing interdisciplinary research, these scholars drew upon cognitive science, as well as literary studies, philosophy, linguistics, anthropology and even neuroscience to present multifarious studies instead of a unified theory. Cognitivism was introduced in film studies by David Bordwell with *Narration in the Fiction Film* (Bordwell, 1985). Avoiding the term “Cognitivist Science”, Bordwell (1989) prefers describing his work as drawing upon a “Cognitivist approach” in which the spectator uses cognitive processes of perception such as memory, recognition, comprehension, and inference-making, to construct a representation of the world. According to the cognitivist theory, during the film viewing process the moviegoer uses both innate capacities and acquired skills, building upon natural sensory processes and cultural knowledge to interpret the film.

Likewise following a cognitivist approach instead of drawing upon a psychoanalytic concept of identification, Noël Carroll prefers talking about *recognizability* (1988). For Carroll, the spectator possesses the inherent capacity of recognizing the mimetic world represented on screen, through spectatorial processes of perception and comprehension. According to the cognitivist theorists, spectators make meaning out of a film through a combination of their objective experiences of the world and embracing their previous experiences of movie-going to identify patterns such as film continuity, diegetic, and non-diegetic sound, thereby managing a response to the film’s stimulus each and every moment, at a conscious level.

Merleau-Ponty (2002) takes a phenomenological viewpoint, where the issue of spectatorship is not so much a matter of consciousness as it is of perception. During the film viewing process the spectator receives sensory information that speaks to all the senses at once and shapes the perception of the film, working just like our own perception of “reality”. As a sensory experience, film is perceived within a complex structure of consciousness, such as concepts of attention, temporal and spatial awareness, and even self-awareness. As being part of the world, the spectator

is an embodied being and the Self plays different roles during the film, as viewing and listening, interpreting, thinking, acting, all of them contributing for a sense of subjectivity.

Vivian Sobchack (1992) argues that the spectator receives the film not only through the eyes but by feeling the experience flowing through the entire body. Specifically addressing the experience of documentary film, Sobchack (1999) introduces a phenomenological model of cinematic identification that she calls *documentary consciousness* (p. 241). Drawing upon both Merleau-Ponty's *filmologie* and Jean-Pierre Meunier's modes of spectatorial consciousness, Vivian Sobchack (1999) considers the viewer's identification with the narrative highly subjective and dependent on prior knowledge and predispositions. However, she believes that in documentary film the spectator sees through the screen and is capable of focusing on the world represented, due to the indexical relation of the images with what we understand as "reality". The spectator is aware the people and events in the film exist elsewhere and thus, "in the documentary experience, our consciousness is more necessarily tied to and determined by the specificity of images given on screen and the increased attention that must be paid them" (Sobchack, 1999, p. 244).

Following the progression of these spectatorship theories, the spectator has been portrayed as increasingly more and more conscious, integral and capable of decision-making while watching a film. Also, scholars have been enhancing the degree of complexity in the research of spectatorship, encompassing diverse fields of study and investigating beyond behavioral approaches. Far from passive, the spectator perceives, identifies, interprets and fills in the gaps as a film unfolds and "works actively on many levels simultaneously, consciously and unconsciously, processing visual and audio cues" (Cook & Bernink, 1999, p. 323).

### **Interrupting the fluidity of narrative**

With the introduction of VCR, DVD players and digital technologies, cinema became a "heterochrone" experience (Gaudreault et al., 2015),<sup>16</sup> manipulated by a "fetishistic spectator"

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<sup>16</sup> Gaudreault and Barnard (2015) define as "heterochrone" media the ones in which the time of reception is determined and manipulable by the audience, as opposed to a "homochrone" situation in which the temporality is incorporated in the medium utterance.

(Mulvey, 2007) who holds the power of changing the cinematic temporality and the film's sequence. When watching a film from a videocassette, the spectator becomes able to manipulate the narrative and profoundly transforms her or his own cinematic experience:

in the sense of what is being seen, when the projected images are no longer bigger than life and are manipulable through fast-forward, freeze-frame, and every kind of fingertip control. Such viewing is no longer an occasion to which you must adjust your attention. With it, cinema culture comes to be on tap, manipulable at will. The videocassette provides a different psychic framework for the film. (Heim, 1986, p. 118)

Although this manipulation fulfills a certain fetishistic desire and pleasure in the spectator, the compulsion for delaying the film, extracting specific scenes or images from the flow of the story and freezing the frames in order to possess them, may be considered an act of violence against the cohesion of the narrative (Mulvey, 2007). The viewer infringes the normative forms of cinema to take pleasure out of the experience, becoming what Laura Mulvey (2007) describes as a "possessive spectator":

(...) this form of spectatorship may work perversely against the grain of the film, but it is also a process of discovery, a fetishistic form of textual analysis. When narrative fragments, and its protagonists are transformed into still, posed images to which movement can be restored, the rhythm of a movie changes. (Mulvey, 2007, p. 166)

The difference between heterochrone experiences and interactive documentaries is that the former were created to be watched sequentially, even if the viewers manipulate and transgress the original purpose of the film watching, while interactive digital objects are conceived and created *à priori* to be manipulated and re-arranged. While the "possessive spectator" is able to manipulate the film's sequence and disrupt its temporality, it is only with interactive cinema that the spectator achieves the condition of user, selecting and appropriating the information that interested her or him most, which does not necessarily meet the director's choices.

More precisely, in the interactive documentary realm the artifacts are created under the concept of "work in movement" (Eco, 1989), opening up the possibility of including several different personal interventions from viewers in order to complete the work. The audience is now

included within the process of creating the work of art, playing with specific rules established by the documentary author. The artwork becomes a platform for collaboration between spectator and filmmaker, a space of encounter between multiple viewpoints which complete each other in a single cohesive work. This collaboration demands a distinct endeavor from the author, consistent with what Pierre Lévy describes as a creation process in the contemporary society:

Rather than distribute a message to recipients who are outside the process of creation and invited to give meaning to a work of art belatedly, the artist now attempts to construct an environment, a system of communication and production, a collective event that implies its recipients, transforms interpreters into actors, enables interpretation to enter the loop with collective action. (Lévy, 1997, p. 123)

Furthermore, by providing the audience with the power of interacting with the documentary's segments and contributing with contents for the narrative, the author is also partly giving up their control over telling a specific story in a certain sequence. The new artforms of the digital age blur the boundaries between filmmaker and audience, insofar as "in this emerging media system, what might traditionally be understood as media producers and consumers are transformed into participants who are expected to interact with each other according to a new set of rules which none of us fully understands" (Jenkins, 2006a, p. 3).

### **Navigating and interacting**

We are far from fully understanding the significant changes in the audience's interaction and interpretation within the realm of interactive documentary, however, some research developed during recent years may shed some light on core concepts relating to the encounter between the viewer and the digital object. In interactive documentary, the spectator loses the immersion in the darkness of the theatrical experience but acquires new levels of agency,<sup>17</sup> which, according with Janet Murray (1998), grant us the "power to take meaningful action and see the results of our

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<sup>17</sup> Agency is used by J. Murray (1998, pp. 126–153), as a corrective to the inexact use of "interactive". Murray considers that the term "agency" is both the exploitation of a virtual environment and the aesthetic experience that the interactor takes from the dynamic of a responsive world.



decisions and choices” (p. 126). Rather than merely looking at the screen, interactive audiences also experience a “sense of doing”, which produces “a more intimate, direct and active relationship with the apparatus itself and, consequently, with the deployment of realism” (Odorico, 2011, p. 243).

The rhizomatic nature of interactive documentary opens up several branches; it allows the audience to navigate through a decentralized network of contents, providing the viewers multiple possibilities for selecting the contents of their choice as well as participating in the documentary’s construction. Therefore, digital non-fiction works require from the viewer a physical action in arranging the narrative, as noted by Sandra Gaudenzi and Judith Aston, as well as demanding “an active role in the negotiation with the ‘reality’” (Aston & Gaudenzi, 2012, p. 126). Instead of witnessing a certain mediated event as experienced in traditional documentary form, the audience of interactive documentary assumes the role of reconstructing the dramatic narrative of reality.

Henry Jenkins considers this process of making connections between dispersed media content as a form of “convergence” (Jenkins, 2006a),<sup>18</sup> which occurs within the brains of consumers but nevertheless contributes to an individual interpretation to make sense out of the world. It is also undeniable that without the audience’s physical participation these new digital objects are incomplete and become useless. No longer confined to watching and interpreting, spectators are allowed and even requested to modify, interact with, choose from and contribute to the creation of a different narrative, a narrative that is rebuilt each time it is accessed. Consequently, the fluidity of the interactive documentary’s narrative not only introduces unpredictability to the story but also adds complexity to the audience’s analysis because when the audience shapes and recombines the documentary contents, in Hudson’s words, “meaning is subjected to endless recombination” (2008, p. 90).

In an interactive documentary, the viewer enjoys several paths and possibilities of access, fostering a process of participatory meaning-making. Instead of enclosing the meaning in a single,

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<sup>18</sup> The term “convergence” was established by Henry Jenkins (2006a) to address the merging of traditional and new media in a single platform, operated through five different processes (Technological Convergence, Economic Convergence, Social Convergence, Cultural Convergence and Global Convergence) that together compound the “Convergence Culture”.

specific way, this multimodal structure opens the possibility of overlapping narrative developments, providing the expansion and redirection of semantic meaning. The audience must interact with and search for fragmented, dispersed and sometimes scattered connotations, organized in several degrees of extent and deepness. The process of navigating through the choices becomes the pursuit for meaning (Murray, 1998, p. 30), while also encouraging in the audience a fascination with surrendering to the experience itself.

As a consequence of interactive documentary allowing the viewer to navigate back and forth through the contents, there is no guarantee that she or he will reach a term, leaving unfulfilled the desire to know how the story ends. On this regard, it is important to highlight that we have grown up in a time-based media environment and the cultural experience of sequencing elements has provided us with “cinematic ways of seeing the world, of structuring time, of narrating a story, and of linking one experience to the next” (Manovich, 2001, pp. 78–79) and consequently, finding the narrative’s closure. Thus, whereas the navigation process may fulfil a certain pleasure in the audience, the story’s denouement remains an important moment of the documentary experience, as it contributes to releasing tension and anxiety and works as a catharsis opportunity. Ultimately, in a rhizomatic structure, the closure of the narrative may be ulterior or remain undisclosed, keeping the viewers disoriented and frustrated:

Closure and cohering strategies are the *sine qua non* component that enables the deep, cognitive, affective and sensual rewarding engagement of spectators in narrative cinema. Conversely, non-closure and de-centeredness, when posited by postmodern textual theorists as a text’s basic premise, frustrate the reader’s strive for coherence and often lead to distraction and loss of interest. In a sense, the whole notion of narration is meaningless if the viewer’s aspiration for closure is frustrated to begin with. (Ben Shaul, 2008, p. 21)

After navigating, interacting and/or contributing, the viewer must achieve the denouement of the narrative as a reward for her or his participation in the development of the story. Although the open narrative trajectories disclose multiple pathways and nourish the pleasure for uncertainty, the closure of the structure remains as a gratification for the audience’s performance.

## **Towards an Interactive Audience**

Arnau Gifreu (2013) considers interactive documentary to represent a radical shift from a passive spectator to an active user-interactor-participant-contributor. On his view, in interactive documentary the active interactor acquires “presence” and “identification”, insofar as the interaction process contributes to engendering the system and provides a subjective sense of the world represented (Gifreu, 2013, p. 309). By acquiring the ability to produce, change and control the new media objects, the spectator becomes a “hyper-spectator” (Cohen, 2001), capable of accessing online contents as well as surfing from one segment to the next. Cohen (2001) portrays the hyper-spectator as empowered and capable of emplacing several positions and escaping from normative identity. In his view, the spectator is no longer the one manipulated by the film instead becoming the one that manipulates the work. However, how much freedom do the user achieves in interactive documentary? Besides the ability of re-arranging the fragments, is the audience truly conscious of its decisions or is still affected by the audiovisual experience?

Looking at the modes of interactive documentary proposed by Sandra Gaudenzi (2013) and described in the previous chapter, we find that each mode of interactivity provides the audience with a different level of agency. Considering that hypertext mode documentaries have a closed database of content and allow the audience to click, choose contents and navigate in a non-linear narrative, Gaudenzi frames them as having a low level of interactivity, when compared with the three other modes (2013, p. 247). As regards the conversational mode, Gaudenzi believes the audience is allowed to freely explore the story world, navigating through unpredictable options. For her, “the interface affords a freedom that is not possible in the hypertext mode where the interface is more static” (Gaudenzi, 2013, p. 244).

She goes on to describe experiential mode as interactive documentaries that demand not only a physical action such as clicking and navigating, but also require a physical displacement in a topographical space in order to activate location-based content. The interactive documentary dislocates the user from a digital into a living environment, emphasizing “body movement and real-time decisions in a constantly changing and unpredictable environment” (Gaudenzi, 2013, p. 249). In what Gaudenzi considers the highest level of agency we find the participative (or participatory) mode, especially boosted by the proliferation of Web 2.0. The author considers this mode to be pushing the interactive documentary form to its limits, inviting the audience into a

crowdsourced documentary that can be translated in different ways of participation, but that in any case the audience becomes co-author and achieves the power of collaborating in constructing a multilayered point-of-view with a substantial impact on the documentary's structure (Gaudenzi, 2013, pp. 250–251). In summary:

If hypertext documentaries offer multiple ways to engage with a pre-authored set of ideas and points of view, conversational documentaries make it possible to experience and rehearse ethical decisions, or distant realities. Experiential documentaries can add layers to the felt perception of reality, and open an embodied enactor to a new affective space, while participative documentaries fundamentally question the role we want to have in society, allowing levels of activism that can shape parts of our world. (Gaudenzi, 2013, p. 252)

Following an empirical approach, Kate Nash (2014b) tries to disclose the audience's behavior during the experience of interaction with NFB's digital documentary *Bear 71*, as well as understanding how users structure their interactions and take pleasure (or not) from their agency. She captured the interactions of 23 participants in an artificial setting, combined with observation, and then conducted interviews enquiring the participants about the experience. Whilst the sample may be considered limited, Kate Nash (2014b) believes “control, immersion and narrative” (p. 232) are the reasons why audiences find interactive documentary pleasurable. Patricia Aufderheide (2015) analyzed five interactive documentaries of the hypertext mode and, scrutinizing the data from the user's interactions, came to the conclusion that the viewers are likely explore these works because of a prior interest “in the content or an interest in how people are using the form, rather than in pursuit of a media experience in itself” (p. 77).

My issue with the majority of the researches on audience in interactive documentary developed so far is that they assume a binary position of looking at the typical spectator as completely passive as opposed to an active user, describing the latter as free of any constraints and completely autonomous. I would argue against such polarity since, as previously outlined through spectatorship theories, the spectator was never completely passive. Furthermore, in interactive documentary the spectator is not only interacting with the digital object but also experiencing the media content in the manner practiced in typical film viewing: watching, listening, interpreting, making sense of and identifying with the film. The participation in interactive documentary

becomes a combination of traditional and interactive practices, of real and virtual experiences, an interplay where the old and new spectatorship forms collide.

In the book *The Emancipated Spectator*, Jacques Rancière (2014) also questions the division between passivity and activity in the audience, asking “if it is not precisely the desire to abolish the distance that creates it” (2014, p. 12). The French philosopher argues that the audience’s “emancipation begins when we challenge the opposition between viewing and acting: when we understand that the self-evident facts that structure the relations between saying, seeing and doing themselves belong to the structure of domination and subjection” (Rancière, 2014, p. 13). Therefore, the emancipation happens when the spectator is critically aware of her or his choices, conscious of her or his own subjectivity, regardless the physical action of manipulating the work of art.

While the freedom of selecting contents and choosing pathways may seem exciting to the audience, we must inquire if the viewers actually aspire to having an active role in the creation of the narrative or, on the other hand, if they simply enjoy to be told a story. It’s relevant to highlight that while interactive documentary grants a certain level of decision and power to the viewer, this change in placing in the audience’s hands a degree of decision may not be appealing to all kinds of viewers. Comparing the videogame *Brothers in Arms* (Software, 2005) with the namesake two-hour documentary (Gomes, Kanew, & Kennedy, 2006) from the *History Channel* which featured recreated scenarios and subject matter from the videogame graphics, Dayna Galloway (2013) suggests that “certain audiences may have a favored method for experiencing factual content and perhaps through choosing certain technologies or procedures for experience, potential consumers may be alienated” (p. 57).

With the increasingly ubiquitous presence of the personal computer through the 1990s, the user of technological products started to be portrayed as an active intervener. However, according with Crary the concession of certain interaction demands a continuous capturing of attention and conceals a specific purpose:

The interactive possibilities of these new tools was touted as empowering, and as intrinsically democratic and anti-hierarchical – although much of the force of these myths has since been deflated. What was celebrated as interactivity was more accurately the

mobilization and habituation of the individual to an open-ended set of tasks and routines. (Crary, 2013, p. 83)

Establishing a parallel between new media audiences and fandom culture, Henry Jenkins (2006b) also questions to what extent we are facing “interactive audiences”. Where critical studies have been struggling to present contemporary audiences as active and critically aware, they still behave under a structure of power. Jenkins refuses to view users as “either totally autonomous from or totally vulnerable to the cultural industries” (Jenkins, 2006b, p. 136), as he believes that in a near future the distinction between authors and audience, creators and spectators will blend into a continuum. So, it is not because the spectator of interactive documentary has the power to choose from a collection of contents, interacting with the segments, and sending her or his own contents that she or he experiences a full emancipation.

Even Kate Nash, despite her relative enthusiasm for an active audience, in the book *New Documentary Ecologies* (2014a) expresses some skepticism about the views that take for granted the audience’s engagement in interactive documentary based on self-report of the viewer’s personal experiences:

It is widely assumed for instance that interactive documentary audiences are more active and engaged than film and television documentary audiences. While widely proclaimed, such a view has no empirical foundation. It is just as likely that the interactive experience – the need to click, decide or move – might detract from narrative engagement. (Nash, 2014a, pp. 57–58)

The truth is the form of these non-fiction digital objects introduces unfamiliar procedures and unsettled conventions that demand a critical position towards the audience’s investigation. Additionally, whereas in non-interactive documentary the viewer is able to not only see the screen but also through it and thus experience an embodied identification (Sobchack, 1999), interactive documentaries are what Bolter and Grusin (1998) defined as objects of “hypermediacy”, constantly reminding the viewers of the medium itself, by means of the interface and of the required action, and making them hyper-conscious of the act of seeing, or gazing.

Addressing the new media audiences, Mariagrazia Fanchi (2005) believes that spectatorship comprises at least three modalities of vision: gazing, glance, and multi-centered look (Fanchi, 2005, pp. 39–43). Gazing she describes as an immersive experience, fixed on the screen, where the film becomes the central and only object of contemplation and voyeuristic pleasure while the Glance is a superficial look, when the film competes with other stimuli, leading the spectator to alternate and juxtapose the focus of attention between the screen and the surrounding environment. Considering the multi-centered look, probably the most common among spectators of interactive documentary, Fanchi describes an attentive but at the same time dispersive look, when the spectator interchanges between several elements in equal ways, instead of focusing on a single media experience.

Jonathan Crary (2001) would diverge from this capacity for paying attention to multiple stimuli simultaneously. He argues that in Western societies the audience is constantly in a state of distraction, as increasing stimuli in everyday life demand individuals to define and shape themselves in terms of a capacity for “paying attention”<sup>19</sup>. Crary believes that beholders are subject to questions that surpass the practice of viewing and looking, that go beyond concepts of the subject as spectator, of the gaze. He rather addresses the issue through the term “perception”; a way of seeing, but also of hearing and touching and as a means of access to self-presence (Crary, 2001, pp. 2–5).

The questions around interactive documentary, however, are not just a matter of looking, paying attention or interpreting, but also the ways in which the spectator is engaging with the work and, by extension, with the screen. The emotional and physical embodiment in interactive documentary must consider that the screen devices differ from the movie screens “not only in terms of size, location or use but, above all, in the different approach that the user/viewer has with it” (Odorico, 2011, p. 242). The form of interactive documentary demands from the viewer an interaction with the artefacts, as well as introduces different venues and reception conditions that

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<sup>19</sup> In the book *Suspensions of Perception*, Jonathan Crary (2001) examines the volatile human attention in modern Western culture through a perceptual approach. Within a historical study from 1880 to the technological culture, Crary focuses on modern attention as a crucial element for subjectivity, individual freedom and creativity.

requires investigating how spectators are experiencing the interaction with the new digital documentaries.

Furthermore, for Vivian Sobchack (2016) the disruption of the temporality as well as the random navigation across dispersed pieces introduces a phenomenological problem; electronic media has changed our modes of perception and embodiment, and consequently our sense of *presence* in the world, provided by the traditional cinematic experience. Sobchack considers that electronic media constitutes a system of *simulation*<sup>20</sup> based on superficial images incapable of providing the spectator/user with a connection between the original referent of the “real” and its signification. However, she also acknowledges that documentary “tends not to ‘play’ in the fields of simulation” (Sobchack, 2004, p. 242).

Likewise, in interactive documentary the indexicality is assured by both the subject matter, portraying life events and social characters, and the imagery, usually captured from reality. Notwithstanding that some interactive documentaries are built with computer-generated images or 3D compositions, most of the works still make use of footage and photographic images to create the world represented. Moreover, Janet Murray (1998) contradicts Sobchack’s skepticism by arguing that it is precisely the act of navigating through the network of contents that evoke in the spectator a sense of bodily presence. While navigating through the choices the interactors are constructing the narrative and therefore can trace their location within the story, accomplishing, for Murray, a sense of *presence* in the digital world (Murray, 1998, p. 80).

By outlining the research on spectatorship and interactive audience we find that the issue of participatory meaning-making is far more complex than simply providing the viewers several degrees of agency. Interacting with these new digital documentaries entails further than clicking, navigating and sending contents. It involves new exhibition venues and conditions, it involves an individual experience and requires an investigation of how subjectivity is shaped while the audience is constructing an ephemeral and malleable narrative. The notion of subjectivity, a fundamental feature of traditional documentary film, doesn’t involve only the filmmaker’s choices

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<sup>20</sup> Sobchack (2016) argues that electronic images construct a metaworld built upon copies with no ‘real’ referent and with the single purpose of the *representation-in-itself*.



but also addresses the spectator's position towards the film. Moreover, by leaving to the audience part of the documentary's construction, the personal desires, the unconscious decisions and the notion of "subjective individual" becomes even more pertinent for the film spectatorship study.

## CHAPTER 3

### FRAMING THE STUDY

The larger framework of spectatorship studies, previously outlined in chapter 2, is crucial to contextualizing and further understanding that different theoretical approaches will necessarily lead the researcher through different paths for analyzing the spectator's subjectivity and identification within the interactive documentary. In order to deeply understand the phenomenon of audience's subjectivity in interactive documentary and how the spectator/user interacts with the digital objects and embodies the cinematic object, I used: i) a combination of interdisciplinary methodological approaches including observation and immersion in the phenomenon; ii) a close, but also broad, reading of different interactive documentaries, comprising form, content, and interaction; iii) an analysis focuses on a metacritical perspective on theories of cinema spectatorship. My aim is understanding how the spectator embodies the film experience and what are the sensations conveyed to the viewer while she or he interplays with the interactive documentaries. My focus is also upon the identification of the spectator with the digital object: how concepts of looking, seeing, hearing influence the audience's perception and may shape the spectators' subjectivity throughout the mediated experience, introducing a development in the psychoanalytical concept of the gaze.

Researching and thinking through subjectivity such as in film theory will allow analyzing specific interactive documentaries, with its particularities and specificities, which in turn will unveil the complexity of the spectator's self-inscription in the artwork and consequent identification in a broader sense. Considering the malleable and expansive configurations of interactive documentary, instead of establishing a pre-conceived framework for analyzing the digital objects as case studies, which could limit and subjugate the documentaries to a scheme, contrariwise I propose a wide and unsealed approach comprising multiple dimensions of inquiry

and responding accordingly to each interactive documentary's structure. Moreover, whereas in a case study approach the research would develop a theory and then apply it to the documentaries selected, by considering the units of study in a comprehensive analysis, I do expect, through a cumulative reasoning, to extract meaning from the interactive documentaries, as well as understand processes of subjectivity and identification within the interaction experience with the non-fiction digital objects.

Following a phenomenological approach, grounded primarily but not exclusively in Edmund Husserl's phenomenological philosophy (2012)<sup>21</sup>, I aim to deeply understand the "lived experience" of the interactive documentary phenomenon. As Vivian Sobchack notes "for Husserl, all knowledge of the world arises in experience and emerges as a *mediated* relation between consciousness and the phenomena" (Sobchack, 1992, p. 32). As a holistic approach, phenomenology allows a descriptive analysis of the experience as lived by the subject through what Husserl (2012) defines as "structures of consciousness", carried on "in the first person", from the human "natural standpoint" (2012, p. 51) of imagining, thinking, feeling (i.e. emotion), desiring, willing and acting. Such perspective of the interactive documentary experience highlights how the subject perceives the form of the conscious procedural interaction. Conceptualizing and understanding how the interactor deals with the interactive documentary will define the meaning of that same object in the interactor's experience. Therefore, the Husserlian phenomenology provides a study of meaning in a broad sense that goes beyond the digital object interpretations through language.

Furthermore, in my perspective, phenomenology presents extended advantages as a method by clarifying and rationally disclosing the complexities of the interactive documentary experience. Avoiding the metaphysical limitation of intuition, I will critically analyze how the audience's experience follows patterns in the structures of consciousness, by providing a description based in the subjective experience of interacting with the digital objects, which hopefully will provide a shared basis for discussion. My aim is not to propose a phenomenological theory to analyze interactive documentary but using phenomenology as a mean to understand the

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<sup>21</sup> Edmund Husserl's writing *Ideas: General Introduction to Pure Phenomenology* was firstly published in 1931 by The Macmillan Co., New York.

perceptual embodiment of film, turning my attention towards the experience of interacting with the objects of analysis. Thinking through the ontological and aesthetic questions encompasses matters of embodiment, subjectivity, intersubjectivity, projected senses, and identification in a diversity of paradigmatic and interrelated digital documentaries. My interpretations draw upon specific examples of digital non-fiction objects which unveil and highlight particular aspects of subjectivity, as understood by film phenomenology and psychoanalysis.

Analyzing the interactive documentaries through the phenomenological structures of embodied existence means regarding the digital works as possessing intelligibility, insofar as the artifacts convey meaning to the viewer, who can communicatively understand its signification. Fostering Vivian Sobchack's responsively dialogical model of the cinema experience, I will address the interactive documentary realm by interpreting the structures of communication as they appear in the structures of being:

The focus here will center on the radical origin of such logic in lived-body experience, that is, in the activity of embodied consciousness realizing itself in the world and with others as both visual and visible, as both sense-making and sensible. The entailment of incarnate consciousness and the "flesh" of the world of which it is a part will be described as the basis for the origination of the general structures of cinematic signification, structures that are themselves produced in the performance of specific modes of existential and embodied communication in the film experience. (Sobchack, 1992, p. 7)

Sobchack's proposed approach of looking at cinema as an embodied experience may highlight consistent analogies with the act of interplaying with interactive documentary, insofar as the digital objects are spaces of encounter between the spectator and the lived world, mediated by the technological apparatus. Not only may the viewers access the indexical re-presentation of the world through the technological device, as also they are allowed to interact with and shape the dynamic, mutable and reconfigurable objects. This line of thought follows Vivian Sobchack's perspective in which both the viewer/user and the digital objects are seen as "viewing subjects" as well as "visible objects" (Sobchack, 1992, p. 23), in a dialectical engagement of embodied existence in the world.

As an embodied experience, such perception immediately produces an *affect* within the spectator's body. Deleuze and Guattari use this concept of *affect* for delving into the aesthetic experience, since for the authors art is "a bloc of sensations, that is to say, a compound of percepts and affects" (1994, p. 163). They conceive the notions of affect/affection elaborating on Spinoza's concept of *affectus*, who considers such state as an encounter between the affected body and a second, affecting, body, by adding a quantitative dimension of intensity to the human experience. In the foreword of *A Thousand Plateaus* (Deleuze & Guattari, 1987), Brian Massumi describes affection as a "prepersonal intensity corresponding to the passage from one experiential state of the body to another and implying an augmentation or diminution in that body's capacity to act" (1987, p. xvi). In this perspective, the interactive object, or second body, provides sensations and affections to the interactor's body, intensifying the interactive experience and eliciting the spectator to interact with the digital documentary.

Instead of looking at the interactor and the digital documentary as separate entities, with independent existence, I will consider both the subject and the object with an *intentional relation* between them, mediated by technology. Grounding this perspective on Don Ihde's concept of "mutual constitution" (Ihde, 1990) since the subject and the object are constituted in their interrelation. Don Ihde's postphenomenological theories extend the philosophical phenomenology and Martin Heidegger's approach to technology and argue that technological instruments transform the subject's perception and, in a broader sense, dramatically impact the human existential condition, specifically in how we perceive ourselves in the world (Ihde, 1983). In such "mediation"<sup>22</sup> perspective, both the audience and the interactive documentary engage in a reciprocal relationship, insofar as they mutually shape one another within an interconnected relation and, therefore, both become the result of the interaction practice.

More precisely, the relationship between audience and interactive documentary is mediated by technology and such mediation co-shapes both subjectivity and objectivity. In this sense, there isn't a pre-conceived subject or a pre-conceived group of objects, mediated by technology; instead,

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<sup>22</sup> this concept of mediation can be understood as used by Don Ihde (1990), who addresses the technological mediation of visual perception through technofacts such as the telescope, the microscope, and the camera. Ihde, upon whose Sobchack stands, considers that a phenomenological perception "always takes as its primitive the relationality of the human experience to the field of experience" (Ihde, 1990, p. 25).

the mediation becomes the origin that shapes human subjectivity and the objectivity of the world (Rosenberger & Verbeek, 2015). Thus, the particular moment of interaction opens a significant opportunity for analyzing the audience's subjectivity in interactive documentary, as space in-between the spectator and the digital artifact.

Drawing upon specific interactive objects of analysis, I will investigate the audience's micro and macroperceptions<sup>23</sup>, as understood by Don Ihde:

What is usually taken as a sensory perception (what is immediate and focused bodily in actual seeing, hearing, etc.) I [Ihde] shall call microperception. But there is also what might be called a cultural, or hermeneutic, perception, which I shall call macroperception. Both belong equally to the "lifeworld". And both dimensions of perception are closely linked and intertwined. There is no microperception (sensory-bodily) without its location within a field of macroperception and no macroperception without its microperceptual foci. (Ihde, 1990, p. 29)

Whereas microperception's analysis will allow unveiling the sensory-bodily dimension of the interactive practice, i.e. how the audience perceives and sees interactive documentary experience through senses, macroperception's study will disclose a reasoning dimension over the experience, i. e. how the audience understands and interprets the interactive practice on the basis of that sensory felt experience.

Such perceptual experience mediated by new technologies reconfigures the notion of subject in a fundamental way. Besides the experience grounded in the consciousness of interacting with the digital documentaries, the interaction practice also engages the audience through unconscious processes. As an embodied and self-centered experience, interactive documentary instigates the viewer's identification with both the interactive object and the virtual environment, an identification largely constructed by the interaction practice, which offers a central perspectivity for a self-referential identification. The digital environment becomes a simulation space where the

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<sup>23</sup> Don Ihde (1991) explores the concepts of micro and macroperception drawing upon Maurice Merleau-Ponty's "lifeworlds". In *The Visible and the Invisible* (1968) Merleau-Ponty introduces the basis of microphenomenon and macrophenomenon of perception for the subsequent development of the concepts and its interaction.

interactor, or the subject, sees oneself reflected, either in a figurative sense, through the embodiment of the self-centered experience, or in the literal sense by being confronted with her or his contents included in the interactive narrative. Therefore, the psychoanalytical theory (Copjec, 2000; Lacan, 1977; Metz, 1982) provides a dynamic method for investigating how the interactors identify themselves with their embodied position on screen within the act of interacting, and how the pleasure of interaction triggers the audience's unconscious desire while contributes for their selfhood.

Drawing upon the Freudian psychoanalysis, Jacques Lacan (2006) developed the theory of the mirror stage where children between six and eighteen months of age misrecognize themselves through their image reflected in the mirror. Lacan considers this vital step of development as a misrecognition since the children identify themselves with an illusory image of their fragmented body by perceiving it as a whole. It is through this misrecognition, indeed a specular image, that the children develop a sense of self-identity and form their Ego. When beholds the mirror the child becomes alienated from her or himself and is introduced into the imaginary order. Authors as Jean Louis Baudry (1974), Christian Metz (1982) and Laura Mulvey (1975) found in Lacan's ideas fertile ground for film theory. They establish an analogy between the Lacanian mirror and the film screen, where spectators identify themselves with the camera or with characters on screen and feel a sense of unlimited power over the image and, by extent, over the diegetic world.

Besides the writings on the mirror stage, the Lacanian concept of the gaze is also crucial for understanding how the interactor sees oneself within the digital environment. In the 1990's Joan Copjec presented a radical new approach to psychoanalytic film theory, arguing the earlier authors elaborated around a misunderstanding of Lacan's concept of the gaze, based on the mirror stage. Alternatively, Copjec turned her attention to the seminar XI, entitled *The Four Fundamental Concepts of Psycho-Analysis* (Lacan, 1977). Instead of comparing the film screen with a mirror in which the spectators can project and identify themselves, creating an illusion of visual omnipotence, Copjec (2000) argues the screen is the precise site of the gaze, an object of the spectator's desire. As the film image presents limits of visibility, the spectator tries to overcome the flatness of the image and see beyond the surface of the screen. Such as Lacan considers desire is triggered by an absence, a missing object, so Copjec thinks the spectator's desire relays on the limits of the image's visibility.

After having a significant impact on film theories of the 1970's and 80's, psychoanalysis as methodology deployed onwards and took emotions (such as pleasure and desire) and embodiment out of its traditional interrogations. While the writings of Jacques Lacan on the Mirror Stage (2006) and the Gaze (1977) are central for the discussion going on in this dissertation, I wish to go beyond the notion of the audience's identification and delve into the concept of subject as constituted through the interaction experience. In this sense, psychoanalysis will allow looking behind appearances and find the concealed mechanisms that empower the interactors while has the potential of contributing to understanding the formation of the interactive audience's subjectivity.

Also greatly inspired by Jacques Lacan, Sherry Turkle (1995, 2005) explores how the concept of the Self is reconfigured within the experience of cyberspace. The MIT researcher argues that psychoanalysis can play an exciting role to unveiling the consequences of people's communication with each other through machines, insofar as new technologies challenge our capacity and experience of self-reflection (Turkle, Essig, & Russell, 2017). Thus, psychoanalytical theory contributes to a critical and appropriate approach for inquiring the disruptive position of the audience in the new interactive non-fiction films. Specifically, this dissertation employs a framework which combines meta-critical theories in analyzing three interactive documentaries and scrutinizing form and content as well as the interaction process, as a lived experience that shapes the audience's subjectivity, and where "the gaze" emerges as a key concept.

The combination of different theoretical approaches and perspectives may seem conflicting with the development of a consistent epistemology. However, we must acknowledge the complexity of the interactive documentary's phenomenon, which comprises the indexicality of the lived world, the re-presentation of a fragment of the same world, an authorial perspective built upon the filmmaker's subjectivity, the technological mediated embodied experience and, equally important in this investigation, the spectator's subjectivity who accesses and manipulates a reshaped version of the existent world. By bringing together various arguments to analyze specific cases I will productively explore the strengths and the weaknesses of each research perspective. Such as Judith Mayne (1993) argues addressing her research on spectatorship, different theoretical approaches do not necessarily conflict. In fact, since each one of the theories focuses on various facets of the same object of study - spectatorship – the combination of several perspectives contributes for a broader and more complex approach that may meaningful inform a single and



unifying analysis. Furthermore, the conception of a more holistic approach provides further insight into the interactive experience and contributes to a deep perceptive analysis of the senses conveyed by the interactive non-fiction works during the interactive practice.

Once the theoretical framework for investigation was established, I selected a *corpus of study* for undertaking this research. Considering the longtime tradition of the National Film Board of Canada over almost eighty years and the cutting edge work developed in the interactive documentary realm, the Canadian public institution become the most challenging place for conducting this research. Albeit empirical research was never the purpose of this investigation, the access to the interactive documentary production process, to the digital creators and the insight into the interactive structure of the digital objects provided an outstanding opportunity for deep immersion in the field of study.

### **Why the National Film Board of Canada**

The National Film Board of Canada (NFB) is a governmental agency with public funding that produces and distributes documentary films, animation, and interactive documentaries. The institution was founded in 1939 by the mythical British producer John Grierson, considered as "the father of documentary film" (Ellis & McLane, 2005, pp. 120–122). Since then, the NFB has produced over 13,000 productions which have won "over 5,000 awards, including 8 Webbys, 14 Canadian Screen Awards, 12 Oscars and more than 90 Genies" (NFB, 2012). Albeit the NFB's foundation aims promoting the production and distribution of films in the national interest, in a time when film and particularly documentary served as propaganda, the institution is known by the pioneering and groundbreaking work and for constantly pushing the boundaries of documentary and animation forms.

Not only had the NFB marked the aesthetic evolution in several moments throughout the history of film, as also developed technological innovations, as the "Sprocketape", a portable sound recorder light-weight and synchronized with the 16 mm cameras, which allowed the evolution of the *Cinéma Vérité* and the *Direct Cinema* styles, and the development of the Imax film format

(Evans, 1991). In 2008, under the mandate of the visionary commissioner Tom Permutt<sup>24</sup>, once again, the NFB settled the trends regarding the most challenging and innovative direction for documentary film. Besides the NFB's core purpose established in 1950 in the *National Film Act*, "to produce and distribute and to promote the production and distribution of films designed to interpret Canada to Canadians and to other nations" (NFB, 2012), Permutt defined a *Strategic Plan* (2008) where is introduced the first NFB digital strategy, pointing out the digital transformation and its impact in audiovisual media. The NFB implemented Digital Studios, based in Vancouver and Montreal, that also work as research and development centers, and started producing documentaries featuring "interactivity, mobility, control of time, user-generated material" (National Film Board of Canada, 2008, p. 6), without neglecting "the importance of artistic voice and diversity of voices" (National Film Board of Canada, 2008, p. 7).

Therefore, the interactive documentaries produced by the National Film Board consistently express the authorial point of view argued in the first chapter of this dissertation as one of the fundamentals of a digital work to consider it an interactive documentary. Digital projects as *Highrise* (Cizek, 2009), *Bear 71* (Allison & Mendes, 2012) and *Circa 1948* (Douglas, 2014), among others, present a wide range of interactive strategies, always with an innovative approach to digital storytelling and grounded in the traditions of the public institution. *Highrise* (Cizek, 2009), for instance, is a digital project which comprises five interactive documentaries - *The Thousandth Tower* (2010b), *Out My Window* (2010a), *One Millionth Tower* (2011), *A Short History of the Highrise* (2013) and *Universe Within: Digital Lives in the Global Highrise* (2015) – and two dozens of derivative works, such as art installations, live performances and even a theatre play, portraying how people live in skyscrapers. Although each work developed within the *Highrise* project has its own characteristics, overall the digital interactive project is known by its collaborative approach, bringing together filmmakers, photographers, architects, 3D animators and also, in some cases, residents who were provided with digital cameras to capture their lives in high-rise towers and contribute with video features for the interactive documentary.

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<sup>24</sup>Tom Permutt served as Government Film Commissioner and Chairperson of the National Film Board of Canada from 2007 to 2013.

The approach resembles the participatory legendary project *Challenge for Change* (Kemery, Low, Dansereau, Forget, & Stoney, 1967), established and ran by the National Film Board from 1967 to 1980 and created with the intention of “giving a voice to the voiceless” (Waugh, Baker, & Winton, 2010). Imbued by the ethnographic practices of the 1960’s and concerned with issues of representation and power, as a strategy of self-representation among underrepresented topics and communities, the NFB provided to the communities the means to image-making practices and encouraged the members to film their representations of the issues that interest them the most. The project originated the production of over 200 films and videos, tackling social and political concerns, including the 29 well-known films by Colin Low about Fogo Island, produced with the purpose of facilitating economic development of the fishing villages on the island (Waugh et al., 2010).

Since 2008, the National Film Board produced over 70 interactive projects, in a pace of eight to twelve interactive objects a year in the more recent years. In 2013 the NFB renewed and updated its strategic plan by reinforcing the digital and interactive approaches and underlining an increased interest towards the audience’s participation. In the report *Imagine, Engage, Transform: a vision, a plan, a manifesto 2013-2018* (National Film Board of Canada, 2013), besides the overall aims previously settled, the NFB established the creation and distribution of “innovative and distinctive audiovisual works and immersive experiences” (2013, p. 5) as its mission, exploring the unique possibilities of the digital platforms and embracing the audience’s participation in the interactive works (2013, pp. 16–21).

By and large, during the last 15 years, the NFB has been taking the risk of experimentation by producing interactive media that extends beyond what numerous media producers have been creating in the interactive non-fiction field. Besides the social impact of the interactive documentaries produced by the NFB, as well as the novelty of providing the audiences the agency of manipulating and creating contents, the NFB digital works, thanks to the internet age, are broadcasted worldwide and achieved world notoriety. It is also conscientious to state that the NFB has been influencing the development of the interactive documentary realm as an art form, while simultaneously respects and preserves its heritage. For these entire reasons, it’s easy to understand why the National Film Board was considered the most suitable organization for receiving this research.

Moreover, the interactive documentaries produced by the NFB present experimental user interfaces and novel strategies to engage audience in diverse interactive experiences, from databases displayed in a desktop screen which allow a multilinear navigation, to diverse collaborative ways of constructing narratives, tablet applications, virtual reality experiences and walk-in interactive installations, fostering in the audience a more deeply involvement in the story. Such diversity of interactive approaches provide a diversified range of possibilities for analysis, ensuring that each sort, or mode, of interactivity, will be covered by the NFB's collection of interactive works.

### ***Corpus of Analysis***

Once it was granted access to the National Film Board facilities and interactive documentaries, I decided to focus my research in few interactive documentaries to allow a close and in-depth analysis of the interactive objects for the understanding of the phenomenon of audience's subjectivity in interactive documentary. Although each one of the seventy interactive documentaries produced by the National Film Board presents specific subject matters, features and ways of engaging the audience's participation it would be unrealistic to assume an elaborated and intensive reading of each one of them while simultaneously respect the doctoral program deadlines. Moreover, several projects, while relatively different, present similar agency forms and may be framed under the same mode of interaction<sup>25</sup>.

Therefore, considering the NFB's portfolio, three interactive documentaries were selected as objects of analysis, taking into consideration that each one of them may be regarded as paradigmatic examples of the different modes of interactivity purposed by Sandra Gaudenzi (2013): *hypertext mode*, *conversational mode*, and *participative mode*. As regards the *experiential mode* no significant examples were found to include in this study. By expanding the search, even to other production institutions, it was concluded the *experiential mode* of interactive documentary never had significant digital authorial artworks that could serve as examples of this interactive mode. Moreover, after an early enthusiasm with location-based non-fiction works the experiential

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<sup>25</sup> Following the modes of interactive documentary purposed by Sandra Gaudenzi (2013).

strategy of interaction rapidly dislocates from the documentary to the entertainment and marketing fields.

Studying the multiple modes of interactive documentary, represented by the three interactive documentaries carefully selected as a *corpus* of analysis, grants a broader and diversified understanding of the differences and the similarities between the cases, covering the wide range of interaction possibilities. Such sample composition allows analyzing the digital works both within each documentary and across situations.

Representing the *hypertext mode* of interactive documentary, *Bear 71* (Allison & Mendes, 2012) allows audiences to follow the story of a bear's life through Banff National Park. The film explores the connections between the human and animal world, and the far-ranging effects that human settlements, such as roads and railways, have on wildlife. This interactive documentary presents a perfect combination of linear and non-linear experiences and may highlight the audience's interaction and engagement in what Gaudenzi considers the most elementary level of interactivity within the interactive documentary modes. While the narrative unfolds during 20 minutes through the narration, users are allowed to freely move through the park's geography, following the Bear 71's movements and access further information about other Park species.

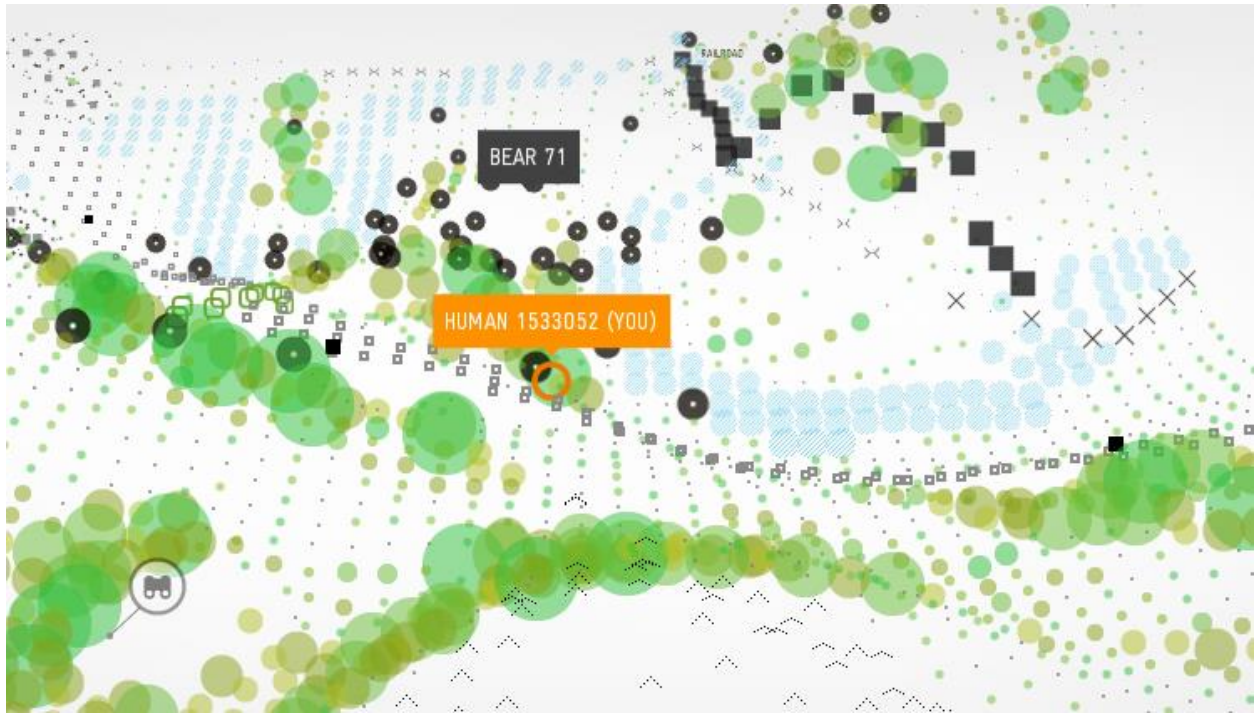


Figure 1. *Bear 71*'s interface (Allison & Mendes, 2012)

Albeit *Bear 71* interactive documentary may be considered a closed database of contents which doesn't allow the incorporation of external media content and, consequently, according to Sandra Gaudenzi, consubstantiates a lower degree of interactivity, the viewer is invited to turn on the web camera and receive back her or his own image at the end of the interactive documentary. Also, despite its almost linear narrative, such feature could be an essential asset to this research to understand the audience's perceptions when interacting with documentaries with low levels of interactivity.

Regarding the *conversational mode* of interactive documentary, within the NFB's collection, the interactive documentary *Fort McMurray* (Dufresne, 2013b) was selected for analysis. Portraying Fort McMurray, the region in Alberta, Canada, known by the oil exploration and the subsequent environmental and social problems, this digital non-fiction film incorporates game elements and allows audiences to decide the virtual city's future, while attempts to engage the users in virtually developing the world's third largest oil sands reserves with a sustainable strategy. *Fort McMurray* sets a more complex and evolving sort of interactivity, with a fundamental

interactive structure that intends to be dynamic, providing a multifaceted experience to its users. Moreover, the embodiment of the main character's role within the experience will allow analyzing the phenomenological experience of spatial-temporal dimensions, in an immersive and self-centered interaction, without neglecting the indexicality of the imagery and of the subjects represented, which ensure a perceptual cinematic subjectivity.

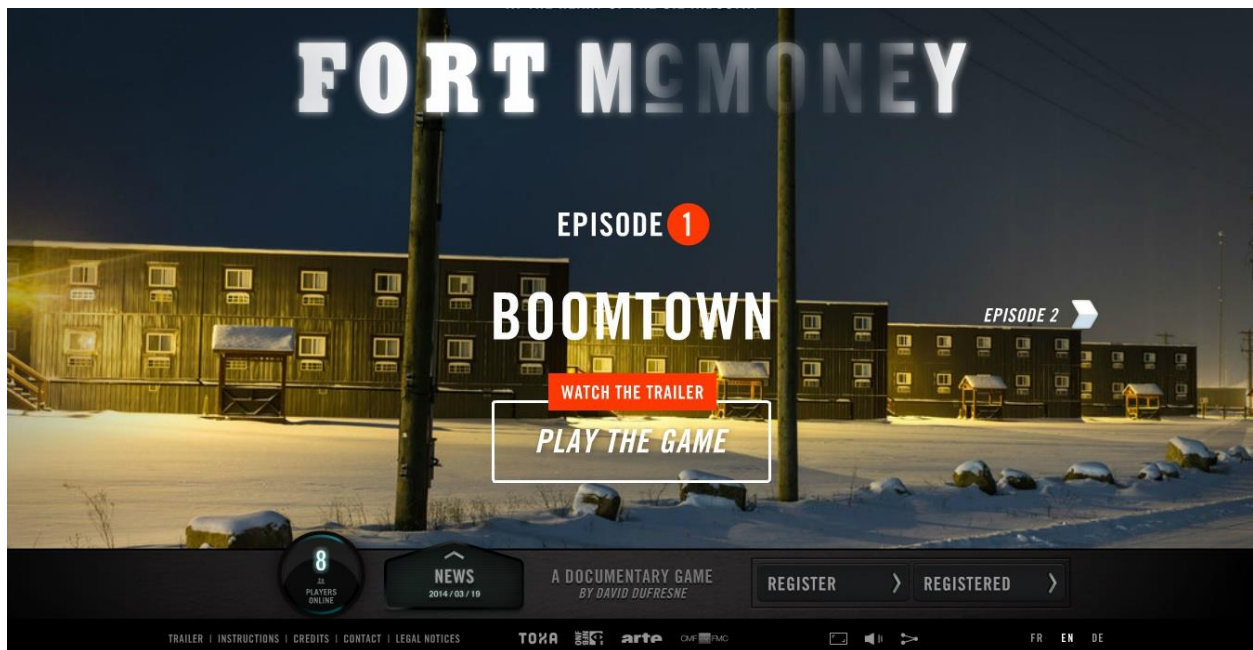


Figure 2. *Fort McMurray*'s episode 1 (Dufresne, 2013b)

*Fort McMurray*'s analysis will also contribute to an understanding of the spectator's perception of the world represented since the camera embodies the first-person point of view and enhances the development of a self-centered gaze. While this interactive documentary forges the perspective of human vision, it also disrupts the fluidity of a linear narrative. Applying and expanding a phenomenological notion of embodiment and perceptual subjectivity provides insight of how the spectator theoretically interacts with the conversational interactive documentary from both imaginary and diegetic perceptions.

The third digital object selected for the unit of analysis is the participative interactive documentary *A Journal of Insomnia* (Choiniere et al., 2013), framed within a mode of interaction that according to Gaudenzi (2013, p. 250) holds the highest degree of interactivity. Firstly, this

multi-awarded documentary presents four testimonies of individuals suffering from sleeping disorder who share their experiences of sleeplessness and talk about how insomnia affects their lives. This core media content with the four insomnia stories was produced, filmed and edited by the National Film Board of Canada. Secondly, the interactive documentary *A Journal of Insomnia* allows the audience contributing for the documentary's archive by sending their video content and sharing their own stories about insomnia, gathering all the testimonies in an overgrowing archive of content which assembles close to three thousand contributions<sup>26</sup>. The high degree of participation is a key factor for understanding audience's interpretation of self-representation and collaborative audience's experience.

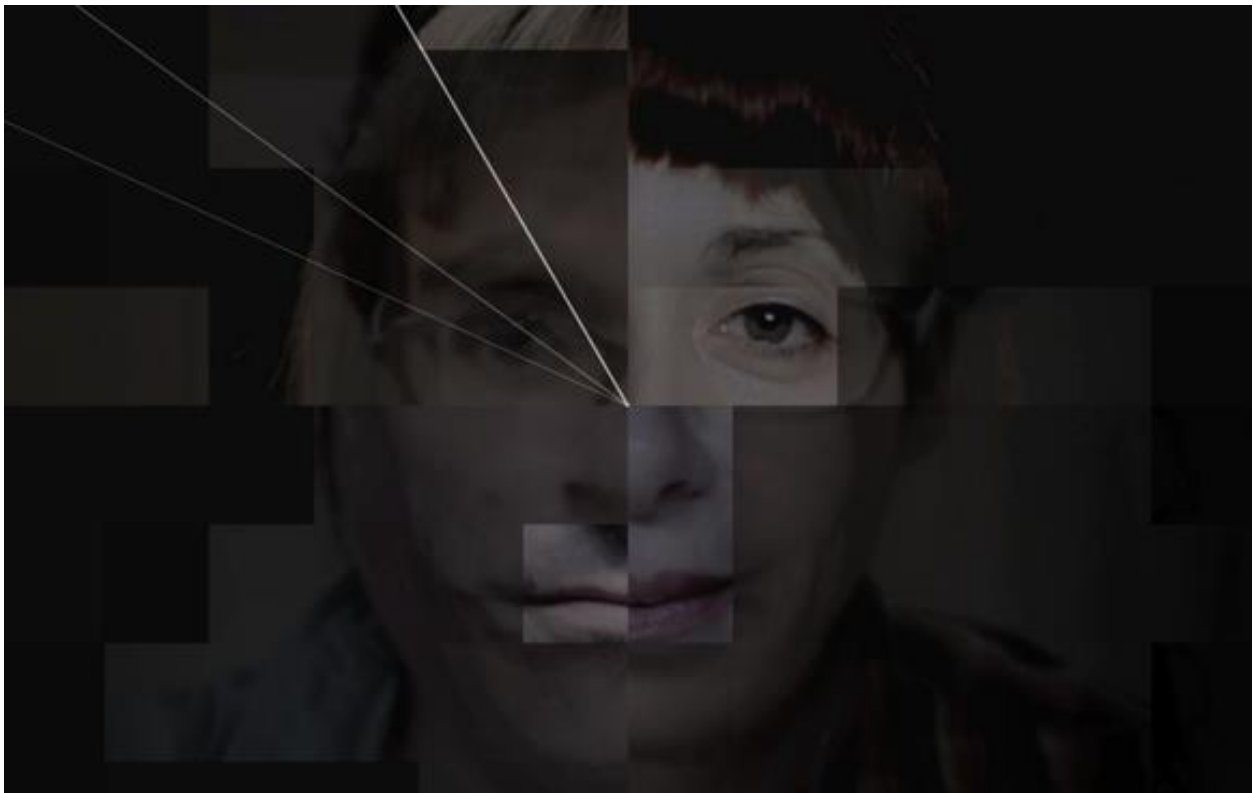


Figure 3. *A journal of Insomnia's* interface (Choiniere et al., 2013)

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<sup>26</sup> Between September 2012 and December 2015, the interactive documentary *A Journal of Insomnia* gathered and published online 2967 contributions. Data provided by the National Film Board of Canada.



The documentary *A Journal of Insomnia* allows the joint participation in a collective practice of self-representation and shared experience, which occurs through constant negotiation with notions of the Self and the others. The subjective experience of interactive documentary, mediated, enhanced and developed by collaborative virtual environments, becomes a process that surpasses the one's perception and creates empathy with the other's lived reality, fostering the construction of an intersubjective shared experience. Such encounter between the Self and the Other contributes for the spectator's realization of her or his position towards the world and even for the juxtaposition of the two entities as part of the same phenomenon (Merleau-Ponty, 1968). From this perspective, the meaning is no longer the possession of a single person but becomes an intersubjective space of mutual understanding.

Also, during the mediated interaction experience, the spectator may be confronted with both her or his own reflected image and the images of other participants. Thus, the analysis of this intersubjective experience is also central to exploring the formation of individualities and understanding the concept of the mediated Self, following a psychoanalytic approach to describe the type of identification a spectator is allowed to engage in participative interactive documentaries.

PART II

*Corpus of Analysis*



## CHAPTER 4

### BEAR 71: A VIRTUAL PANOPTICON

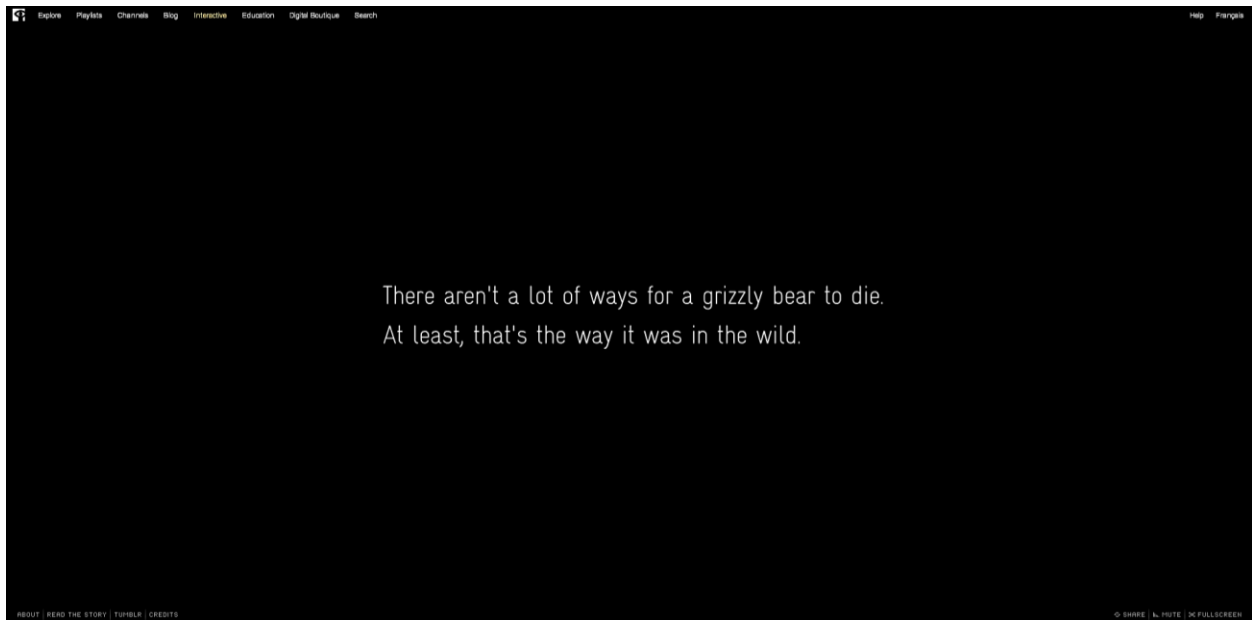


Figure 4. *Bear 71*'s opening sentence

The opening sentence in the *Bear 71* interactive documentary (Allison & Mendes, 2012) should come with a spoiler alert. Since the beginning, we became aware that the female bear, who will address us during the documentary, will die due to unnatural causes. *Bear 71* is an interactive documentary, which portrays the life and death of a female grizzly bear at Banff National Park, in Alberta, Canada. Created by Leanne Allison and Jeremy Mendes, under the Digital English Program at the National Film Board of Canada, the documentary explores the intersection between wildlife, humans and technology, and raises awareness about privacy and control in contemporary society.

Leanne had access to thousands of hours of footage, captured through remote surveillance cameras during ten years, portraying animals and visitants in the park. Among the footage, there were images of the bear number 71, tagged with a GPS surveillance equipment when she was three years old. The park rangers tracked the bear's movements over eight years and, through motion-activated cameras placed throughout the park, captured scenes of her daily life, allegedly to protect her. All this information allowed the reconstruction of the life of the documentary's character Bear 71: her daily habits, the obstacles she faced, the three litters she raised, the encounters with humans and, ultimately, her death.

Leanne Allison identified and tracked the story and the images of this particular female bear, proposing to focus the narrative on her life. At first, she pitched the idea to NFB as a traditional linear documentary, but the low-resolution images would not be suitable for a large theatre screen. As the NFB considered the story a powerful subject matter with intriguing elements, the digital team proposed Leanne to direct an interactive documentary. Leanne Allison and Jeremy Mendes, creative director and digital creator at the digital studio, went through the footage during around six months. While watching and selecting footage, still images and information, the creators came across not only with the topic of human impact in wildlife but also with the concept of surveillance and how technology enhances our ability to infringe someone's privacy. That is what was happening while they were watching all the footage of Bear 71.

Jeremy Mendes says that he "immediately saw this as surveillance of animals rather than documentation, regardless of the park's intention" and he also saw parallels between animals and humans in a "moment when we are watched more than ever" (J. Mendes, personal communication, October 28, 2015).

The interactive documentary *Bear 71* mixes linear and non-linear experience, combining a linear soundscape narrative with free navigation through the interface, which represents the topographic details of Banff National Park. The interface was created by Toronto based company JAM 3, using Flash to allow a continuous narration of the story. Bear 71's voice, performed by Mia Kirshner, tells us her life story, her encounters with humans, and how she constantly bumped into technology: "It is hard to say where the wired world ends and the wild one begins". All these constraints and the ever-encroaching human presence in the bear's natural habitat forced her

adaptation and affected the animal's instincts developed through millions of years: "the first rule of survival is don't do what comes naturally" (Allison & Mendes, 2012).

Right at the beginning of the interactive documentary, the audience receives some instructions for the interaction experience: how to navigate with the keyboard; how to use the mouse; the possibility of interacting with the webcam, asking permission to activate it (which the user may refuse); and information to turn on the sound.

While listening to the female grizzly bear's story, the audience can follow Bear 71 movements, as well as trigger several windows with surveillance images and information of different animals: elks, foxes, golden eagles, wolves, and deer mice. Such as Bear 71, each animal is identified with a number, as well as each human that accesses the interactive documentary. By clicking on their markers, the viewers reveal a group of surveillance feeds with several animals, including their video feed, through the webcam.

*Bear 71* it was launched on January 13th, 2012. Along with the web-based interactive documentary, the NFB team presented an augmented reality interactive installation, at Sundance Film Festival's New Frontier in Park City, Utah, on January 20th. The installation presents a large image of the same Banff National Park's stylized map projected onto the gallery walls. By using an iPad, the audience can select video from specific points all over the park, selecting one of the trail markers, and add an extra layer with the video recorded from that trail marker's camera. Next to the interactive installation's screen, it was placed another large screen playing the interactive documentary as seen on the main website.



Figure 5. *Bear 71*'s interactive installation at the Sundance Film Festival (The National Film Board of Canada)

By the time, *Bear 71*'s executive producer Loc Dao, described the installation experience as the following:

Online, the user faces the disconnection from nature by the very form they are using — sitting in front of their computer. Similarly, at the installation, the viewer is out of their element, being in a public space, and like many of us who live our lives through iPhones and digital cameras, the user at the installation experiences the grandiose 24-foot wide digital grid world of *Bear 71* through a tablet app, limiting their view of the bigger picture and giving them safe distance from what's happening in front of them. (Aziz, 2012)

Besides the interactive installation, the documentary *Bear 71* was also presented as a live performance with Jeremy Mendes and Leanne Allison playing a director's cut of the interactive documentary, with live musical accompaniment by Tim Hecker, Loscil, and the cellist Heather McIntosh. The live performance had several public presentations, namely at St. Andrew's-Wesley United Church, in Vancouver, during DOXA Documentary Film Festival, May 2012, at IDFA, in Amsterdam, in November 2012, and in a live concert hall in Montreal, in November 2013, which Siobhan O'Flynn assisted and reports:

What we lost in our positioning as spectators were offset by the physical enhancement of the live cello accompaniment, though the immersion I experienced had much to do with the scale of the projection and the cinematic quality of the unfolding narrative. Here the experience was designed for spectators, rather than interactors... (O' Flynn, 2016)

Finally, in 2016, IDFA challenged the National Film Board of Canada to reimagining *Bear 71* as an immersive Virtual Reality installation, included in a program the organization titled "Elastic Reality", with the aim of crossing the boundaries of the internet in non-fiction works. The Virtual Reality experience of *Bear 71* enhances the immersion in the park and momentarily suspends the perception about the surrounding space, but the interface and interaction design remains very similar to the web-based interactive work.

### **From Linear Sound to Interactive Navigation**

A black screen with the NFB logo is the entrance doorway for the documentary *Bear 71*. The black background remains and an informative message is displayed: "This is a 20 minute Interactive Documentary" and time starts to count down with a timer on the upper left side of the screen. Such message prepares the audience to the following experience, making them aware of the documentary's length but could also be interpreted as a control mechanism, since time and space are, according to Foucault (1995)<sup>27</sup>, elements for coercing individuals. Also, the information about the documentary's length may be regarded as a sign that we are about to experience an interactive documentary with, somehow, a linear narrative or at least that we cannot control its duration.

Along with the timer, nine small square screens flicker with black and white surveillance images, exhibiting animals in what appears to be wildlife. Images jump from one animal to another, in a zapping attitude, interspersing footage with magnetic dropouts. These images have a coincident aesthetic with the urban surveillance cameras that we are used to, presenting a diffused

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<sup>27</sup> *Discipline and Punish: The Birth of the Prison* was originally published in 1975 in France under the title *Surveiller et punir: Naissance de la Prison* and was translated into English in 1977.



and blurry quality, fuzzy and grainy, in what Patricia Pisters (2012) considers to be the “Affective Aesthetics of Surveillance” (pp. 106-110). The images go along with dramatic music by Tim Hecker which suggests stasis, immersion, and a state of dreamy contemplation. The structured and repetitive tone triggers a pervasive tension that never really dissipates and evokes a relatively lulling effect, but the mood remains dark and uneasy.

After the presentation and the main credits, a message unveils the narrative’s denouement: “There aren’t a lot of ways for a grizzly bear to die. At least, that’s the way it was in the wild”, and the interactive documentary starts with a linear video of 1:45 minute. The introductory video works as a contextualization about Bear 71, introducing to the audience the character and her environment. The bear seems to be restless, tied in with rope and struggling in the woods between trees. We see a park ranger preparing to shoot the bear with a sedative. The low-resolution images are filmed with a handheld camera, with some zoom-ins to focus on the main subject filmed, in an aesthetic similar to amateur home movies. The imagery presents several size shots, varying between full, medium shots and, mostly, close-ups to reveal details of the park rangers’ work.

Meanwhile, the voice over provides several information about the process of capture, the tranquilizer, the radio frequency device attached to the bear and the number assigned to the animal: Bear 71. The first time we listen to the bear's name, or number, the animal is facing directly the camera, in a close-up shot, gazing the audience. The bear’s voice, performed by the actress and activist Mia Kirshner, with a calm and sad tone, speaks in the first person, embodying the bear’s position. Therefore, within this dissertation, and considering the anthropomorphic nature of the bear, we will address the animal by “she”.

Bear 71 is released and runs into the wood for freedom. However, to what extent is she free? How can she be free being under constant surveillance? Does the argument of protection justify the control and infringement of privacy? Several questions can be raised just by watching the introductory video, while we observe Bear 71 running away.

From a black screen to a white background. From a linear video to an interactive environment. From a moving image segment to an interface with an audio soundtrack. When the introductory video fades out, the audience is presented with a stylized map of Banff National Park, representing the geographical landforms of the territory, such as the Castle Mountain, the Bow

River, the Lake Louise, the Trans-Canada Highway and the Canadian Pacific Railroad. The audience is allowed to freely navigate through the park and explore the footage from several surveillance cameras, marked with spots which open up small windows when activated. Meanwhile, the female voice keeps providing information about the park, the surveillance cameras and the radio frequency devices, always in the first person as if the Bear 71 is communicating with the audience.

Each spot represents an animal, such as coyotes, elks, wolfs, foxes, etc., and when pinpoints are activated open up windows with the surveillance footage and further textual information about the animal is displayed. An interesting detail is that each animal is identified with its number, similarly to what also occurs with humans that are navigating in the documentary. As users, we are able to identify our location in the park, the location of other humans that are interacting at the same moment, and all animal's position. The use of numbers to identify both animals and humans may be regarded as a sign of authentication, since creators are indexing the animals to their assortment in the park, but also makes the audience aware that in the digital world we all are numbers.

Eleven chapters addressing different topics of the bear's habitat break down the interactive documentary. The chapters automatically display and Mia Kirshner's voice brings to life Bear 71. Although the interactive documentary is split into parts, the oral discourse ensures a continuous and builds a unified narrative with a linear story that comprises a beginning, a middle and an end. The story also unfolds through a dramatic structure with a narrative arc, to move the character from one situation to another and take the audience with her, culminating in a climax.

In the first chapter, entitled "My home range", Bear 71's voice provides the audience a context, both geographical and conceptual, and creates a sense of attachment to the character. The content of the spoken message is not unbiased. Between the park information, Bear 71 complains to be under surveillance, observed by "15 remote-sensing cameras, plus infrared counters, and barbed-wire snags to collect my hair" and intuits "that explains the radio caller constantly beeping my location to some ranger playing God".

Furthermore, Bear 71 lives close to Canmore, a town that "doubled the size in the past decade and it gets five million tourists a year" (Allison & Mendes, 2012). The demographic impact

in the grizzly bear's life is significant and Bear 71 warns that "there used to be grizzlies all across the Canadian Prairies, and now there aren't any. Not one. We have been pushed into the mountains" creating a survival challenge to grizzly bears. Bear 71 continues arguing: "thing is, you can take grizzly out of the prairie, but you can't take the prairie out of the grizzly", drawing attention to the fact that bears need their habitat to survive. Also, the main character Bear 71 requests the audience to think about the bears as refugees, forging an identification with human beings again and appealing to an empathic feeling.

During the second chapter, "The first rule of survival", Bear 71 complains that massive tourism brought to the valley many unknown smells that affect animal's abilities to detect prey and predators. The introduction of alien elements disrupted the delicate natural balance and threatens the animal's survival. Therefore, Bear 71 has trouble to find food or to protect herself and her cubs from dangers and concludes that "when the first rule of survival is don't do what comes naturally, of course it's not going to be easy".



Figure 6. Pop-up window of Bear 71

Also, human presence introduced into the valley "thirty-five cell phone towers transmitting 3G data, voice over IP and text messages around the clock", making evidence of how ubiquitous technology is nowadays. As Jonathan Crary argues, individuals feel the need to be "constantly engaged, interfacing, interacting, communicating, responding, or processing some telematic

milieu” (Crary, 2013, p. 15). Moreover, Bear 71 unburdens: “it’s hard to say where the wired world ends and the wild one begins”.

On the third chapter, "a mother bear is a cautious bear", Bear 71 unravels arguments to show the human impact in its life. The freeway and the railroad split the valley into the middle and cars and trains become part of the park's daily life. "There's a freight train every hour" and "one car every five seconds". Although there are underpasses and overpasses along the freeway, "there's nothing 'natural' about a grizzly bear using an overpass". The train is even more dangerous, because “there’s no safe way to cross the railroad” and cars leak grain along the railway. “Since 2000, 17 Grizzly Bears have been killed in the Bow valley due to railway fatalities”.

During the first six months, after Bear 71 was wired, park rangers used to chase her and shoot rubber bullets to stop undesirable behaviors. Bear 71 says "they call it 'aversive conditioning'. I call it rubber bullets", which is the fourth chapter's title. And she continues explaining that "even at a distance of a hundred feet, a rubber slug is still moving at 650 kilometers an hour."

The chapter opens a full-screen video and takes the audience back to footage images. A still camera portraits an underpass of the freeway, filmed in a wide, colored shoot with the camera in a low angle, in which we can see Bear 71 crossing the freeway and coming in our direction. The camera stays still and a group of tourists walks in the opposite direction. Then, Bear 71 returns to the other side of the freeway through the same underpass and a moose slightly intrudes into the frame. Somehow, with the moose peeking at the camera, we are reminded there's always someone behind technology watching our steps.



Figure 7. Full video screen in chapter 4

All along within the video segment, the female voice keeps embodying the main character's persona, thinking about her youth and memories, lulled by a sad piano's melody. Bear 71 returns to the surveillance topic, relating to her radio-frequency collar to trace her location and protect the park visitors. Doing so, she is also addressing surveillance in urban life and raises a very pertinent parallel: "I suppose is like most of the surveillance that goes on today – it's partly there to protect you, and partly to protect everybody else *from* you".

In the fifth chapter, "what looks random probably isn't", Bear 71 tells a story of a man stretching his quads in a rubbing tree, laying back, eating chocolate and updating his Facebook status, as if he had forgotten why he stopped there. It happens, that was not an ordinary tree. That tree happens to be the one rubbed by bears and by other animals. Bear 71 uses this metaphor as an example to address the unknown forest language, considering environment has its natural order, and to state that it will not be through surveillance cameras and test tubes that humans will understand and learn that language.

The main character keeps telling her life story. "Cubs change everything". She tells us about the dreams she had before maternity and how cubs constrain her to move away from the valley. She raised three litters of cubs, eating berries and hunting invisible elks. On chapter six, Bear 71 starts enunciating that something fateful is about to happen: "what I really want to

understand is this: I was a good bear. I didn't knock over anyone's garbage cans. I didn't break into anyone's mobile home." This feeling of being misunderstood remains on suspension, and she moves on, again, addressing cameras, surveillance and technology. There's a "video camera in front of every train. Why? Liability – to keep a record in case of an accident". Of course, for the female bear, this is a pointless decision, because the train it will be “unstoppable” if something gets into the railroad.

On chapter seven, Bear 71 keeps addressing the interference of humans in wildlife and unveiling the inconsistencies between words and actions. While human activities were responsible for the extinction of passenger pigeons, there is ongoing research to extract DNA from a specimen and reproduce the bird artificially. Also, Bear 71 questions how some humans “can start a revolution on a smartphone, but can’t remember to close the lid on a bear-proof garbage can”.

On chapter nine the music stops. Winter is coming and silence gives rise to the sound of the cold wind blowing. With a poetic tone, Bear 71 describes a white and icy landscape and the soundscape transport us to an inhospitable scenario:

There are times when the human world seems to disappear, like when an early snowstorm shakes the trees all night, and all the noises are muffled and the footprints go back to their houses – and an older version of the world continues. (Allison & Mendes, 2012)

The weather is used to address famine and the hardship of mother and cubs to find meat before went into the den to hibernate. "You can't eat technology" is the title of the ninth chapter. Bear 71 uses, once again, the word “unstoppable” to address the following events as unavoidable consequences. “Looking backward from any single point in time and everything seems to lead up to that moment.”

Chapter ten opens a full-screen video with images from the train camera, with the sound of Glósóli, by Sigur Rós. It presents a traveling shot following the railroad, with snow around and on the top of the mountains ahead. Bear 71 and her cubs were sniffing for grain along the tracks when the train takes them by surprise. We can see three still black and white images placing Bear 71 and her cubs in the train trail.



*Figure 8.* Subjective travelling shot of the train



*Figure 9.* Bear 71 and her cubs in the train rail

As audience members, we foresee what's coming and the inability to prevent Bear 71's death make us feel powerless. The tension raises and the video segment uses parallel montage, intercutting the train's point of view shot with Bear 71 facing the unstoppable train, increasing the sense of anxiety.



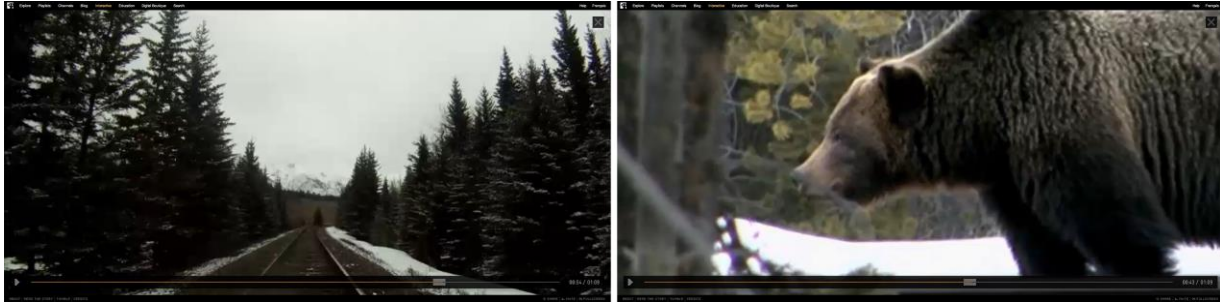


Figure 10. Shot and reverse shot of the train's POV

Suddenly, the moment of the impact is replaced by a black screen, using dropouts as an aesthetic appeal for the transition between shots, and dipping into black. It is a one-minute powerful video which intersects the color image from the train camera with black and white still images from surveillance cameras of the park.

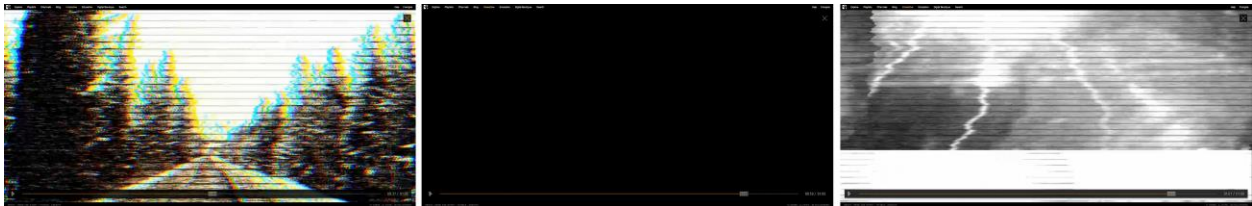


Figure 11. black screen interleaved with drop-outs.

The full-screen window closes, in fade-out, and the audience is driven back to the topographical interface, led by the continuous music by Sigur Rós as if the creators decided to provide the audience a moment to breathe after the shock of witnessing the death of the main character. But the truth is, we do not see the precise moment of death. The "decisive moment", as Robert Capa would call it, is replaced by a black screen, maybe because, in an act of respect for Bear 71's privacy (something she never had during her life), the creators decided to veil one of the most intimate, almost sacred, moment of someone's existence – her death.

After a brief moment, the full-screen comes back and a point-of-view camera shot shows us the park rangers approaching. The image fades out and we start seeing a bear in the railroad. The Bear 71's voice keeps talking to us about her deepest feelings. What is a mother's greatest fear? To die and leave her cubs alone. Bear 71 expresses her concerns:



I keep telling myself she can make it. But she shouldn't be out there alone, you know? She's just starting her second year. She was already tagged with her own radio frequency signal, and has her number – she is Bear 107. (Allison & Mendes, 2012)

A time-lapse of an extreme long shot shows us Banff National Park and Tim Hecker's soft and emotional music returns to cuddle Bear 71's confessions:

For eleven years I did everything right, and then I made a mistake. Now, my cub is on her own. More than a million years of evolution have prepared her to live in the wild, but let's face it, the wild isn't where she lives. (Allison & Mendes, 2012)

The narrative's *dénouement* unveils a cyclic story when Bear 71 talks about her daughter and denounces the fact that the young cube is already tagged and numbered by the park rangers. Also, expressing her concerns as a mother, Bear 71 proceeds interrogating the human interference in the natural ecosystems and how technology is disrupting animal and human lives, while the screen splits into nine windows displaying surveillance images from different animals, similarly to the design displayed at the beginning of the documentary.

As regards the interface, *Bear 71* interactive documentary has a very simple interaction strategy, although it is quite engaging due mostly to the voiceover that drives us throughout the story. The wireframe is composed of a single white and minimalistic design screen, representing Banff National Park with its landmarks. The virtual territory is divided into eleven sections, with x and y-axes, to guide the audience through the park's map. Bear 71 herself describes the documentary interface as "the grid". By triggering a hyperlink on the top right corner of the screen, we may access this documentary's feature, which spots our position within the park, Bear 71's position and other characters' locations, as well as discloses the explored and unexplored regions of the park.

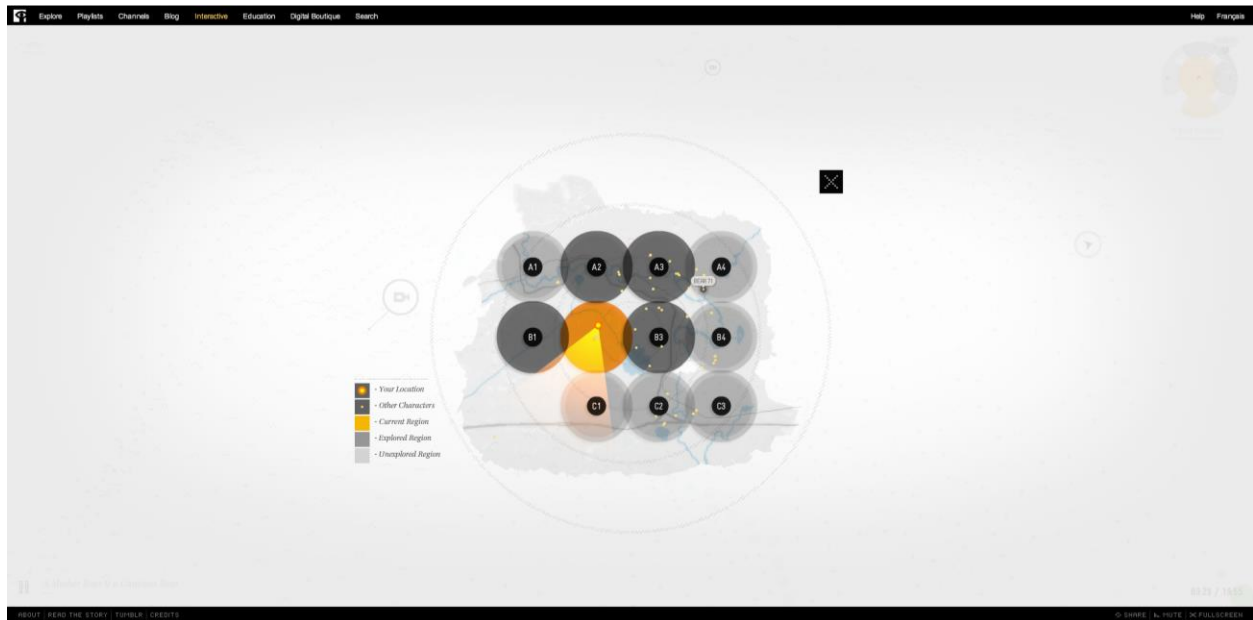


Figure 12. *Bear 71*'s interface "grid"

While navigating throughout the park, the audience will find several interactive signs representing different animals, each one identified with its number. The spots are continually moving, simulating the animal's course, and can be triggered to reveal video feed and textual information about the animal. Each time an interactive sign is activated a pop-up window opens, overlaying part of the screen. The audience can also choose to follow the character Bear 71, by clicking on her marker, as she moves through the park, in line with the story.

As the story unfolds and Bear 71 moves around, small black dots reveal her footprints in the screen, tracing her path through the park. Her tracks remain carved in the interface, for marking her territory. At the end of the story, after Bear 71's death, the interactive sign remain immobile, lifeless, next to the train rails, at the place where the bear died.

Considering the interactive signs are activated through clicks on hyperlinks, even if they present an unusual configuration, we may frame the *Bear 71* interactive documentary within the *hitchhiking* or *hypertext mode* (Gaudenzi, 2013, pp. 47–53). *Bear 71* also responds to other characteristics, listed by Sandra Gaudenzi, to be considered a hypertext interactive documentary: presents a closed, or pre-established, database; videos and contents are limited in number and duration; therefore, there's no space for the unexpected; contents are activated through hyperlinks; and the starting point of the narrative is fixed (Gaudenzi, 2013, p. 49).

In fact, regarding the documentary *Bear 71*, the entire narrative is fixed and elapses using the sound storytelling. We may even consider that the interactive component is optional, insofar as the documentary does not necessarily demand an action to keep evolving. Indeed, if the viewer remains inactive during the documentary, the story will unfold continuously through time.

Sandra Gaudenzi also considers that the *hypertext mode* is closed to external elements and doesn't allow incorporating additional contents. Although *Bear 71* is framed within this interactive documentary mode, we must acknowledge that the artwork allows the incorporation of the webcam feed, portraying the viewer as an imagery resonance of the Self.

Unlike most of the *hypertext mode* interactive documentaries, *Bear 71* doesn't sustain the narrative in a multilinear structure of branching the story, since there are no alternative paths to be chosen. Alternatively, should be considered a multilayer journey, providing the audience access to several layers, or frames, of information and control on the object displayed on the screen. Since the documentary's narrative relays mostly on a linear sound story, to properly demonstrate the navigation structure I draw a timeline, with a chronological development through time but which allows the non-linear navigation around the space. In specific moments the documentary displays a video in full-screen and denies to the audience the ability to interact with the windows of the surveillance footage. Therefore, the documentary's structure may be represented through the following scheme:

**Bear 71's Navigation Timeline**



Diagram 1. *Bear 71's* timeline

The digital artwork *Bear 71* may be regarded as a transitional interactive documentary, where old narratives and new interaction strategies meet, by combining a linear sound narrative with a random navigation environment. In this interactive documentary, the linear soundscape is the element that sustains the narrative progression throughout the story, and while the chronological sound narrative drives the audience throughout the story and discloses Bear 71's life journey, the audience is provided with the experience of delving into other species' information, opening window by window and diving in deeper degrees of interaction. While the story progresses in a chronological, horizontal axis ( $x$ ), triggering the several pop-up windows allows drawing a vertical axis ( $y$ ) to translate the navigation's depth.

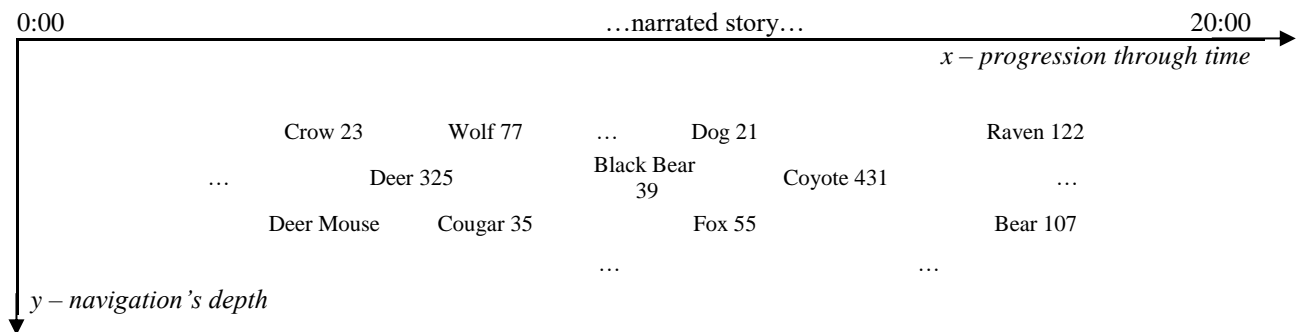


Diagram 2. *Bear 71*'s progression through time and in depth

Multiple frames and juxtapositioning of frames (or windows), rather than a single frame, provides the screen onto the video and immerses the viewer in the interactive documentary varying depths. Such interaction strategy corresponds to what Lev Manovich describes as “spatial montage” (Manovich, 2001, pp. 322–330). Instead of sequencing the information one after the other, the viewer may access several windows of micronarratives simultaneously. The several layers of information contribute to a higher degree of familiarity with the park's fauna and landscape and grants additional footage for enhancing the awareness about surveillance. The strategy of overlaying several windows of information intends to present the multiple facets of the subject matter, as well as providing a network of interrelated data holding its own semantic meaning. While navigating, the audience's multilayered experience allows the interaction of

dispersed content and entails multiple perceptions and apperceptions<sup>28</sup>, as well as apprehensions of the symbolic significance of the represented subjects.

Regardless the action of triggering the additional information displayed in the pop-up windows, the story progresses through time towards the documentary's end. The audience does not hold the control of manipulating the temporality by re-arranging the narrative. The interactive documentary provides instead the freedom of navigating through space, virtually visiting the park's land and roaming around the territory. The experience becomes the exploration or navigation of a topological and geographical space. Instead of expressing the filmmaker's perception through an unfolding time, the digital body of the documentary presents a multidimensional unfolding space and through time.

Although the interactive documentary *Bear 71* develops employing a time-based chronological narrative, the digital body of the documentary as well as the interaction experience do not express the filmmaker's and the audience's perception through an unfolding time, but rather through a multidimensional unfolding space and through time. The digital object follows an aesthetic of navigation where the audience is allowed to freely explore the park, represented by the documentary's interface, and wandering through the virtual space. The experience becomes the exploration or navigation of a topological and geographical space, provided by both the documentary's interface and the immersive soundscape.

Moreover, there are four central moments (introductory video, chapters number four, number ten and eleven) in which the interaction is denied to the audience, as the video plays in full screen and doesn't allow triggering the interactive signs unless the viewer closes the full-screen video as skips part of the documentary. During these segments, *Bear 71* embodies the "voice of God"<sup>29</sup> and requires the audience's absorption into her life's description. Such interaction strategy, or the deliberated denial of interaction, demands from the audience full attention to the video and

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<sup>28</sup> In this context "apperception" should be understood under the phenomenological Allan Casebier's perspective (1991), where representation is discovered and experienced through a selective recognition of what is being represented. Thus, the audience's perception is a selective recognition of the objects represented through the experience of "living through" (or "interacting through") the digital documentary.

<sup>29</sup> The term "voice of God" is used by Bill Nichols to address the documentary's narration where the filmmaker (or a narrator) presents a scripted commentary to guide the audience through the film.

converts the interactor back into a spectator. The audience loses a degree of autonomy and becomes exposed, as much as immersed, to the documentary's intended meaning.

Also, the interactive documentary *Bear 71* engages the viewer into a participatory feature. By enabling the computer webcam, requested at the beginning of the experience, the spectators become part of the digital artwork. After chapter eleven, the interactor is confronted with her or his own image displayed at the screen's center and placed next to the animal's park surveillance images. Such characteristic interplays the subject the desire and pleasure of looking at the park's species with its awareness that one can be viewed and surveilled. Under this "gaze" effect, as described by Jacques Lacan (1977, pp. 67–121), the interactor realizes that is a visible object and loses a degree of autonomy. The audience becomes a *voyeur* of their own spectacle.

### ***Bear 71's* Conclusions**

*Bear 71* presents a narrative unfolding on tensions: the tension between animals and humans, the tension between wildlife and technology, the tension between linear sound and non-linear navigation. The antagonisms not only create the narrative arc as they instill in the audience the desire of proceeding listening and interacting with the documentary. The tensions also anticipate several possibilities within the story and induce uncertainty about the character Bear 71's destiny, which makes the audience engage emotionally and physically in the interactive documentary.

The pervasiveness of observation all through the narrative allows the audience nurture a more profound sympathy with the wired animals and engages the viewer deeper into the story. Simultaneously, the interactive documentary *Bear 71* also provides the audience with the excuse of experiencing a voyeuristic overview on the animal's lives, creating a feeling of almightiness over the characters watched. The computer screen becomes a "rear window" (Hitchcock, 1954), enabling the audience into a visual stalking. Leisurely and, as far as the viewer thinks, privately, from his personal space, the spectator observes the animal's lives. However, we must acknowledge that, such as in James Stewart's case, the point of view accessed by the audience is merely the one

provided by the surveillance imagery, a framed, partial and fragmented perspective of the non-human characters.

Moreover, *Bear 71* is a meta interactive documentary, using technology to raise awareness that the technological *dispositif* itself is encroaching our lives. While interacting, the viewer is enhancing the technologies of control. His digital traces are recorded, gathered, stored, processed and manipulated as a form of accumulating data on user behavior. Passively and, in most cases, unconsciously users collaborate participating voluntarily in an infinitely extendible "panopticism".

Following Foucault (1995), in a panoptic system, the prisoner is the one that ensures the power's operationalization, insofar as the individual never knows for sure if he is the one being watched within the architectural space. The interactive documentary user is watched but cannot see who is watching him, although he is aware that surveillance could be practiced at any time, and this feature constrains him and forces him to behave as if he is being watched all along.

In this post-disciplinary society, the "individuals are no longer confined to particular spaces that discipline them (prisons, schools, hospitals) but can move freely while nevertheless being constantly watched and controlled" (Pisters, 2012, p. 102). In this case, the viewer, or in Foucault's words, the prisoner, embodies the surveillance dispositif itself and carries it at every moment. The system induces in the observed audience the feeling of being under surveillance all along, even if isn't happening at that particular moment. The individual himself generates his own subjection and, conformed, accepts it, and can even actively participate by constantly developing this state of submission.

*Bear 71*, both the interactive documentary and the animal, encourages a strong identification with the audience by intrinsically articulate two main narrative documentary's components. One of them is the narration, comprising both the story and the performed voiceover, and the second one is the strategy of using the webcam to engage the viewer in a panoptic of surveillance.

As regards to the first component, while the interactive documentary unfolds, we can listen to the soundscape, which rebuilds ambient sounds from the park, placing the audience in the exact space and time narrated, and the different moments of the story are underlined with music to



enhance the dramatic effect. Nevertheless, Mia Kirshner's voice is the sound that captures our attention. The profound and intimate narration or voice-over counterbalance the shortage amount of cinematic images in the interactive documentary. By the selective hearing, the voice intonations draw most of the audience's attention, responding to what Michel Chion calls "vococentrism": "Speech, shouts, sighs or whispers, the voice hierarchizes everything around it. (...) Human listening is naturally vococentrist, and so is the talking cinema by and large" (Chion, 1994, p. 6).

Mia Kirshner intones the main character's story with a deep and intimate tone of voice, interweaving (interchanging?) descriptive, argumentative and poetic modes of rhetorical discourse. As the story unfolds, the voice of Bear 71 reports several pieces of information, descriptive and inferential statistics about Banff National Park, wildlife, and technologies. The anthropomorphized life of the Bear 71 leads the presentation of formal data, which forges in the audience an identification with the nonhuman character by virtue of her life events: her youth aspirations and dreams, the adaptation process to the human interference in her habitat, how her life changed thanks to motherhood, and all the concerns with her cubs.

In the digital object *Bear 71*, the anthropomorphism is used as a mode of embodiment in the bear's voice, demanding from the audience to imaginatively accept that a grizzly bear holds information about surveillance, technology, and statistics about the park. Moreover, the interactive documentary presents the non-human character as able to express events from the past, her most profound thoughts, and nurturing concerns and feelings by other animals, similar to the ones expressed by human beings. The individual non-human voice resounds the collective audience thinking. The intersubjective encounter enhances in the viewer a sensory recognition compelled by recalling his life events in the Bear 71's narration.

The second component of the interactive documentary that emboldens the audience's identification with the narrative is the use of the webcam. *Bear 71* encourages spectators to face themselves as participants in the interactive documentary, by confronting them with their own video feed, next to the animal's surveillance images. At this moment, the interactors become aware that was under surveillance during the interactive experience and, such as children in the Lacanian "Mirror Stage" (Lacan, 2006, pp. 75–81), recognize themselves as inscribed in the documentary narrative.

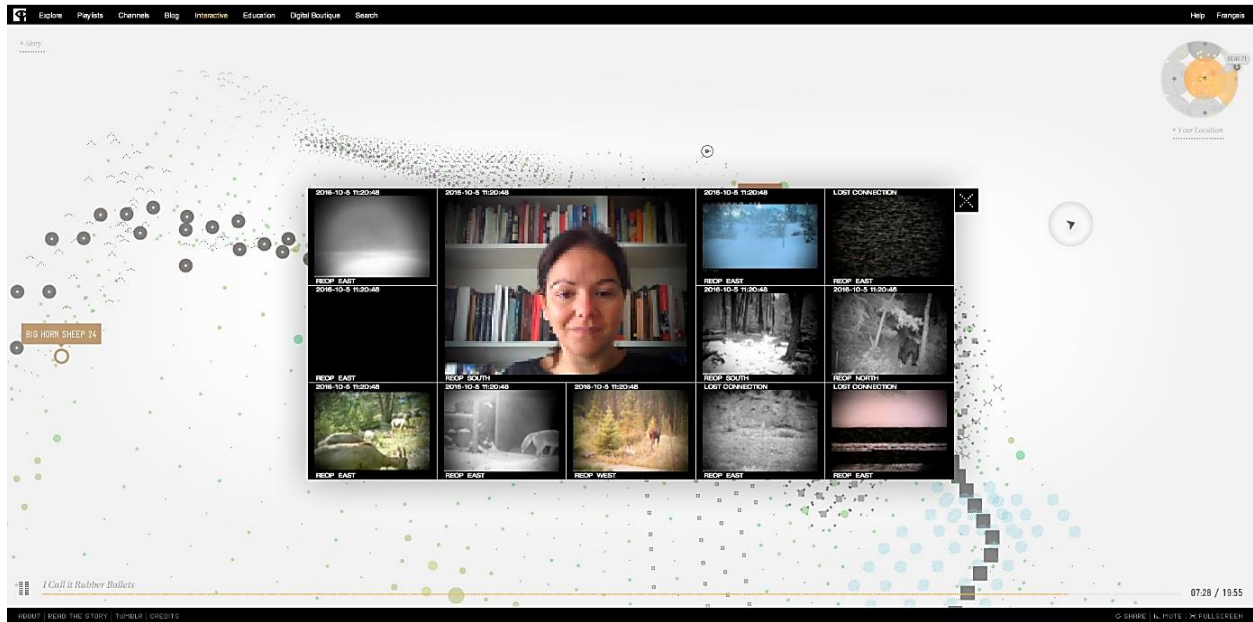


Figure 13. user's webcam feed displayed in the interactive documentary

*Bear 71*, the digital documentary, encourages the imaginary integration of the Self in the artwork. The spectator's image is not merely a mirrored reflection but becomes a representation of a permanent structure of subjectivity, an apperception induced by the symbolic contraption. Actually, spectators not only enjoy the act of interacting but they are conceited enough to take pleasure in seeing themselves into the objects of observation.

Whereas in self-reflexive films, such as Woody Allen's *The Purple Rose of Cairo* (1985) or Jean-Luc Godard's *Les Carabiniers* (1963), the internal spectator is utterly aware of the audience's inscription in the film, in *Bear 71* the external spectator is also incorporated into the subjective image. Moreover, by confronting the audience with his own participation, this interactive documentary also incorporates the spectator's response. The audience is introduced into the diegetic world represented on the screen, creating a hybrid object with an ambiguous ontological nature, interplaying the position of spectator and character, viewer and viewed, observer and observed.

The self-reflexivity operates, in this instance, as a coercive force, intimately compelling the spectator's responsibility and complicity to the perpetuation of the surveillance. By laying heavily in the Brechtian practice of distantiation, *Bear 71* enables the mythical "alienation effect" (Brecht,

1978)<sup>30</sup>, trapping the spectator in a technological vortex, implicating him in the control society and calling him to account for the main character's tragedy.

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<sup>30</sup> The term "Alienation Effect" was firstly used by Brecht in the essay "Alienation Effects in Chinese Acting" published in 1936, for describing the way in which the audience was hindered from identifying itself with the characters in the play.

## CHAPTER 5

### FORT MCMONEY: PLAYING WITH REALITY

Any resemblance between Fort McMurray, the region in Alberta, Canada, and *Fort McMoney* (Dufresne, 2013b), the game-based interactive documentary, is not purely coincidental. *Fort McMoney* is a paronomasia to address the oil exploration and the economic sustainability (or unsustainability) of the Athabasca oil sands, located in Fort McMurray, Canada. More than 1,5 million barrels of oil are extracted every day from the oil sands, representing seven percent of Canada's total greenhouse gas emissions, and it is expected that the number of barrels will increase to 5 million a day over the next 20 years.

The region is inhabited by a multicultural community, attracting people from all parts of Canada and the world with the promise of well-paid jobs. Over the last ten years, Fort McMurray's population raised from tens of thousands to over 100 thousand people. However, not all immigrants succeed, and housing prices and rents are far higher than one would expect in such a remote area. The result is that a significant number of people live in caravans, and there is a high rate of homelessness and prostitution. Also, the average temperature during the winter is  $-18^{\circ}\text{C}$ , with the lowest recorded temperature as  $-50.6^{\circ}\text{C}$ , making life difficult for those living in Fort McMurray.

After two years of research, a team from the National Film Board of Canada, in collaboration with the private company Toxa and the French television channel ARTE, filmed 2,000 hours of footage, over sixty days, at 22 of Fort McMurray's locations, under the direction of David Dufresne. This footage includes 55 interviews with citizens, ranging from homeless people to the Canadian environment minister, and the chairman of the energy giant Total.

The director David Dufresne had already explored the genre through a game strategy in his previous interactive documentary, *Prison Valley* (Dufresne & Brault, 2010), and when he was

finishing this work heard about Fort McMurray. After overcoming some skepticism about the subject matter, Dufresne realized Fort McMurray could be the perfect place to portrait in a game base interactive documentary since he considers capitalism itself is a game. A cruel, terrible, fascinating game — terribly human. Also, he states that the city of Fort McMurray is more virtual than real, as it is miscreated. For him, Fort McMurray is something between a real-size Sim City and the economic lung of a country less and less green (Dufresne, 2013a).

Through the documentary, the viewer is able to travel virtually around the city, meet residents, hear their stories and interrogate the city's figures in the interviews, to learn their opinion about specific issues predetermined by the documentary creators. The interactive documentary *Fort McMoney*, provides audiences with a sense of control over the city's virtual future, exploring Fort McMurray's social, economic, political and cultural dimensions through real footage, and tries to secure from the audience an active role in seeking a solution to Fort McMurray's problems.

Structurally, the interactive documentary *Fort McMoney* is stratified in three levels and has a progressive organization, according to which users must complete a set of tasks to gain access to certain areas. Each option chosen by the viewer has an impact on the city's life, for it is accompanied by an accumulation of points, through their conversion into votes, enabling him to vote in the city's virtual referendum that will influence (together with other user options) *Fort McMoney*'s virtual development. More specifically, each action performed by the viewers earns them influence points that enable them to vote in referendums and thus contribute, as part of a collective experience with other viewers, to the transformation of *Fort McMoney*. The final outcome is a synthesis of the interaction of all the participants. Despite its interactivity and a reminiscent strategy of video games, *Fort McMoney* follows a documentary approach since it seeks to “give a tangible representation to aspects of the world we already inhabit and share” (Nichols, 2001, p. 1) while engages audiences in the issue of sustainable economic development.

*Fort McMoney*, the National Film Board of Canada's interactive documentary with its characteristic video game strategy, may be framed under what Sandra Gaudenzi (2013) defines as the Conversational mode. This kind of documentaries are based on Human-Computer-Interaction strategies and “inspired by a type of interactivity that wants to reproduce the interaction between two human beings, or a human in a physical space” (Gaudenzi, 2013, p. 41), providing to the

interactor the illusion of an infinite database, open to endless possibilities. Gaudenzi compares this ability of movements to an interaction with the world, such as Google Street View which affords users with the false impression of freely explore a geographical location.

The interactive documentary premiered at IDFA – the International Documentary Film Festival of Amsterdam, with pre-launch events in Paris, Toronto, and Montreal. Originally, *Fort McMoney* was launched in three episodes, starting in November, the 25<sup>th</sup>, 2013, played in real-time over a four-week period, engaging more than 190 thousand users in virtual debates and voting in the weekly referendums. Since then, the interactive documentary became fully available, and more than 360 thousands users accessed *Fort McMoney*, with a total of 493 thousand sessions, contributed with nearly 6,500 arguments in the forums<sup>31</sup>.

### A Spatial First-Person Interaction

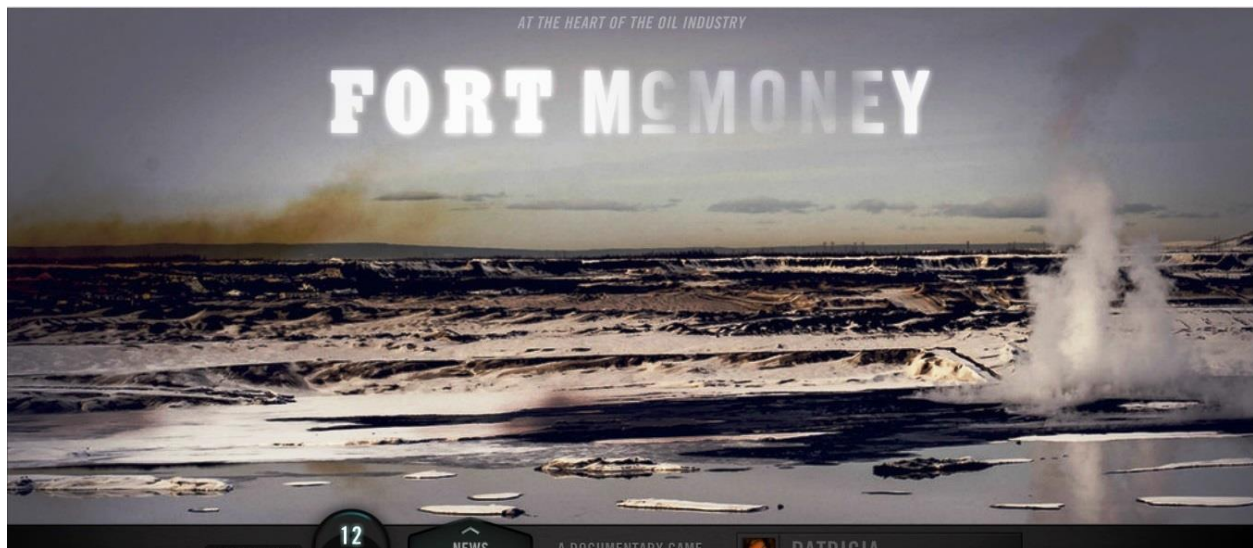


Figure 14. *Fort McMoney*'s wireframe

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<sup>31</sup> Data extracted from the National Film Board of Canada Google Analytics, from November the 25<sup>th</sup>, 2013, until December, the 31<sup>st</sup>, 2015.

When we arrive at *Fort McMoney*, we find a cold and inhospitable place. The first wireframe in the interface, which acts as a gateway to *Fort McMoney*, is an image of an icy landscape with vapor, resembling an explosion. The sound of wind blowing makes us snuggle in our coats and get ready for the experience to follow. The introductory video segment is a traveling movement filmed from a car's point of view that drives us to the first level. The first shots, as well as others during the experience, resemble the opening sequence of Michelangelo Antonioni's *Il Deserto Rosso* (1964), which presents the industrial structures of a petrochemical plant.



Figure 15. *Fort McMoney*'s petrochemical plant (left) and still frame from *Il Deserto Rosso* (right)

A female narrator serves as a guide to explain rules and provide clues. This female voice addresses the viewer directly, in an apocalyptic tone: “you have reached the end of the road at the world’s edge” (Dufresne, 2013b). In other moments, the voice has a more informative tone, explaining to the audience the documentary game’s rules or providing background information about what has happened and is happening. The narrator addresses viewers in the second person, assigning thus to them the role of the main character, and summoning them to take control. Sentences such as “your mission?” and “*Fort McMoney*’s faith is in your hands” reinforce the feeling that audience’s actions and choices cause the narrative to move forward. At certain moments, there is music to create a more immersive environment and create the emotional mood intended by the director.

Perhaps because *Fort McMoney* has a game-like structure, David Dufresne felt the need to draw the audience's attention to the indexical nature of the interactive documentary: "you are embarking on a documentary game where everything is real: the places, the events, the characters..." (Dufresne, 2013b). Such as Nichols points out, addressing non-interactive documentaries, an "indexical image serves as empirical or factual evidence" (2001, p. 125) and, thus, reinforces the audience's perception of the documentary's verisimilitude.

*Fort McMoney* is structured around three levels, or episodes, in the same way as a video game, enabling audiences to go forward in the documentary's narrative and attain greater involvement in decisions considering the city's future, as they deepen their knowledge and interact in civil life. In level one, entitled Boomtown, we can visit the city center and are introduced to several subjects who share their experiences of living in Fort McMurray. In a trail camp, for instance, we get to know a migrant worker, Richard Page, who works as a carpenter and tells us how difficult it is to rent a house with such a high prices, forcing most people living in caravans. We also meet Carl Valdock, an unemployed alcoholic in recovering, that collects and sells cans and other recycling garbage to survive. Carl confesses he had a hard time to get used to Fort McMurray: "I used to call it hell, now I call it home". Marquesa Shore, a waitress, expresses a positive feeling towards the city. Although the job market is very male-dominated, she states there are still many opportunities for women: "it's nice that women can make as much money as men now. It's good to be a woman here". Attending the municipality council and interrogating the mayor, visiting the hospital and a center which supports homeless people, as well as the casino and the striptease club, are other possible actions in the first episode.

As the first level evolves, audiences are interpellated by the police patrol and invited to register to keep a record of their interactions and scores. Without registration, the user cannot proceed and has no access to the second level.

After introducing us the subject matter and the main conflicts, like poverty, prostitution and environmental sustainability, the second level, Black Gold, presents the main subjects and activists regarding the oil exploration. The episode evolves around the Macdonald Island Park, where we can interrogate Jean Michel-Gear, CEO of Total Canada, and listen the arguments of a journalist, as well as a lobbyist of the oil sands developers, and the member of the Legislative



Assembly of Alberta, Don Scott, among others. Most of the interactive signs, with a shape of an arrow, inside the leisure center simply drive the audience through a tour along the corridors and provides the possibility of visiting some of the rooms. The experience is very similar to Google Street View's navigation, as we explore the building and encounter certain subjects.

At the third and last level, entitled Winter Road, we are introduced with the following welcome message: "you have reached the end of the world... or close". The footage take us in a tour to the remote and icy village Fort Chipewyan, 140 miles north of Fort McMurray, where we can meet and listen to some of the strongest opponents of the oil exploration, such as Allan Adam, the Chief of the Athabasca Chipewyan First-Nation, and Melina Laboucan-Massimo, the representative of Greenpeace Canada. Besides the environmental issues, they raise awareness about the abnormal number of cancer cases in the region. There's also time for listening to a medical doctor and the Minister of Environment, before having the chance to visit the Shell site, which ends up being the "reward" for the three weeks interaction experience.

Among the other elements incorporated into *Fort McMoney*, we find documentary segments, during which audiences are not able to act, except to pause the playback and go forward to the next stage. Not all documentary segments can be regarded as a scene, as some of them occur in more than one location, but they may be considered as a sequence since they are related to a particular character. This element has an informative function (i.e., it mainly offers information about places, lives, and everydayness conditions) and an argumentative function (i.e., it presents topics advocated in a particular situation).

Most documentary segments begin with establishing shots, introducing the viewer to the place inhabited by the character. Subsequently, the audience follows the character in an everyday-life situation, such as walking or driving a car. The character is filmed mostly in a medium sized shot, creating the sense that we are close enough to have a chat with them, while we listen to a voice-over relating the subject's story of their life experience at Fort McMurray. David Dufresne presents several medium shots from different angles (front, side and mainly back) filmed with a handheld camera to follow the subject's journey. Audiences have the feeling of walking alongside the subjects while they talk, and thus the sense of a shared experience and moment. The sound

combines the character's interview as voice-over, diegetic direct sound and background music to provide the audience with a more immersive experience.



Figure 16. Walking alongside subjects (front and back)

In order to drive the audience between different places, the interactive documentary uses ellipsis as narrative devices, displaying a video segment from a car's point-of-view. The viewer is emplaced in the driver's seat, traveling through the city and listening to the radio broadcast. The sound ambiance results both to create continuity between scenes and to convey information about the subject matter.

When we accompany a character who travels by car, traveling images frequently show the landscape outside. In fact, landscapes are of major significance in the documentary's narrative, whether they are natural scenarios or images of an urban highway in the city's downtown. There are several moments when we behold Fort McMurray's surroundings through establishing shots, extreme long shots and traveling shots from the car's point of view, both in documentary video segments and in some videos that transport us between places or levels. The more we move away from the city and go towards its outskirts, the wider the shots become; this technique reinforces the feeling of how cold and inhospitable the region is. Some of the shots remind us of images from the film *Fargo* (Coen & Coen, 1996), with its icy landscapes and deserted roads. The petrochemical plant itself is filmed in extreme wide shots to underscore the largeness and mightiness of the oil company, imposing a sense of distance and detachment on the viewer.



Figure 17. *Fort McMoney*'s icy landscape (left) and still frame from *Fargo* (right)

When the viewer encounters institutional representatives (mayor, minister, doctor, environmental activist), she or he can choose the questions that will be answered by the subjects. However, options are constrained to three topics predetermined by the director and could eventually be deepened more elaborately if the viewer wishes. Regardless of whether the interview takes place at the City Hall, a council building or a coffee shop, they have a very formal approach regarding the image's framing, with the interviewee filmed in a close-up or a middle-sized shot, as if talking to a news reporter.

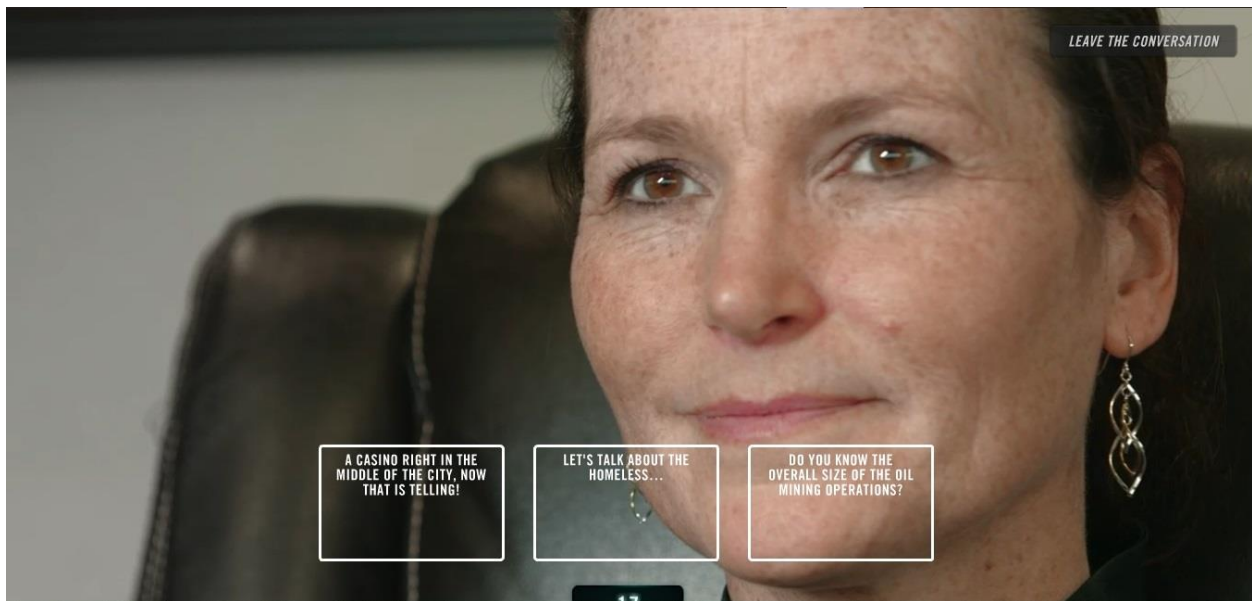


Figure 18. Interview with the City Mayor (Dufresne, 2013b)

Few documentary segments, on the other hand, take place during the night. Nevertheless, these moments create a closer and more intimate relationship with the characters, as well as contribute to simulating different times of day, providing the impression of the passage of time. At

the end of each documentary segment, the narrator provides audiences with instructions about their subsequent options. From time to time, the voice reminds the viewers that “your choice will affect your experience”, to provide a sense of empowerment and make the audience aware of the ultimate goal.

As regards the interface, audiences are able to move forward in the story and build their own narrative through “interactive signs” (Andersen, 1997), considering the users can manipulate them directly. Interactive signs trigger actions in response to user interaction, as a mean of providing feedback to the actions performed by users, by clicking on the characters or additional signs on the screen. In general, these signs change transient appearance and become other signs; i.e., each time the viewer clicks on a button (even if it does not have the appearance of a button), something happens to show them that their decision is ongoing. This behavior is critical in providing feedback on the user's action while it is being carried out. The sign button has the handling characteristics illustrated by the user's action of clicking on it and, as a result, triggering an action in the narrative.

At the beginning of each level, we access an interface of still images representing public places at Fort McMurray, in a 160° view that rolls right and left, as if viewers actually turn their head and look around.



Figure 19. Fort McMurray's subjects gazing at the camera

Characters are placed in the image's center, looking at the audience in a long shot from an eye-level camera angle, waiting to be chosen for interaction. Each one of them embodies an interactive sign to allow triggering her or his story. Therefore, interactive signs (or buttons) are mostly placed at the screen's center, or their position depends on the viewer and their choice to roll the wireframe right and left. Furthermore, all subjects that embody an interactive sign address the audience directly, facing the camera, with a view “more interactional and emotive than

representational” (Kress & van Leeuwen, 2006, p. 89), to establish an imaginary relationship with audiences. In each middle screen, there are several possibilities – from getting to know some individuals, to accessing buildings or a news media archive or picking up clues with information for the next levels. Whereas the human characters are placed at the screen’s center, archives and small documents with game clues are scattered over the ground. This director's decision emphasizes the human stories and experiences over the additional materials and makes them less obvious.



Figure 20. Clues scattered over the ground

The interactive work presents a very complex structure, insofar as it offers audiences several narrative possibilities, as well as the opportunity to navigate backward and forwards through the documentary's contents. Due to the great significance of the interactive documentary's structure, we have adopted the social semiotic model for multimodal meaning analysis, presented by Martinec and van Leeuwen (Martinec & van Leeuwen, 2009), in order to transform *Fort McMoney* into a diagram with three independent, but nevertheless related levels, comprising a semantic structure. With this approach, we imply that the interactive documentary’s different modalities (film, interface, still image, sound, text) can be converted into a meaningful whole.



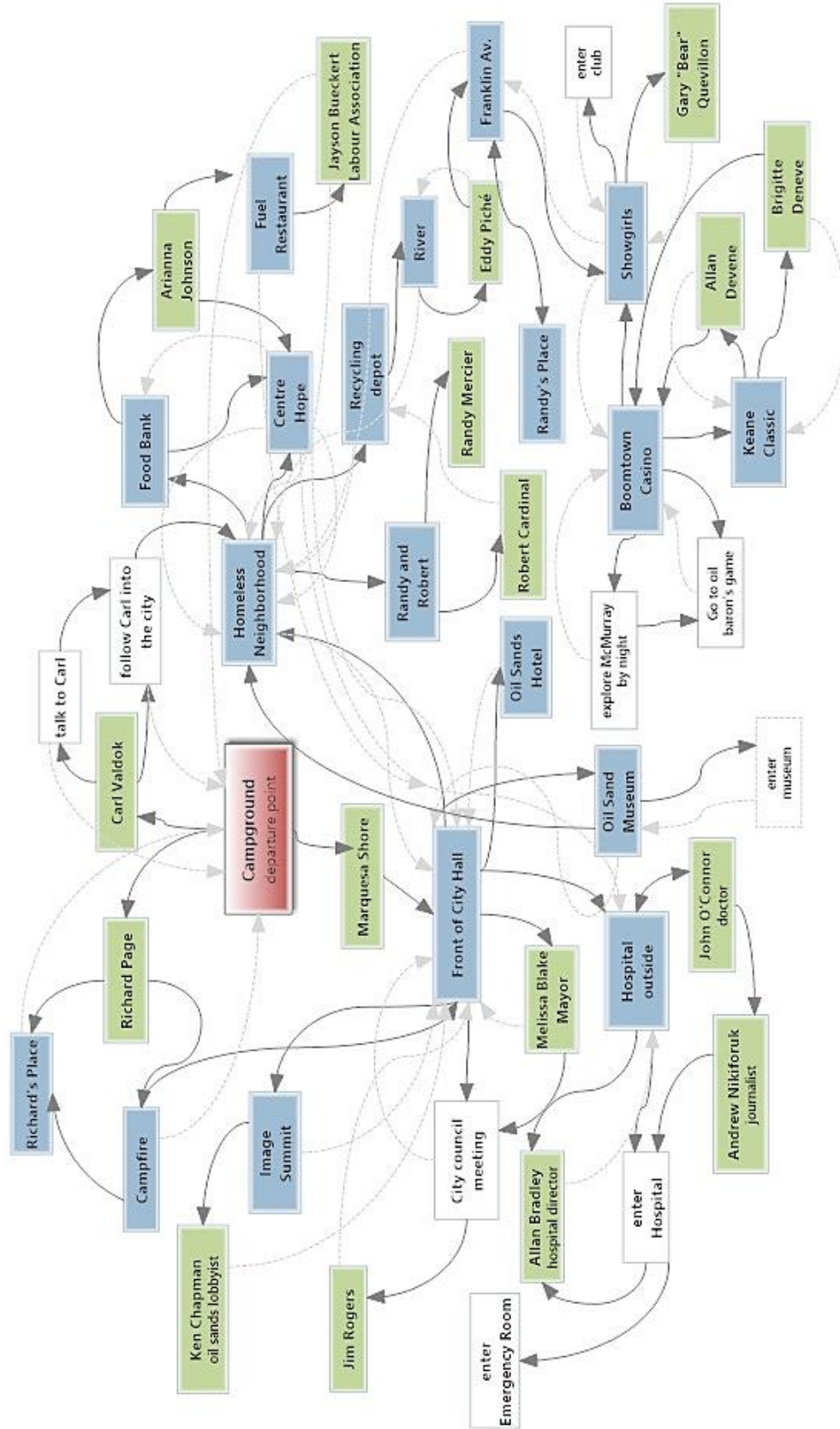


Diagram 3. Fort McMoney's structure – level 1

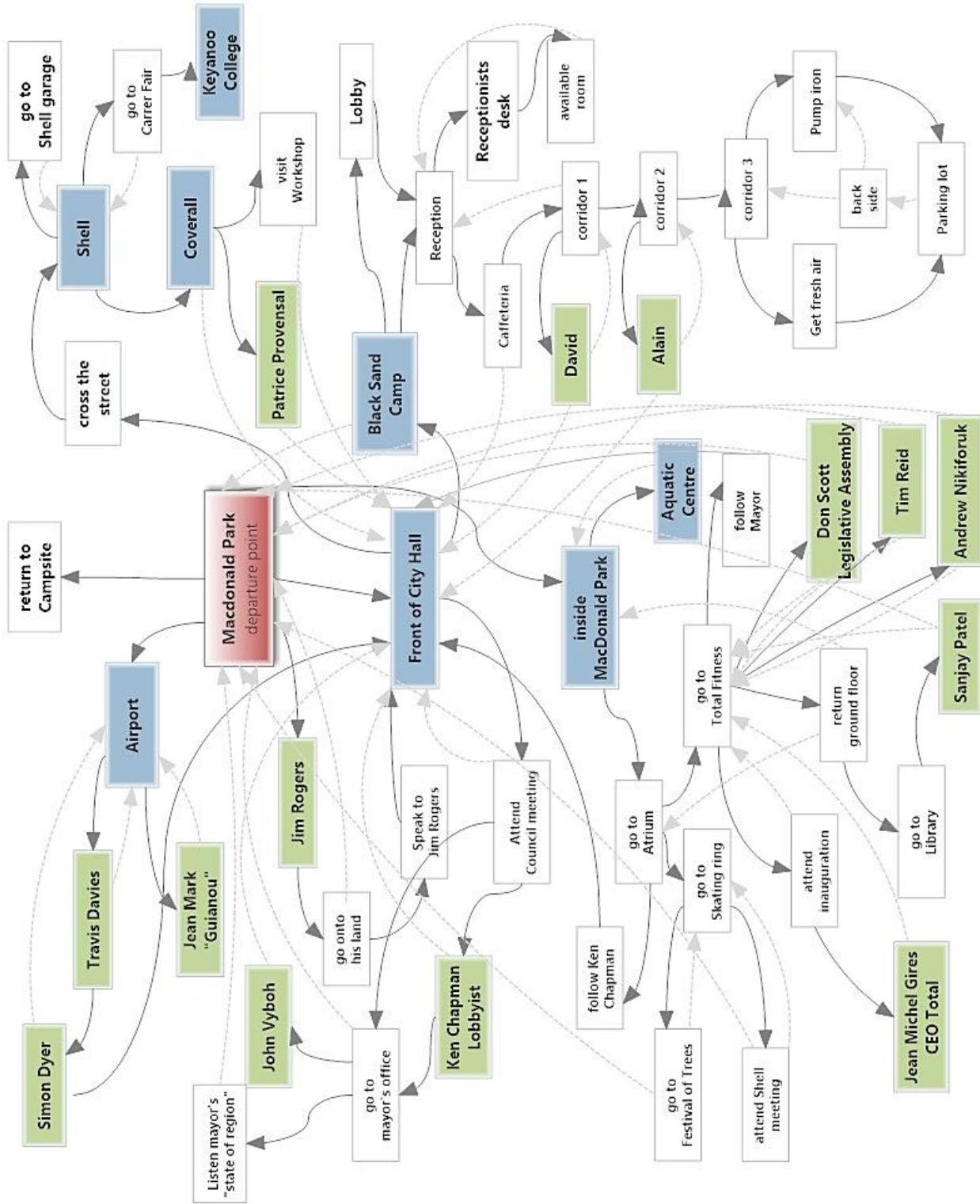


Diagram 4. Fort McMoney's structure – level 2

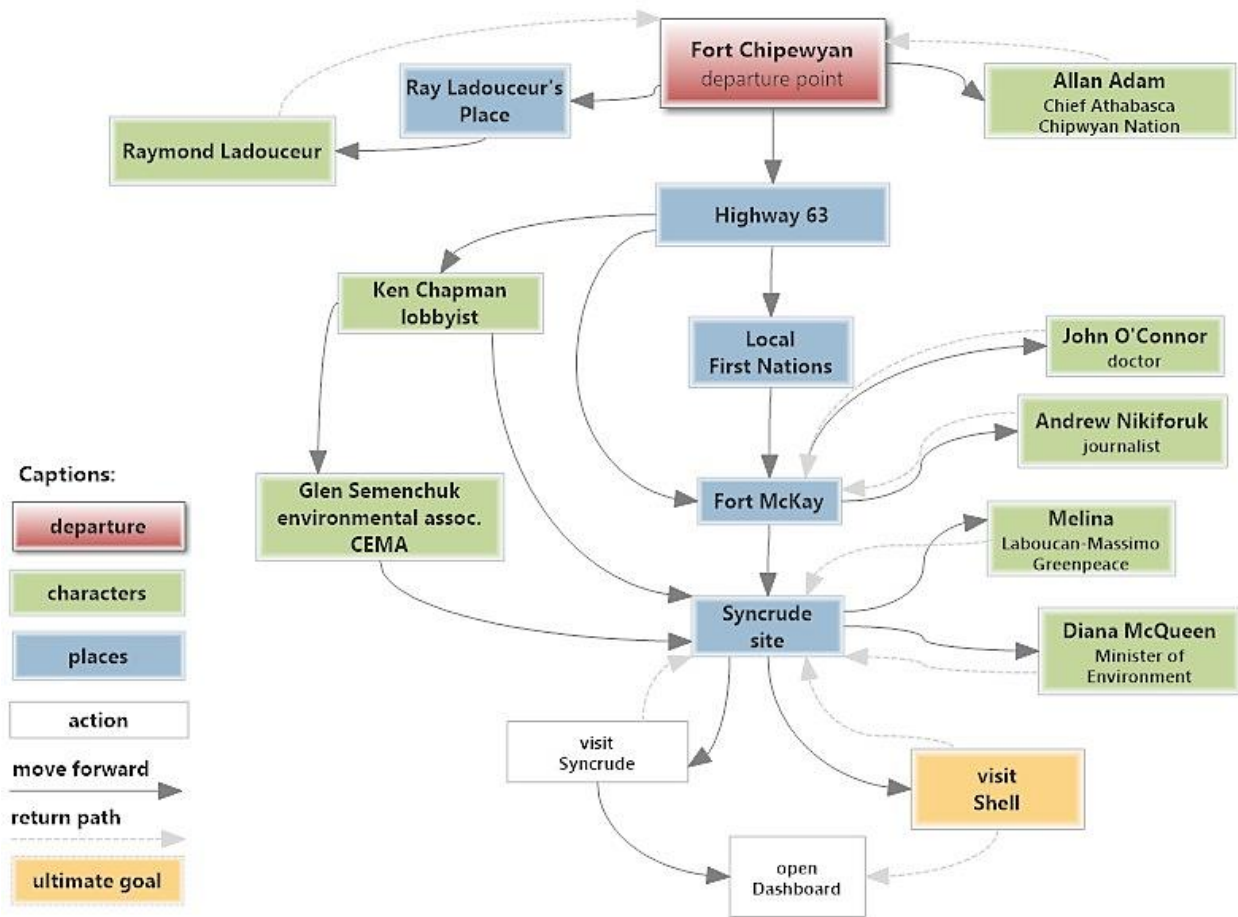


Diagram 5. *Fort McMurray's* structure – level 3

In analyzing *Fort McMurray's* navigational structure, we find a complex combination of nodes and connections aimed at creating a range of communication paths. The diagram drawn from the different navigation possibilities can be considered as a complex non-linear model (Martinec & van Leeuwen, 2009, pp. 65–76) with a star composed by several satellites, consisting of non-hierarchical and non-centralized information, as well as plenty of transitions between the documentary segments and the different levels. Regarding the complexity of the *Fort McMurray's* interaction structure, the non-linear diagram is divided into three parts, one for each level of the documentary, and maps out all the contents available and the possible paths followed by the audience.



Each level of the documentary presents a nucleus node as the point of departure for the interaction. From there, the audience may move on to other nodes which configure satellites of the primary node. The satellite nodes are simultaneously superordinate of other nodes less central and subordinate nodes of the nucleus node. Furthermore, satellites are subdivided into sub-nodes that provide the audience with sub-information for deepening the knowledge about certain places or characters.

As the audience progresses throughout the space is given information about events, characters and the location/ environment, providing them with the context for their actions. Hence, the narrative establishes the viewers' position within it and the actions they are expected to take as a result. Also, as the interaction procedure is regarded, the interactor may move back to a central node or the nucleus node and pursue a different path from the previous one followed, acquiring new information and getting to meet further characters. The most interesting aspect of this dynamic content organization is the potential it creates to explore this virtual world as much as possible. Multiple storylines may be followed, leading the audience to a wide variety of content organization.

There are, however, certain steps that the user must follow in order to achieve the ultimate goal, which is still predetermined by the documentary director. By analyzing the diagram, we may identify that some nodes hold a more centralized and prominent role in the documentary's narrative, either by converging a more substantial number of video segments' connections or by performing a pivot crossing point within the narrative and, therefore, the creators demand from the audience to undergo through those nodes in order to navigate through the documentary.

In this sense, there are certain patterns to be found in the navigation structure. First, each interface level may be considered a node, connected to different documentary segments in order to allow audiences to develop their personalized paths. Moreover, some documentary segments have several connections to both nodes and other documentary segments. Second, the connections are designed to diversify the semantic values of each connection as much as possible — i.e., documentary segments are organized within patterns (public/private place; ordinary citizen/ institutional spokesman; urban/ rural landscapes) which are presented to audiences in an interlaced

way with the purpose of creating a feeling of randomness. Third, and finally, there are predetermined landmarks, which must be revealed in order to accomplish the ultimate goal.

We must not expect *Fort McMoney*'s narrative to be structured in terms of a narrative arc or climax. The interactive documentary's structure is designed to offer the audience a series of multiple climaxes that culminate in the documentary's conclusion. However, we may identify that each level, or episode, produces a more profound knowledge in the experience and raises a more profound awareness of the subject matter. All the elements in *Fort McMoney*'s story lead audiences to an ultimate goal, whose accomplishment presupposes that viewers use everything they have learned and felt along the process.

### ***Fort McMoney's Conclusions***

*Fort McMoney* is designed to be a journey, a roadmap through the city, introducing the viewers to several arguments to help them make informed decisions. The interactive documentary presents an evident perspective on the subject matter, or as Bill Nichols writes, "stands for a particular view of the world" (Nichols, 2001, p. 43). Regardless the many subjects interviewed and presented within the documentary, with pro and con arguments about the oil exploration, it becomes clear that David Dufresne's main purpose is to raise awareness about the environmental consequences of such economic activity. His position could be summarized through the voice of Allan Adam, chief of the Athabasca Chipewyan First-Nations: "They call it development, we call it destruction" (Dufresne, 2013b).

The multiplicity of people interviewed, as well as allowing the audience to select segments of the interview for each character, creates a very fragmented discourse. The impressions conveyed by the characters are mostly superficial, and the interactive documentary lacks a deeper approach and immersion that we usually experience in a traditional non-interactive documentary. Also, as the video segments are short and are constantly stopping, requesting a choice from the audience, the state of "suspension of disbelief" (Coleridge, 2009) is constantly interrupted and becomes hard to create empathy with the characters on the screen. In fact, regardless David Dufresne interviewed subjects with pro and con opinions about the subject matter, people portrayed seem to have a

merely informational and instrumental function in the narrative, as representatives of an institution or a certain fringe of society, to convey a message pre-conceived by the creators. Furthermore, when we move on to the next location and leave behind a certain subject, we will rarely come across with her or him again and, if so, the interaction with her or him is replicated from the previous one. The hypothetical audience's identification with the characters is disrupted by the need to proceed in the narrative.

More than a character-driven documentary, the digital object consists, primarily, in a non-linear narrative that progresses dynamically throughout the viewing experience. Its characteristic interactivity opens up the possibility of exploring several narrative paths that may occur simultaneously, in parallel or dynamically. At the same time, it operates as a matrix combination that enables choices and perspectives limited only by the existing database. Despite the viewers' progression towards a goal, defined by the documentary's director, each is free to find her or his own path through the process.

The interactive documentary provides viewers with narrative control and the possibility of choosing certain aspects of the environment — above all, the power to imagine an alternative Fort McMurray. This strategy provides audiences with a sense of control over the narrative's construction and, ultimately, the city's future. Through their actions and interactions, they produce, transform, and continuously develop heterogeneous and interlinked spaces.

Whereas most of the classical documentary forms evolve through time, *Fort McMoney*'s narrative progresses across space. Such as Henry Jenkins suggests the method of environmental storytelling for games, David Dufresne built this digital object “privileging spatial exploration over plot development. Spatial stories are held together by broadly defined goals and conflicts and pushed forward by the character's movement across the map” (Jenkins, 2004, p. 123).

*Fort McMoney*'s indexical relation to reality affords to interactors the feeling of physically visiting the place and traveling around Fort McMurray, contributing to a recognizable sense of place. The complex and multilinear structure may, however, induce in the audience the feeling of roaming around aimlessly. During the development of a personalized pathway, by moving back and forward between choices, the viewers find themselves in a maze, where the dead ends force them to retreat in order to proceed through a different path.

Due to a great amount of contents and a complex network of nodes and connections, as shown in the diagrams, the non-linear narrative of *Fort McMoney* may be compared with a neo-baroque labyrinth that Angela Ndalians describes as "an enforced circuitousness, planned chaos, choices among paths, intricacy, complexity, and an invitation to the audience to engage reflexively in the diverse linear formations that drive the multidirectional form" (Ndalians, 2004, p. 84). However, this labyrinthine structure represents a challenge for the audience, the challenge to rediscover a certain order in the apparent chaotic structure of contents. As in a maze, "it begins with the pleasure of becoming lost and ends with the pleasure of discovering where we are" (Calabrese, 1992, p. 133).

The process of reconstructing the interactive navigation demands from the viewer a certain degree of mental mapping to keep track of space both in *Fort McMurray* and within the documentary's structure. Moreover, the documentary's creators established a network of hyperlinks that allow the viewers to access some pivot crossing points or characters through multiple paths, as previously named as centralized nodes, becoming more likely that the audience will step into this elements to progress within the documentary. This strategy is common for open-ended and exploratory narrative structures, in which "essential narrative information must be presented across a range of spaces and artifacts, since one cannot assume the player will necessarily locate or recognize the significance of any given element" (Jenkins, 2004, p. 126).

Furthermore, as Jewitt states, "the potential of the medium to link texts via visual hyperlinks enables the reader to move between the entity character in the 'fictional domain' of the novel and the entity character in a 'factual domain' beyond the novel" (Jewitt, 2004, p. 185). As such, the form strengthens the bonds between the interactive documentary and the audience. All these choices, however, are made within a closed database of footage, archive material and pre-selected arguments that are made available to the public. Whereas audiences are free to choose and create their own path through the contents, their choices are compromised by contents (in the documentary database), by how they are presented (via the interface) and by their own social and personal perspectives.

The interactive documentary *Fort McMoney* is filmed in such a way to place the interactors in the role of the leading character. Despite all the different shot sizes, camera angles and

movements, the camera always embodies an intra-diegetic gaze, in a first-person point of view, which encourages the identification of the audience with an active role in the documentary, and cultivates the feeling that the camera embodies the viewer's exploring gaze.

Not only the classic point of view shots permit a strong identification with the characters on screen, in a process of "spectatorial identification" (Metz, 1982), as *Fort McMONEY* uses as rhetorical aesthetic discourse what Ruggerto Eugeni describes as "first person shot" (2012). Such camera perspective represents a "remediation" (Bolter & Grusin, 1998) of the video games aesthetics and allows "the player to perform the actions planned by the game, keeping the visual and aural position of a specific character, whose body isn't usually entirely visible" (Eugeni, 2012, p. 22).

In *Fort McMONEY*, the character represented behind the camera is the viewer himself. Instead of personifying one of the film characters' point of view, as part of the documentary's diegetic world, this "first person shot" embodies the audience's perspective, entailing an extension of subjectivity, and encouraging the viewer to embody and perform the main character's role. Such position blurs the distinction between interactor and character, inner and outer space, diegetic and lived world. Drawing on Vivian Sobchack's phenomenological theories, Eugeni considers that, through the first person shot, the viewers "are confronted with an embodied, situated, 'enworlded' (although non completely-human) subject, and they have to define a kind of dialogical and dialectical engagement with it" (Eugeni, 2012, p. 27).

Furthermore, this perspective offers to the viewer the illusion of personal power and control over the world on the screen. *Fort McMONEY* encourages such identification by inviting viewers to identify directly with the interactive documentary's protagonist, considering they are actually in control and able to influence the documentary's leading character. The tasks performed by the audiences in the documentary reflect the development of their knowledge and skills, and contribute to their ego as a reward for their commitment. Allowing the audience member a chance to act heroically, behave admirably and achieve the desired outcome may be the keystone in providing them with a positive sense of Self. However, this embodiment of the documentary's protagonist also demands from the viewer a constant negotiation between the Self and the extension of the interactor's body enacting on the screen.

Alternatively, we may consider the possibility of an incentive for the ego in seeking to perform better in comparison with others, in creating social bonds as affiliation and solidarity and pursuing social recognition. Moreover, *Fort McMoney* uses a collaborative strategy to engage the audience's participation, and offers users the opportunity of constructing the city's future collectively. Audience members induce *Fort McMoney*'s virtual destiny, but they must work together, and the final result is as a shared construction of a virtual space of signification, which each user attempts to shape according to his social and political views, but the result will always be an intersubjective reality. Therefore, we may conclude that *Fort McMoney* strengthens community feeling and provides users with a sense of belonging.



## CHAPTER 6

### A JOURNAL OF INSOMNIA: A COLLECTIVE PORTRAIT

*A Journal of Insomnia* (Choiniere et al., 2013) is an interactive documentary with a crowdsourcing component, in which insomniacs are encouraged to provide insight about their sleepless hours and to share their affliction. The platform collects the participants' stories using a User Content Generator feature and gathers the contributions in a digital database about insomnia.

Hugues Sweeney, the executive producer of this interactive documentary, came up with the idea of gathering insomniac stories shortly after becoming a father for the first time and experiencing the common parents sleeping deprivation caused by newborns. The nights he spent awaked while looking after his daughter made him wandering: "Here I am up in the middle of the night – how many other people are up at the same time we are and why?" (Adams, 2013).

Digging into the subject matter, he found that one in each three Canadians suffers from sleeping disorders, and this ratio may be extended to all the western countries. The idea was developed over more than two years at the Montreal NFB's Digital Studio (Adams, 2013) and resulted in a very collaborative experience, in which the audience may select the contents to watch and also contribute with their own insomnia's experience to the collective journal, by rendering an interviewed to the NFB staff, through the computer's webcam.

Although the sleeping disorder may be approached as a health issue, either as a symptom or through its consequences, Hugues Sweeney had a different idea in mind, framing the subject matter through a human perspective: "The point of view on insomnia is typically clinical. We wanted to get at the heart of it. A human story. See how it affects society." (Carter, 2013).

Besides Sweeney, who introduced the original idea, the National Film Board gathered an extensive team of creators, including Thibaut Duverneix, Guillaume Braune and Bruno Choinière,



from the company Akufen, who developed the script and the art concept as creatives, directors and post-producers, and Philippe Lambert, a composer and sound designer which created the audio ambience for the interactive documentary.

*A Journal of Insomnia* was created to induce in the audience the uncomfortable sense of insomnia, requiring from the viewers to be awake during the night in order to fully experience the interactive documentary, inasmuch as the creators divided the platform into three different levels of participation: i) an open-access database, ii) a closed database and iii) the possibility of participating with contents for the closed access database where contents generated by the audience are lodged.

The open database can be accessed anytime from any part of the world and contain a preamble of four stories from insomniacs, produced by the National Film Board of Canada. This introductory section results as an invitation for a deeper experience and is accessible any time of the day. To access the closed database, the viewer must schedule an appointment with one of the four characters and wait for her or his phone call during the night, by providing personal contact information. The interactive documentary demands from the audience to be an insomniac, or at least to experience for a night sleep deprivation, to gain access to the full contents from the closed database as well as to the other participants' stories.

In a deeper level of involvement, the viewer may become a participant her or himself and share one's insomnia experience. Thus, *A Journal of Insomnia* should be framed as a participative interactive documentary, since "the interactor can add, change or circulate content - and therefore transform the artifact itself"(Gaudenzi, 2013, p. 57). To do so, the viewer must answer the questions asked during the phone call from the National Film Board of Canada. During the call, the voice on the other side of the line will guide the audience's participation, inquiring the participant about her or his insomnia experience. The answers can be recorded in a video file, through the computer webcam, typing out text and by drawing sketches.

The digital platform started collecting the audience's participations in September of 2012, and until December 2015, 2967 insomniacs answered the call and contributed with 41354

elements, as texts, videos, and drawings<sup>32</sup>. The official premiere happened in April 2013, as part of the Tribeca Film Festival's Storyscapes section for transmedia, with the exhibition of an interactive installation, created with Judith Portier, as Art Director.



Figure 21. *A Journal of Insomnia's* interactive installation (National Film Board of Canada)

The interactive installation consists of a black box, resembling an oblique cube, with a desktop computer inside. The participants may step into the box and, sited at the computer, facing the glowing screen in the dark environment, and are invited to answer various questions about insomnia either through video, drawing or typing the answers. Simultaneously, the answers are projected onto the black-box's exterior and inputted into the online database.

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<sup>32</sup> Data provided by the National Film Board of Canada.

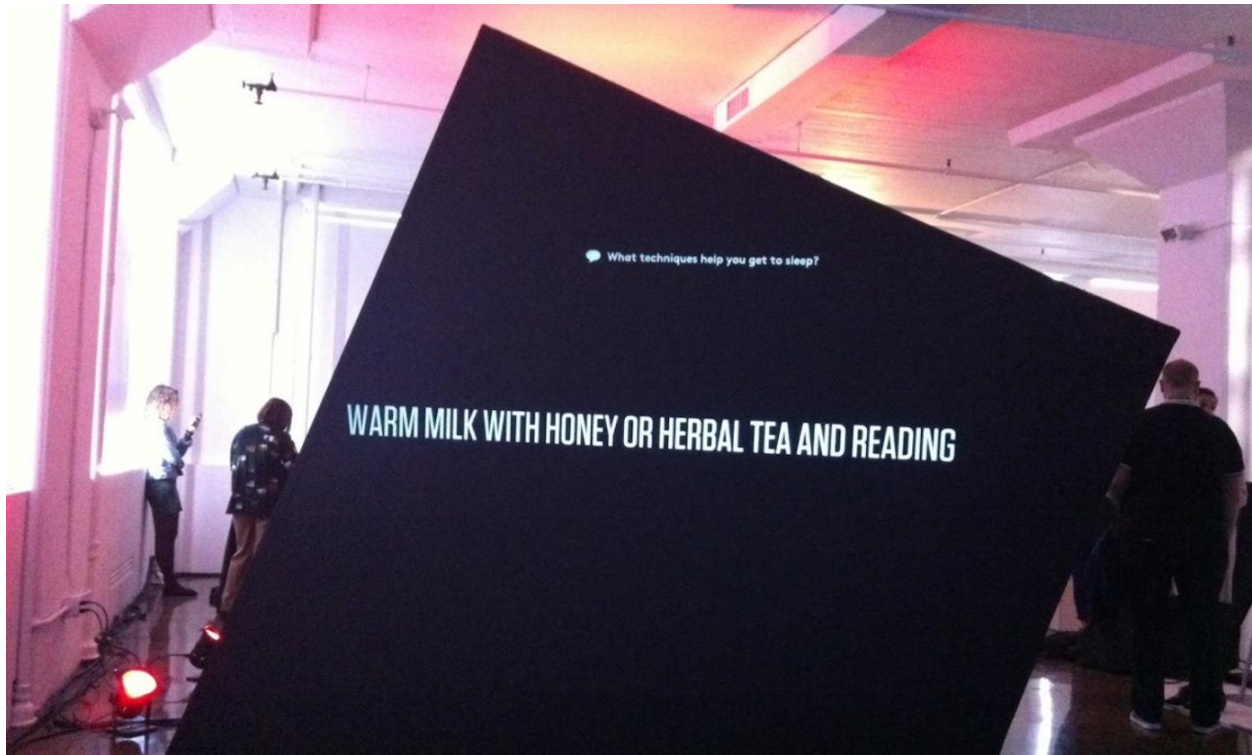


Figure 22. User's answers projected outside the installation (National Film Board of Canada)

Besides Tribeca Storyscapes section, the installation was also presented at the Sheffield Doc/Festival, DOK Leipzig, Kassel Documentary Film and Video Festival and the Musée National des Beaux-Arts du Québec (Montreal). The creators also presented a collective and sensorial experience, in a live web-concert, with a 60 minutes director's cut version, during Cinema du Réel (Paris), in 2014.

### **From Interaction to Participation**

An immersive voice, with minimal mood music over a dark background invites the audience to dive into a night of insomnia. The voice is accompanied by a digital sound wave vector, pulsating out from the screen's center. A resonant sound effect follows this disembodied voice in a vacuum, baffling, dreamlike, crossed with a ticking clock sound, setting the pace every second. The sound designer Philippe Lambert explains that he used and manipulated actual sound from the webcams to acquire this result: "You can take a sound and pitch it down and it becomes a dark

bass note, a melody or choir effect. I was using *musique concrète* techniques to create a soundtrack” (Pangburn, 2013).

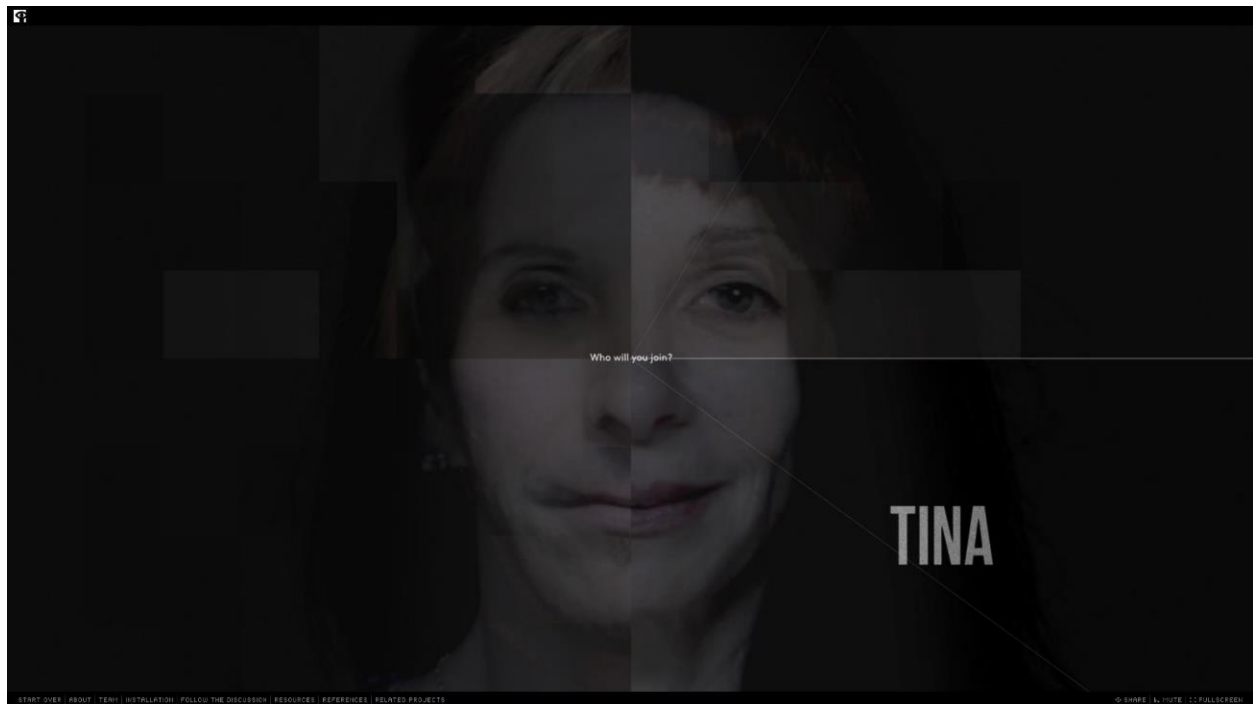
As the creators tried to enhance a sense of surreal darkness, the voice resembles the erotic and appealing tone of the actress Debbie Harry in the film *Videodrome* (1983), by David Cronenberg. *A Journal of Insomnia* uses narration as a rhetorical mode of discourse to communicate directly with the viewer, appealing to her or his senses and speaks in the first person to create an intimate and personal story, as a confidential testimony of an insomniac. Also, it relates to the audience in the second person, addressing the viewer directly by “you”, to boost in the viewer what Edgar Morin (2005) describes as a process of projection-identification: "in developed countries, 30 percent of people are insomniacs like me. Since the fall of 2012, privately, under the cover of darkness, I have been meeting them and collecting their stories. Welcome to *A Journal of Insomnia*” (Choiniere et al., 2013).

The interface of *A Journal of Insomnia* induces a feeling of dysomnia in the audience and sustains a surreal experience. According to Akufen, the company that designed the documentary interface, “every element of graphic design is in a direct link with the visual identity; intense color contrasts, shrieking elements, glitches... Anything to make a user the most uncomfortable, just like as sleepless night would” (“A journal of insomnia - Akufen,” 2013).

The opening sequence works as a preamble for welcoming the audience into the documentary content, divided into an open access section for all viewers, a closed section with further content, available only to the viewers that schedule an appointment, and a closed digital archive with all the participants’ contributions. The voice delivers this information, warning that “only by making an appointment and coming back tonight will you receive the full experience. It’s your turn now to invest part of your night” (Choiniere et al., 2013).

The open access content is accessible to anyone during the daytime, composed by teasers of four stories produced and filmed by the National Film Board of Canada to introduce the subject of insomnia. Four parts compounded by the faces of four subjects (Francis, Sarah, Fatiah, and

Tina) split the screen, while the narrator asks “Who will you join?”. The hands of a clock move over the screen, setting the pace in slow seconds.



*Figure 23.* Welcome screen, presenting a combination of the four individual portraits of the protagonists (Choiniere et al., 2013)

The four individual portraits combine into a single face, visually conveying that although each story is unique, all the stories have something in common: insomnia. These four stories work like an invitation to a deeper experience in the interactive documentary. Tina, Sarah, Francis, and Fatiha share their intimate thoughts to promote identification with the audience, while images of their empty bedrooms overlap with a still close-up portrait of each subject, facing the camera directly and subsequently the audience.

It's a blend of movement and stillness, just as Tina describes her nights: "thoughts running through my mind, images constantly streaming through my mind, words... Ghostly thoughts... thoughts and images. Movement. Motionlessness, which is hard to bear at night". For Tina “insomnia is a space-time continuum that must be tamed, in order to surrender to it. Otherwise, insomnia drives us mad” (Choiniere et al., 2013).

The inevitability of the continuum of space and time in life is suspended in film, as montage has the ability to manipulate time and space through flashbacks and flash-forwards, slow motions and ellipsis. While reality traps us in a certain place and time, the film has the peculiarity of interrupting time, of displacing us to another world, leading us to a state of “suspension of disbelief” (Coleridge, 2009). Furthermore, in an interactive documentary the concept of time and space is even more discontinuous, considering the contents are fragmented to allow the audience to navigate through the database and experience a multilinear narrative, leading to a complex process of reception, interaction and, consequently, interpretation, which Sandra Gaudenzi describes as following:

While in linear documentaries meaning was created by framing shots and editing them together, in participatory interactive documentary meaning is shared and layered: there is the meaning of individual clips (not controlled by the interactive documentary author), the meaning of the interface (normally conceived by the author) and the meaning of the browsing (the narrative route and association generated by the user, while jumping between videos). (2014, p. 200)

All the images from *A Journal of Insomnia* are dark, accentuated on a black background, flicking and tilting slowly. The aesthetic of a tawdry and intended low-resolution quality image and sound, to forge the analog recordings, presents an attempt for creating a tension between the high-quality images, normally associated with digital new technologies, and the human, defected, faulty and disruptive sleep of the insomniacs.

The four protagonists complain that sleep deprivation is disrupting their lives. Fatiah describes insomnia as "hell", and all of them affirm that their minds are over-busy. If that's not the case, Francis discloses, he tends to "dwell on something that wasn't there". Meanwhile, the night represents an emptiness, a vacuum, when “nothing happens”, as Sarah resignedly says.

Once we have watched and interacted with the open access database, we are invited to schedule an appointment during the night with one of the characters, for accessing the closed content about that particular subject, for contributing with our insomnia experience and interacting with the digital archive comprising the other participant’s contributions. In order to experience the full participative interactive documentary, the user is invited to embody the point-of-view of an

insomniac, interacting with the archive and simultaneously experiencing a condition of insomnia during the night.

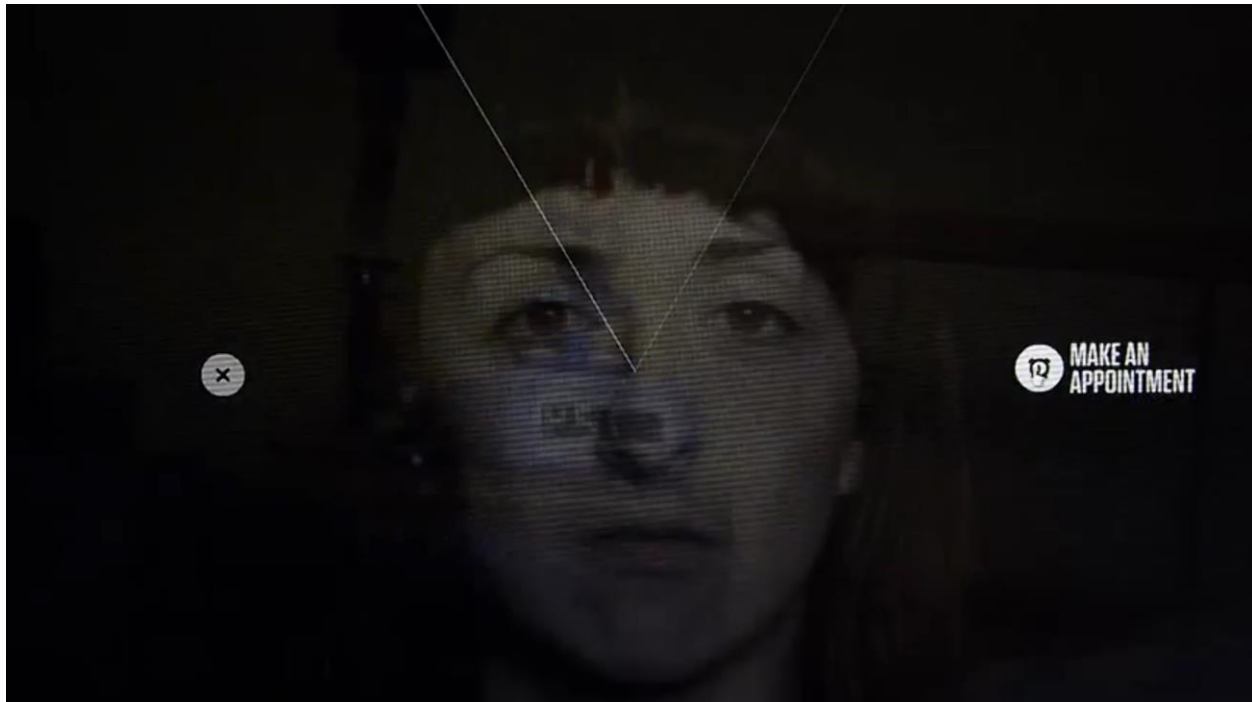


Figure 24. Inviting the audience for making an appointment

Accepting the challenge will lead us to the second level of interaction within *A Journal of Insomnia*. By clicking on the alarm clock interactive sign and requesting an appointment, we are redirected to a webpage that suggests the time for the appointment, asking for the user's approval. As the viewer accepts the time for the *rendezvous*, the platform requests her or his contact information, such as e-mail address, country code and phone number. The information is confirmed via e-mail with the following text:

Hello, Thank you for agreeing to surrender part of your night in order to experience collective insomnia. Your meeting with (name of one of the four characters) will be at 23h11 (scheduled time). The invitation will expire after two hours. (Choiniere et al., 2013)

After receiving the e-mail, all we can do is waiting for the night to fall.

It's night. The dark sky above our heads tells us it's time to sleep. Most of the lights from the houses are off. Only the street lights punctuate the urban landscape. It's silent. Probably

everyone is sleeping, or at least I assume so. I feel like I'm the only human being on earth that is awake. Thoughts are streaming into my mind and do not allow me to just forget about daytime. The feeling of loneliness is suddenly interrupted by my phone ringing. It's a call from the National Film Board of Canada.

On the other side, the surreal narrator's voice starts conducting the experience with a sententious discourse: "Good evening! The time has come. Don't miss your appointment. Someone is waiting for you in the night. Click the link I've sent you in the e-mail" (Choiniere et al., 2013).

The link redirects us to a black screen with a countdown timer, notifying the time remaining for the *rendezvous*.



Figure 25. landing page of the e-mail link (Choiniere et al., 2013)

After presenting the frontal close up portrait of the subject, we are introduced in the characters' house entrance hall, and we are provided to choose where, inside the house, we want to go, by clicking on one of the arrows in the image.



The interactive documentary presents a specific aesthetic to each character as an attempt to illustrate how each one of the four describes her or his nights, what kind of thoughts run in their minds and what they usually do when they can't sleep.



Figure 26. Sarah's entry hall (Choiniere et al., 2013)

In Sarah's case, the interactive signs will lead us through a walk in the house by displaying an accelerated first-person point-of-view sequence shoot. Both the image and sound's aesthetic resembles a VHS tape played in fast forward. In an interview for The Creators Project, the director of photography of *A Journal of Insomnia*, Thibaut Duverneix, explains that he shot the room images with a Red camera and then transferred the footage to a VHS tape in order to degrade the look, as a way to represent what Sarah described as her experience of insomnia. Duverneix elaborates that he had some doubts considering the aesthetic: "I was really pushing it far from interactivity. Far from making it look good, honest and intimate" (Pangburn, 2013).



Figure 27. Documentary footage with VHS drop-outs

However, the half-amateur, home video aesthetic make us feel closer to the character as she becomes more tangible and human. Such aesthetic approach reinforces the audience's identification with the subject, since VHS images and sounds are familiar for most adults that deal with it during the 1980's.

After walking through the house, the Sarah is waiting for us in one of the rooms, framed in a medium size shoot while is talking about her life and insomnia experiences. During the video segment drop-outs typical from the videotape playback are used to veil the jump cuts between the different parts of the interview. At any moment of the video segment, the user is able to interrupt the interview, either by closing the window and going back to the entrance hall to choose another video segment of the same subject, or by clicking on an interactive sign placed in the bottom of the screen to explore further footage related with the characters' description of her or his insomnia experience. While the interactor manipulates and selects the images displayed the interview is not interrupted. The soundscape grants the continuity between segments.

While in Sarah's and Francis cases, the extra contents triggered are mainly close up shots of the room where they are sited, in Fatiah's segment the images become all warped or defragmented in multiple smaller windows composing a kaleidoscopic yantra. Such aesthetic

represents the fragmented and messy sleep she experiences, as described in her interview. In Tina's interview turn, the extra contents triggered present ghostly images overlaying her house, just as she describes her insomnia nights: “ghostly thoughts... thoughts and images” (NFB, 2013).



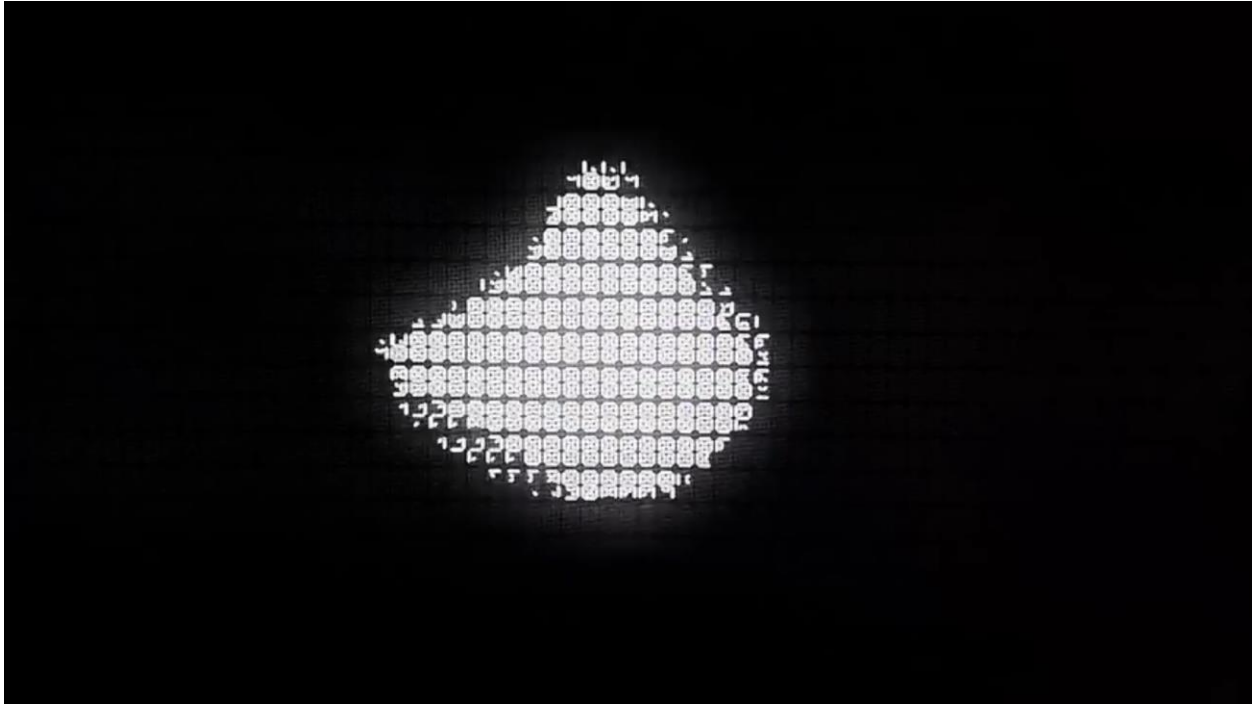
Figure 28. Fatiah's kaleidoscopic images



*Figure 29.* Tina's ghostly images

When each video segment ends, we listen the sound of a shuttle controller being pressed to stop the video display, and the viewer is taken back through the corridors to the departure place using the same VHS video aesthetic, but this time in a rewind mode. From there, we can choose to keep listening to the same character and exploring the other rooms and footage, by clicking in one of the interactive arrow signs, or abandon the character's testimony and move on.

Whenever the spectator wishes to proceed with the experience, an interactive sign with an axe, placed in the upper right corner of the screen, allows leaving this specific insomniac and redirects the user to "the voice".



*Figure 30.* Dynamic sound wave vector ("the voice")

The sound wave vector, in the black background, returns to inform us that we gained access to the other three subject's stories as well as to "all the confessions from all the insomniacs who collaborated to A Journal of Insomnia" (Choiniere et al., 2013). The black background absorbs the sound vector, and we gain access to the User Content Generated database. What is intriguing in the database is the fact that the four main characters' testimonies are presented next to the participants' stories, placing the spectators/contributors and the documentary's subjects next to each other and, therefore, regarding them as being at the same level within the documentary's structure.

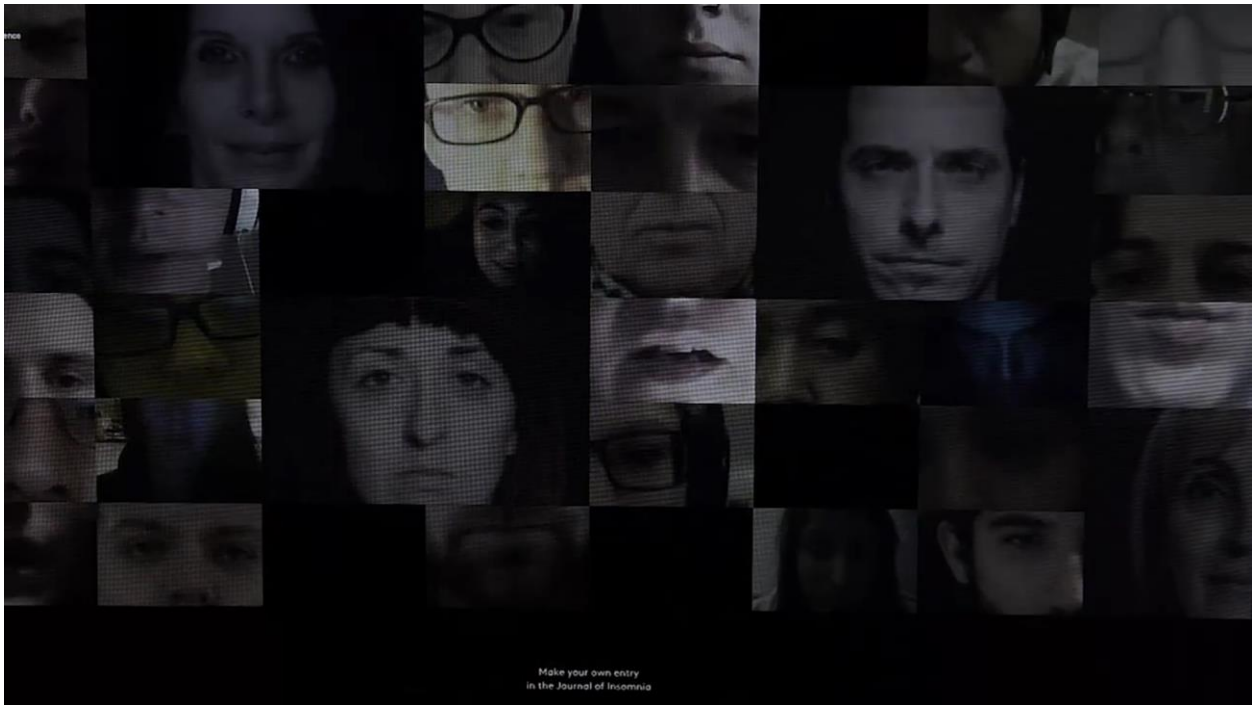


Figure 31. Participant's digital archive

In the bottom of the screen, we may identify the option of contributing with our own experience and contents to *A Journal of Insomnia*. This interactive sign displays an interface with the black background and the ticking clock sound. The arrow placed in the center of the screen leads the interactor to the interview to answer the questions and participate in the interactive documentary. Each question is presented both typed on the screen and through the voice that, by now, has become familiar to the audience. The interface also provides to the participant the chance of choosing the answering mode: through the webcam, typing and drawing the answers.

The participant's answers are then included in the digital database, and available to the other insomniacs. While some participants clearly accept the call with the intention of gaining access to the database and do not disclose their intimate thoughts, the truth is that most of the contents present a very intimate, profound and honest description of the audience's experience with insomnia. The producer Hugues Sweeney considers "there's a real need for these people not only to come out as an insomniac but also to share how they feel" and whereas the oral and typed answers are insightful, the drawings unveil the deepest private worlds:

Most of the drawings were especially affecting. I didn't expect them to be so personal and so natural. There's one that asks, "how does the insomnia make you feel



towards the people around you?” And that person really drew themselves as completely separate from the world. That touched me. I was impressed with the ways that people would create themselves. The medium is a website and they talk like they would to a real person. (Kemmerle, 2013)



Figure 32. Drawings made by participants for answering questions.

By and large, most of the participations occurred in the bedroom or the living room, with a warm and shimmer light. While participants are aware the result of their contribution to the interactive documentary will become available for streaming online, the videos reveal a surprisingly intimate and confidential tone. The digital documentary’s archive becomes a confession booth where interactors feel they may unveil their thoughts and traumas. Such comparison between documentary and confession was also suggested by Michael Renov, who drawing upon Foucault’s theories of the confessional subject, addresses the video camera as “an instrument of confession” (Renov, 2004, p. 196), as a kind of psychoanalytic stimulant which encourages people to self-disclose and reveal their emotions and experiences in depth. Renov also addresses the first-person video confessions, as objects which satisfy Foucault’s concept of confession as a “discourse in which the speaking subject is also the subject of the statement” (2004, p. 200), the subject of enunciation. Such practice may serve as a cathartic moment for reliving

anxieties and unburdening afflictions, almost in a therapeutic way, which provides interactors with the chance of sharing experiences. This process may also contribute to the audience's sense of virtual companionship.

Regarding the interaction strategy, although hyperlinks activate the interactive signs and the documentary allows exploring its contents in multilinear navigation, the most significant interaction component in *A Journal of Insomnia* is the acceptance of external video segments sent by the audience. As a participative interactive documentary, the digital object challenges the interactors contributing with contents and, thus, “the video database can evolve through participation” (Gaudenzi, 2013, p. 56). Therefore, I draw two diagrams for disclosing the architecture’s structure of *A Journal of Insomnia*: a simple non-linear tree model (Martinec & van Leeuwen, 2009, pp. 30–35) for the open access database and a complex non-linear model, combining a tree and a star model (Martinec & van Leeuwen, 2009, pp. 45–54), for translating the semantic structure of the closed access database.



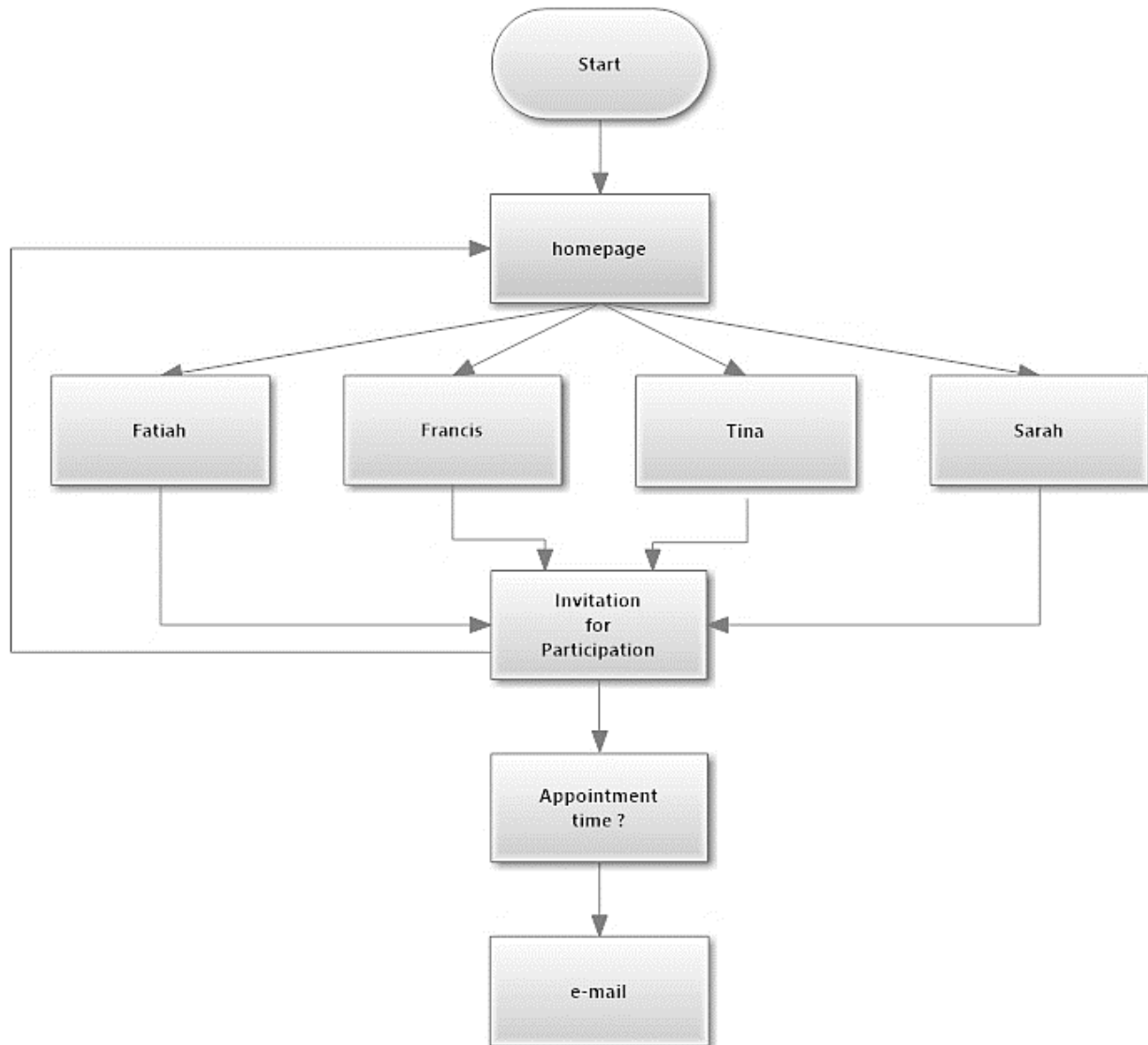


Diagram 6. *A Journal of Insomnia's* open archive

The first diagram corresponding to the open access database, as a simple non-linear model, translates a basic interaction navigation which branches the contents for providing the selection of pathways. By selecting one of the characters, a short video with her or his testimony is displayed, without providing further control over the narrative to the interactor. The viewer is also allowed returning to the homepage and select another subject to listen to her or his introduction story. Regardless the character selected, in any case, the viewer is driven to the invitation screen and encouraged to make an appointment and actively participate in the documentary by adding her or his own insomnia experience. Such structure classifies the items under a hierarchical system with different levels, in which the higher level nodes contain the information about the characters and

the lower levels invite the audience to schedule an appointment and later proceed with the experience of participating in the interactive documentary.

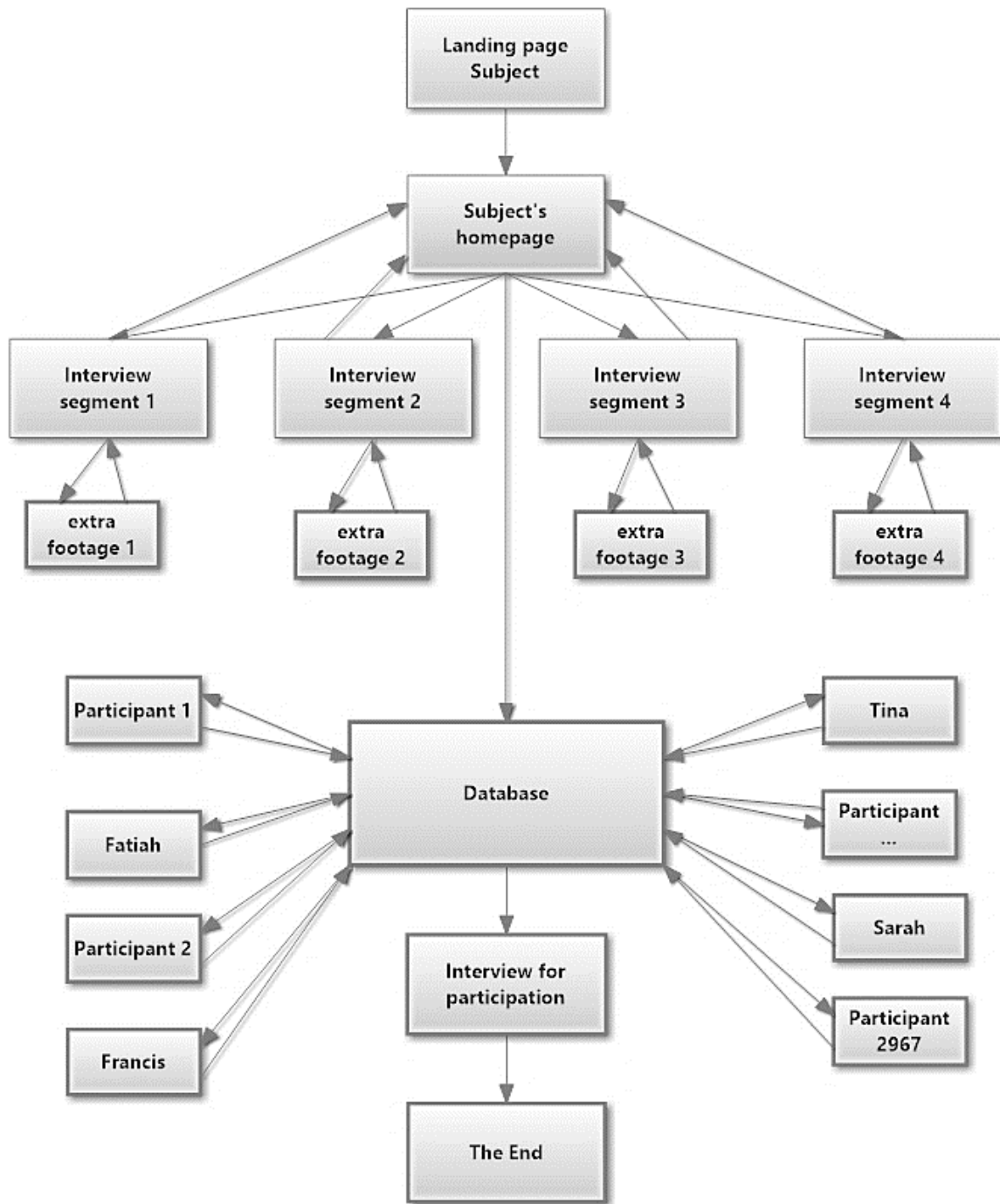


Diagram 7. *A Journal of Insomnia's* closed archive

As regards the closed access database, represented on the second diagram of *A Journal of Insomnia*, it structures the contents in a combinatory scheme of a tree with a star model. Whereas the video segments with the characters' testimonies are presented under a tree form, the participants' evolving database is organized within a star architecture. In the tree model format, each one of the characters' interview is fragmented into four segments represented by central nodes, which in turn evolve in sub-nodes with further additional information. Each one of the video segments focuses on a specific topic within the subject of insomnia, contributing along with the sub-information contained in each sub-node to deepen the audience's familiarity with both the person and the subject matter. Concerning the digital database where the participants' contributions are included, the items are organized as a star pattern, where the main interface with the appearance of a mosaic is the nucleus, and each one of the video segments available is a peripheral element. Each one of these elements represents a satellite of the nucleus, insofar as the video contributions are directly related and under the main interface. Moreover, at the end of each video segment, the interactor is driven back to the nucleus to choose another video segment or to proceed with the interactive experience.

Notwithstanding the distribution of contents within a structure may comprise semantic meaning, in the interactive documentary *A Journal of Insomnia* the more significant feature is undoubtedly the audience's participation in the work by contributing with a personal experience to the overgrowing digital database. Under the participative interactive documentary, interactor steps forward and engages in the work as a co-creator who contributes to the expansive database in a collaborative ecosystem where the documentary's characters co-live with the participants' contributions. By allowing and engaging the effective participation in the documentary, *A Journal of Insomnia* fosters a sense of virtual community among the participants and connect them in a collaboration of collectively constructing the digital object. Moreover, the audience's awareness about the expansive capacity of the digital archive provides them with the feeling of contributing for nourishing the approach to the topic of insomnia.

## ***A Journal of Insomnia's Conclusions***

The Internet is probably the best place to talk about insomnia. The World Wide Web disrupts our concepts of time and place, and as Jonathan Crary states in his book, “24/7 announces a time without time, a time extracted from any material or identifiable demarcations, a time without sequence or recurrence” (2013, p. 29). The technologies efface geographical borders and blurry the divisions between night and day, light and dark. We can be online 24 hours a day, seven days a week, and in some place on the planet there will be daytime, and there will be someone online.

Pierre Lévy compares this alternation process of succession to a “changing of the guard”, stressing for the continuous of internet, a system that never sleeps and breaks the sense of discontinuity and the corporeal:

While the thought of individuals is discontinuous because they sleep, grow ill, tired, take vacations, the collective intellect is always alert. When a mind slips into sleep, a hundred others rise to take its place. Consequently, the virtual world is always illuminated, animated by the flames of living intelligence. By combining thousands of intermittent flickering rays, we obtain a collective light that shines continuously. (Lévy, 1997, p. 107).

The interactive documentary *A journal of Insomnia* plays with this specific Internet attribute to contradict it, requiring the audience to be online during the night time. In order to give their testimony and to access most of the documentary's contents, it is necessary that participants make a night appointment and receive a call from the National Film Board to guide their participation. In a sense, this interactive documentary tries to restrict a world without apparent constraints, establishing limits for the endlessness of the World Wide Web. However, the digital database of the interactive documentary is an overgrowing archive, always accepting another video contribution, and where interactors may experience a sense of loss and infinity, insofar as the countless documentary contents may generate an everlasting interaction performance and stress in the users a sense of endlessness.

*A Journal of Insomnia* also triggers the audience in the process of self-representation by encouraging the participation in the documentary's content. Such practice goes beyond the projection-identification process defined by Edgar Morin (2005). While in his *Imaginary Man*

writings Morin establishes the spectator as outside the *mise-en-scène*, deprived of actual participation and without the ability to change the narrative, in the interactive documentary the user can shape the story and, furthermore, to include himself as an active participant in the artwork. For Morin, cinema is an aesthetic experience because it is meant for a passive spectator “who remains conscious of the absence of the practical reality of what is represented” (Morin, 2005, p. 97), by converting the magic crystallization into affective participation. While, in participative interactive documentary the user contributes to building a world that is not merely imaginary, where she or he inscribes oneself and intervenes directly, even though such constructed world is always intersubjective.

By accepting to participate in the documentary and including their stories the users become “both spectators and actors” (NFB, 2013). They not only navigate and watch the contributions from other insomniacs, creating a personalized narrative, as may send their own contents, contributing to a collective portrait. In fact, in such collaborative ecosystem spectator becomes a character among other faces, a part of the collective world represented by inscribing her or himself into the narrative and ensuring a shared omnipresence online. Such high degree involvement in the interaction process may trigger the interactor’s sense of belonging to an online community. As a participant sharing common interests, anxieties and experiences with other audience members, users perceive a sense of connectedness which may contribute to their absorption in the documentary.

Also, we must acknowledge that we are living “in the epoch of simultaneity: we are in the epoch of juxtaposition, the epoch of the near and far, of the side-by-side, of the dispersed” (Foucault, 1984, p. 46)<sup>33</sup>, and insomnia conducts to a feeling of extreme loneliness. On the other hand, while we become more rootless in our physical space, we are more and more embedded in the new digital neighborhood, connected through cultural and personal interests. As networked beings, we are becoming intellectual and social “nomads”(Lévy, 1997), moving through a virtual, mobile and discontinuous territory.

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<sup>33</sup> The essay *Of Other Spaces, Heterotopias* was first published by the French journal *Architecture/Mouvement/Continuité* in October, 1984, based on a lecture given by Michel Foucault in March 1967. Since the text was never reviewed for publication by Foucault is not part of the official corpus of his work.

Each video of the database may be regarded as a personal territory, a space of affinity that is built by its participant to mark her or his presence in a virtual world of insomniacs. The individual stories are both produced and presented as discrete experiences, disconnected from one another, and connected through a common subject matter. When ephemeral stories captured by our digital artifacts become part of a heterogeneous assemblage, they find their space within a narrative and draw a map, delineated from the emotional virtual bonds. The combination of these contributions collaborates in constructing a specific territory for its users based on affective geography and generating a map of multi-shared experiences. The archive keeps evolving, and the map keeps growing every time someone contributes with a new personal story.

In a prophetic statement, Foucault (1984) imagines the networking of individuals as a means to constructing geographies of human interaction. The Web 2.0 and collaborative digital environments appear to reanimate a spacialization of thought and experience and simultaneously gather individual experiences to enhance collective memory. In a certain perspective, we may infer that participative interactive documentary brings people closer together and connects them through sharing their stories, fostering a sense of belonging among participants. If only in a figurative sense, by bringing the users closer to each other through identifying with an issue in common, the artwork also forges in the audience a sense of place.

Moreover, through a displacement of archives to the user's screen, the digital artwork presents a "reterritorialization" (Deleuze & Guattari, 2000) of images, building a map that provides the digital archives with a new context and meaning. Even if the archives were deterritorialized from their original territory, in participative interactive documentary the images are resituated in a new territory of knowledge to assume a different function.

Also, the database works as a "sounding board" for insomniacs' confessions. Each one of the participants present a unique story and contributes to creating a multi-perspective, multidimensional, and multilinear map of insomnia, mapping the sleep disorder in an artistic rather than in a clinical perspective. In the interactive documentary the digital archives encompass multiple perspectives with different approaches to the same subject, such as insomnia, and together these perspectives build a broader point-of-view, or as Pierre Levy calls it, a "Cosmopedia", in which knowledge is not in possession of a few, but a form of "*universally*

*distributed intelligence*, constantly enhanced, coordinated in real time, and resulting in the effective mobilization of skills” (Lévy, 1997, p. 13).

Later, by facing themselves in the documentary’s content, participants are confronted with their image transferred to the screen and interact, physically and conceptually, with their own beings. We may consider this self-inscription as a self-portrait, a face to face with the subject, a proper inquiry into the essence of the subjectivity of the individual. The interactor beholds the Self through her or his own mirrored digital image, and watches her or his own eyes and gaze, her or his image from the otherness point-of-view. Thus, the viewer experiences the dialectics of the symbolic form between the Self and the Same.

PART III

THEORETICAL DEVELOPMENTS





## CHAPTER 7

### WAYS OF AFFECTION

Back in 1964, when Marshal MacLuhan (1994) wrote *Understanding Media*, there was no such thing as interactive documentary, the Internet was in its infancy and the first experiments in interactivity were being developed. Nonetheless, the recent progress of electronic media brings to the discussion McLuhan's writings about the human body as an extension of the technological *apparatus*, like an implosion of a shared consciousness that comprises significant changes in experiencing the world. McLuhan goes further by considering that media is, in fact, an extension of our senses:

Rapidly, we approach the final phase of the extension of man – the technological simulation of consciousness, when the creative process of knowing will be collectively and corporately extended to the whole of human society, much as we have already extended our senses and nerves by the various media. (McLuhan, 1994, pp. 3–4)

In this cultural-technological upheaval Marshal McLuhan's suggestion that electronic media change how we feel becomes relevant for understanding the perceptual and multisensory experience of interactive documentary. Also, Vivian Sobchack proposes a "cinesthetic" mode of embodied spectatorship. In the paper "What my fingers knew" (2000), she argues that film experience is not only a visual experience but a fully body-sensory pleasure since cinema appeals to the viewer's multiple senses and creates a para-sensory experience similar to synaesthesia. As such, the subject's body becomes the agency and location of perception where all the senses cooperate and commutate. Furthermore, Sobchack stresses that electronic media, as pervasive cultural technologies, transform our sense of subjectively perceived and embodied ways of "being-in-the-world", altering the audience's subjectivity, extending our senses and the "capacity to see and make sense of ourselves" (Sobchack, 2016, p. 4).

The digital devices, such as the mouse, the keyboard, the monitor or any other input and output devices positioned between the viewer and the virtual environment, provide to the human body an extension, in the McLuhanian sense, where the interactor may act and through which she or he perceives the mediated experience. As a domestic digital medium, the digital screen appears here as an “object of fascination” that demands the constant interaction through seeing and listening, as also through touching and reasoning, providing a multisensorial interface of interconnection between the human body and the diegetic world of interactive documentary. Consequently, the digital screen becomes a space in-between the interactor and the digital environment, for providing the fusion of technology with the body in a perpetual symbiosis, not only in an embodied phenomenological sense, in which the device reshapes the user’s experience, but first and foremost in a postphenomenological “hermeneutic relation”<sup>34</sup>, in which “the user experiences a transformed encounter with the world via the direct experience and interpretation of the technology itself” (Rosenberger & Verbeek, 2015, p. 17).

Drawing upon Merleau-Ponty's concept of phenomenology, which analyzes structures of human experience between the world and the bodily sensory experience, Don Ihde's postphenomenological approach explores the relationships between body and technology, how the latter induces bodily experiences of interacting with it and, consequently, shapes how the human beings perceive the world. He also distinguishes between two dimensions of perception: micro and macro-perceptions. While the first one (microperception) is the dimension of bodily-sensory perceptions, elaborated on the work of Husserl and Merleau-Ponty, macroperception comprises an interpretative dimension that discloses cultural, historical and anthropological meaning, drawn upon philosophers such as Heidegger and Foucault. Following Ihde’s approach, these two aspects will be analyzed as intrinsically interrelated, since “there is no bare or isolated microperception except in its field of hermeneutic or macroperceptual surrounding; nor may macroperception have

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<sup>34</sup> Don Ihde (1990) understands technological mediation as the role technology plays in the relation between human beings and their world. He discerns several relationships human beings can engage with technological artifacts: “embodiment relations”, when the instrument is “incorporated” and becomes an extension of the human body, experientially quasi-transparent to the user; “alterity relations”, when the users interact with devices as if they were other living beings; “hermeneutic relations”, when technologies provide representations of reality, which need to be interpreted by humans in order to constitute a perception; and “background relations”, for addressing technologies that play a role at the background of our experience, creating a context for our perceptions.

any focus without its fulfillment in microperceptual (bodily-sensory) experience” (Ihde, 1993, p. 77).

In this sense, technologies have the ability to alter certain phenomenological sensations, since their embodiment “simultaneously magnify or amplify and reduce or place aside what is experienced through them” (Ihde, 1990, p. 76). Thus, whereas the experience of interacting with the digital documentaries alienate the interactor from the surrounding world, also provides sensations and enhances her or his illusions and fantasies. The spectator-interactor, i.e., the subject, manipulates the interactive documentary, i.e., the object, as much as is shaped by it. They mutually reflect upon one another their desires, dreams, and aspirations through the perceptive and expressive articulation of subjectivity. The beholder becomes an active and passive character simultaneously, controlling the digital object as much as it is controlled by it.

Deleuze and Guattari (1994) talk about the *interaction* of bodies as a condition for sensibility, or proto-sensibility and proto-affectivity, a state of the body induced by another body. Besides the perceptual experience, they behold the state of *affection* as a moment of unformed and unstructured potential, when the human body is affected by the encounter with another body so that it affects one's power of being. It is through an increasing or decreasing intensity that such encounter prepares the body for acting. Such as Eric Shouse (2005) summarizes, “affect plays an important role in determining the relationship between our bodies, our environment, and others, and the subjective experience that we feel/think as affect dissolves into experience”. Thus, while navigating through the interactive documentary contents, triggering hyperlinks, making decisions and interpreting the filmic interactive narrative, the audience is brought into the performative action and becomes vulnerable to bodily felt *senses* conveyed by the experience itself, as much as uses her or his personhood for shaping the subjective perception of consciousness.

The term *sense* is employed in this study through a perceptual approach that has been guiding the experience of interacting with the digital objects, to address the way in which the body perceives the external stimulus provided by the interactive experience. Although emotions and feelings are related with and influence *affections*, Deleuze and Guattari distinguish the terms, addressing affections as states of mind and body which add intensity and a sense of urgency to the practice, influencing the subjective human experience. However, affects cannot be translated into

language, since they are unformed, unstructured and always prior to and outside of consciousness. Thus, not only interactive documentaries communicate with the spectator through vision and hearing, as, in a phenomenological perspective, the interactive perception is an embodied experience following through the entire body, providing sensations and feelings which trigger *affects* and encourage the pleasure to proceed to interact with the digital objects.

Within the last three chapters I presented a descriptive work of the interactive documentaries' experience selected as the *corpus* of study, while describing the nature of the human perceptual contact and the interaction with the world re-presented on the screen, as the essence of the spectator's perception and consciousness<sup>35</sup>. The experience of interacting with the digital objects while provides to the spectators the opportunity of participating in the interactive documentary at different levels, as aligning the fragmented parts of the interactive documentaries, building a personalized narrative, contributing with her or his own contents for constructing the narrative, also grants the audience with perceptions, sensations and affections.

The affects conveyed by the interactive documentary experience are, however, impressions that do not necessarily represent faculties, but more an illusion of intentionality. Throughout the experience of interacting with the documentary contents, the audience actively seeks out for pleasure and for fulfilling a sensation of delight. The sensuous encounter with the interactive documentary provides a virtual gratification for the spectator's performance, translated in this research as a "sense of". These *senses of* are embodied responses of the viewers from the process of interacting with the documentaries, as also represent embodied ways of being seduced and shaped by the experience of manipulating the digital objects. Instead of representing real achievements, as types of feelings, the *senses of* imply the audience's perception rather than their emotions.

Such as the various modes of interactive documentary represent different ways of interplaying with the documentary's contents, and consequently, with the world, each interaction strategy behind the digital objects convey different *ways of affection*, or *senses of*, to the viewer.

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<sup>35</sup> Both concepts of perception and consciousness include the processes of reasoning and interpretation, as well as sensation induced by the experience of film viewing and interacting.

While interacting with the documentaries, the spectators are imbued by these sensations that shape their perception and subjectivity, as also influence the interaction in itself.

### **Sense of Control**

Having non-linear structures, interactive documentaries are responsive objects, flexible, sensitive and open to the audience's inputs, responding in "real-time" to their instructions. Such process of interacting with the contents generates an illusion of greater freedom for choosing paths and outcomes. While the documentary unfolds, the viewers introduce commands into the system and receive the transformed feedback from their orders instantaneously and consistently with the expectations created by the digital object. The immediate response to the user's instructions as well as the sense of shaping the object elicits in the audience the impression of having control over the narrative, consequently over the flow of the story, and ultimately over the character's destiny.

While interacting with the digital environment, the spectator experiences a *sense of control*, insofar as all her or his instructions have consequences and produce a development. The simple action of navigating through the narrative, triggering hyperlinks and receiving back images, audio, and video contents, creates in the beholder the sensation of determining the flow of the story, encouraging her or him to proceed and achieve the plot of the documentary. As the interactive practice evolves, the embodied experience provides to the audience the tactile sense of having the documentary's diegetic control at the fingertips, palpable sense of a living object that feeds and sustains the process of meaning-making. The user, thus, comes into a relational dimension for a subjective mediation of reality.

While the *sense of control* is transversal to all interactive documentaries by virtue of the mere operation of interacting with the contents, the degree of manipulation, and therefore the perception of controlling the narrative, varies according to the interaction architectural system. Looking at the interactive documentaries analyzed within the previous chapters, we realize the choices are generally limited to a database, and the audience's participation is guided by the rules established by the documentary's creators. Moreover, although the system is responsive and

presents to the viewer the contents selected, the result of the interaction doesn't necessarily change the development of the story.

In the hyperlink interactive documentary *Bear 71*, not only the interaction is restrained to the contents available as the choices made by the audience have no impact on the story's development and denouement. Regardless the information triggered and displayed about the park's animals as the story unfolds, the linear soundscape leaves no space for manipulating the sequence of events and the final destiny of Bear 71 remains unchangeable. Such systems present mere procedural actions and result in a deterministic relationship between the subject and the object, allowing the audience just a few creative freedom.

On the other hand, a truly interactive system grants the audience autonomy for navigating more freely through the contents and even allows unexpected choices and developments. That's one of the reasons why Janet Murray (1998) distinguishes generic interactivity, action and participation from the concept of agency. While a responsive system based in a cause-effect scheme corresponds to the expected feedback, an interactive narrative should seek for a high-agency experience, comprising both the author's intentionality and the openness of unexpected and meaningful developments. In the participatory database of *A Journal of Insomnia*, the user is free for compounding a personalized puzzle of fragmented contributions from insomniacs and creating a unique narrative which flows according to each spectator's choices. Such interactive documentaries, with a higher degree of openness, result from a mutual collaboration between the audience and the machine, evolving in a dynamic, contextualized and continuous progression, and consequently fostering in the viewer a more profound *sense of control*.

Besides the action of triggering hyperlinks, documentaries like *Fort McMoney* position the user in the role of the story's protagonist, automatically prompting an intimate empathy with the documentary's goal. The virtual eyes become the spectator's vision, the user's navigation and choices become an extension of the character's movements through the narrative, immersing the audience at the plot center and blending spectator and character in a single entity. In such documentaries not only the spectator experiences the *sense of control* over the narrative as also enacts the personification of the main character and, by large, has the impression of controlling the world portrayed.

To summarize, depending on the interaction strategy and the degree of manipulation provided, the impact of the user's interaction may be more or less significant for the documentary's development and, consequently becomes more or less meaningful for the audience. Whereas the *sense of control* is always induced in the interactive audience, the impression of being in control also varies according to the degree of the spectator's autonomy and the position undertaken.

### **Sense of Presence**

Such as Marshall McLuhan (1994) highlights, as extensions of our nerves and senses, the technological media may lead to an illusion of overcoming the bodily constraints of space and time. While interacting with digital objects, the awareness of the physical self is replaced by the sense of being surrounded by the diegetic world of the interactive documentary, since the experience allows users to virtually visit, inhabit and interact with those worlds. Furthermore, the digital environment change our perception and experience of space as much as make it possible that no territory becomes off-limits, providing to the audience imaginary worlds:

Interactors will be lured into worlds where they float, tumble, and arc through thrillingly colored spaces, fly through imaginary clouds, and swim lazily across welcoming mountain ponds...enchanted worlds of increasingly refined visual delight that are populated by evocative fairy-tale creatures. (Murray, 1998, p. 263)

Regardless if the interactive documentary is build up from live events footage or 3D computer generated images, each digital object creates its private world, or a *heterotopia*<sup>36</sup> as Foucault (1984) would call it, and induces the subjective perception of transferring the viewer to the simulated place, providing her or him with a *sense of presence* in the diegetic world.

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<sup>36</sup> Michel Foucault (1984) describes *heterotopias* as real places which stand outside of its space, capable of combining several spaces in a single place, usually sliced in time, and both isolated and open and accessible, as public spaces.



The term *presence*<sup>37</sup> has been widely explored by scholars (Heeter, 1992; McMahan, 2003; Steuer, 1992), along with *immersion*, for addressing the experience of virtual reality and games, as a perceptual and psychological state of being transported to the constructed digital environment, either by means of the realistic images and sounds or by positioning the audience role-playing the story. In either case, the users experience a *sense of presence* when they forget about the physical place where they stand and have the impression of being absorbed into the diegetic digital world. For Heeter (1992), beyond the technological apparatus that bears the interactive objects, the uniqueness of digital environments lies mostly on the subjective mediated experience offered to the audience, inducing the perceptual impression of one's existence within the constructed world. According to her, the impression of "being there", at the story, when individuals become absorbed, concentrated, and fascinated by the environment, is what provides to the audience a *sense of presence*.

Heeter proceeds by distinguishing three dimensions of *presence* within Virtual Reality - *personal presence*, *social presence* and *environmental presence* – which may be applied to the experience of engaging with interactive documentaries. *Personal presence* is described as the subjective perceptual experience of the audience's perception of being included in the virtual world, by the realistic imagery and sound or by the responsiveness of the environment to the user's movements. In the documentary *Fort McMoney*, the *personal presence* is induced in the users by an intra-diegetic gaze translated through the first person point-of-view camera that feeds the sense of an audience who role-plays the story. In the 180° view at the beginning of each level, when some characters are introduced to the user, the interface responds to the audience's simulated head movement, rolling right and left. Also, the documentary is filmed in such a way that places the audience into the story, and the user experiences the impression of strolling through the geographic space.

Other important feature for a sense of personal presence results from pointing out the user through "position trackers to place the participant inside a virtual environment" (Heeter, 1992, p.

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<sup>37</sup> In this context *presence* is a derived term from *telepresence* (Minsky, 1980) which originally describes the ability to manipulate objects remotely in the real world through a technological interface. As the term evolved, *telepresence* is now considered a mediated perception by which the user feels incorporated into a virtual environment.

264). In the interactive documentary *Bear 71*, the viewer is represented by a dynamic orange dot, identified by the word “human” with the number attributed to the user and followed by “you”, as a way of determining the viewer’s location and presence within the screen and the park. By constantly seeing their position, the users become aware of their presence in the documentary and are provided with the impression of being included into the diegetic documentary world, a strategy that in Heeter’s opinion “has a powerful personal impact” (1992, p. 264).

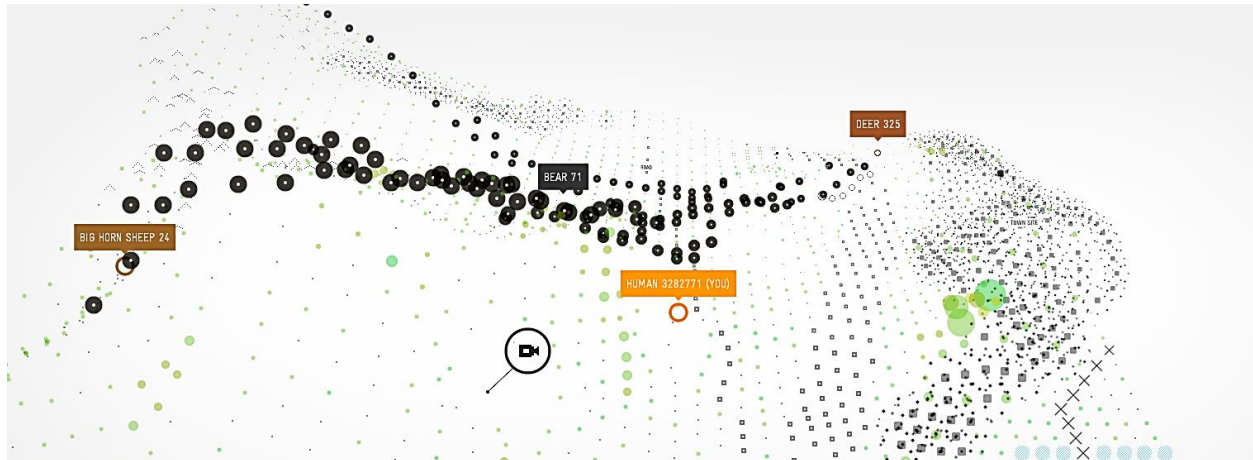


Figure 33. Identification of user's location within the interface (Allison & Mendes, 2012)

Additionally, the sense of *social presence* is only possible if more than one viewer interacts simultaneously in the same digital environment, insofar as demands from the users identify other interactors in the virtual space. Such awareness reinforces in the audience the impression that the diegetic world “exists”. Moreover, the encounter and interaction with other participants who recognize the user’s presence offers further evidence of the viewer’s virtual existence and stresses in the interactor the perception of being inside the digital world (Heeter, 1992, p. 265).

Whereas in *Bear 71* the *social presence* is limited to coming across with other audience members, pointed out by similar orange dots and identified by their specific number, in *Fort McMoney* the user “encounters” other participants in the debates and can advocate in order to influence their vote in the referendums. Furthermore, by contributing to reimagining an alternative

Fort McMurray, the users are engaging in a post-symbolic communication process<sup>38</sup>, “in which they could jointly create or modify virtual worlds from within those worlds” (Heeter, 1992, p. 266), and collectively shape the virtual city’s configuration. Such degree of *social presence* influences the audience’s impression of being in the digital environment.

On its turn, as a participative interactive documentary, *A Journal of Insomnia* is formulated around a collective experience of sharing personal stories and interacting with other participant’s contributions, boosting the perception of *social presence* to a higher level. By inviting the interactors to send their testimonies and images to the digital environment, the interactive documentary introduces each participant to the other interactors and allows them to watch and interact with their contents. The documentary triggers in the audience the awareness of being together and sharing the digital space, reinforcing the *sense of social presence* among users.

Also, when the participants include their contents in the digital archive of *A Journal of Insomnia* they are modifying the object of interaction and actively participating in the construction of the virtual environment, fostering a sense of bodily building the digital space. While many digital environments are designed for being merely explored by the users, in Heeter's perspective the responsiveness to the user's interactions, which allows them to modify the virtual space, induces in the audience a sense of *environmental presence* (Heeter, 1992, p. 266). Therefore, the *sense of environmental presence* is provided by the audience's ability to shape the digital space and depends on the effectiveness of the participant's interactions.

As regards the interactive documentary *Fort McMoney*, when accessing the dashboard area, the audience becomes aware of the changes introduced in the virtual city as result of the collective interaction and manipulation of contents. The participants experience a sense of *environmental presence* by comparing in the map the before and after result, as an outcome of their performative experience within the digital environment.

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<sup>38</sup> Researching the intersection between computer science and neuroscience, Jaron Lanier (2010, pp. 179–192) believes in a system, perhaps Virtual Reality, which will allow communication between human beings without any symbols, either visual or audio, using technology as an extension of both mind and body.

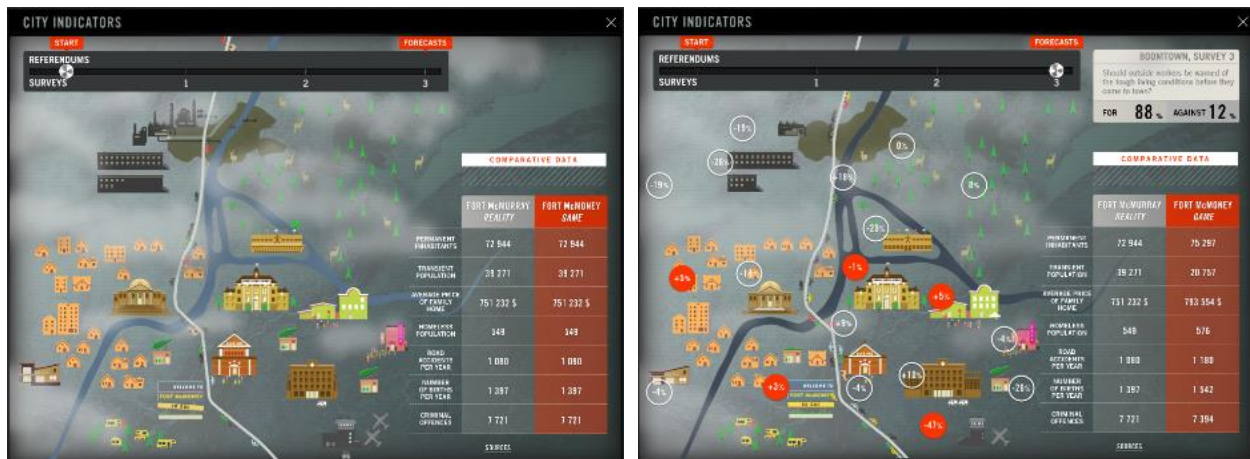


Figure 34. Comparison between Fort McMurray (left) and Fort McMurray transformed by users (right).

## Sense of Self

The procedural experience of agency in interactive documentary places the user at the core of the story, providing her or him with the possibility of developing the narrative through mutual interactions and compounding the segments into a composition whole. The spectator is persuaded by a self-centered experience while constructs a self-narrative, as she or he has the impression of role-playing the story. Instead of watching a single or collective protagonist leading the development of the narrative, in interactive documentary, the spectator experiences a *sense of control*, when accepts being the imaginary leading character, and a *sense of presence*, integrated into the represented space. Simultaneously, the interactive performance stimulates the audience's imagination and transforms the users into something other than their selves, insofar as the perceptual and sensorial differences between the digital environment and the lived reality tend to efface.

Such experience leads the audience to a self-induced shift in consciousness, a *sense of Self* that necessarily diverges from the daily physical existence. The users are in front of the screen but are simultaneously absent from the concrete reality; they are living the materialistic existence while experiencing the sensuous encounter with their own digital beings. The spectator is progressively erased, redefined and reinscribed as a *persona* and the Self is replaced by the digital being of the documentary world. Subsequently, the *sense of presence* in the digital environment represents a dislocation of the interactor's identity, which yields from her or his position in the

physical world to be replaced by the digital Self. As a result, when the core Self is detached from its commodity of origins and becomes dispersed and fragmented throughout the digital environments, the interactors fulfill the disembodiment of their own beings and experience a “bodily extension”<sup>39</sup> (Merleau-Ponty, 2002) form of Self. The interactive audience incorporates a different position and, thus, enacts a separate self each time it interacts with a documentary.

Concretely, whereas in *Fort McMone*y the user embodies the role of an explorer who discovers the city and helps shaping its future, in *A Journal of Insomnia* the participant becomes an insomniac connecting with other sleepless humans, as the interactive documentary demands from the user being awake during the night for interacting with the digital archive and sharing her or his intimate thoughts and distresses. Moreover, *Bear 71* arouses the viewer’s consciousness for the relocation of her or his Self when displays the image of the webcam at the screen, incorporating the audience into the digital object, next to animal characters. The embodied experience of interacting with the digital documentary reveals the self-awareness of the spectator's subjectivity, translated into the consciousness of the audience's digital identity or, in other words, into a particular *sense of Self*.

Although interactive documentary still considers an embodied felt experience, the Self is not enclosure restricted to the human body skin. Contrariwise, it becomes penetrable, a dynamic and fluid identity, in which the corporeal body and the technology spread across each other and become interwoven. Pierre Lévy (1998, pp. 39–42) elaborates around the virtualization of the body, or the creation of a “hyperbody”, which overcomes the skin, as the boundary between the self and the external world, multiplied and dispersed outside the individual. He also believes this process of detachment from the physical Self encourages traveling from one being to another, and virtually participate in a collective body.

Notably, the agency practice in digital environments must consider the fragmentation, dispersion and dislocation of the audience's Self, not only according to each interactive

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<sup>39</sup> Drawing upon Merleau-Ponty’s concept of “bodily extension” (2002), I believe the virtual and disembodied Self ceases to be an object and becomes an external but integral part of the interactive bodily experience, in the same line of thought proposed by Donna Haraway in the *A Cyborg Manifesto* (1991). Haraway’s essay *A Cyborg Manifesto* was originally published in 1984 and rejects rejection the existence of rigid boundaries, notably those separating “human” from “animal” and “human” from “machine”.

documentary but also acknowledging that the performative action is not fixed to one single settled digital identity. As the interactive experience unfolds, the user interconnects various spaces and environments and embodies changeable positions within the virtual environment, while performs different roles and may enact several *personas* throughout the documentary. Such as Sherry Turkle suggests, interacting in digital environments generates “a distributed Self that exists in many worlds and plays many roles at the same time” (Turkle, 1999, p. 644). The agency and the subjectivity of the “I” move across from one Self to another, providing the audience with a dynamic and fluid experience of the Self, insofar as the digital identity is encouraged or even imposed by the object of interaction.

More precisely, in the interactive documentary *Bear 71*, while at a given moment the viewer performs a *voyeur* who oversees the park through surveillance footage, in another time becomes the bear's companion and follows her steps through life. At the end, the viewer faces her or his own being, displayed at the screen, integrated into the object of interaction, revealing the consciousness of his subjectivity. Additionally, while exploring *A Journal of Insomnia*, the user enacts a careful collector who selects and enjoys segments of content. However, she or he mutates into a sleepless participant when contributes with materials for the collective archive.

Nevertheless, such flexibility of the spectator's digital identity doesn't undermine her or his digital *sense of Self*. Contrariwise, may reinforce it, since interactive documentary ultimately enables the engagement of the Self in a multiplicity of roles, distributed through varied environments, positively contributing to the audience's self-esteem.

### **Sense of Place**

The *sense of presence* in the interactive documentary, of being surrounded by a different reality, is intrinsically related with the audience's experience of exploring an illusionary world and temporarily inhabit it, interacting with its characters and perceptually exploring unknown territory. While navigating through a particular interactive documentary, the audience is provided with the sense of strolling across the contents and, thus, athwart the topographical area of the documentary. It is through the subjective interaction performance that the users are caught up in the diegetic

world of the documentary, making meaning out of the experience and fostering a *sense of place*<sup>40</sup> towards the virtual space. Such affect enables the sensory engagement with the space portrayed, by the identification of the viewer with individual and cultural particularities of the portrayed world.

The performative action of interacting allows the audience a certain familiarity with the virtual location, charging the space with meaningful connections and nourishing feelings towards the constructed world. Considering the perception of a space is directly related to the way we move through and inhabit it, as the interactive experience unfolds the audience takes pleasure of learning to move within the constructed world and starts creating attachment to the virtual, nevertheless eventually real, places and excursions, fostering a *sense of place* towards the diegetic space.

While interactive documentaries are constituted by broken and partial scenes, the act of sequencing the segments through the navigation experience creates an illusion of continuity both throughout the narrative and within the space. Linking one documentary segment into the next one may represent, in a certain sense, moving from one location to another space, and affords the audience with the opportunity of embodying the practice of displacement into the interactive experience. By means of their performative actions and interactions, the viewers produce, transform, and continuously develop heterogeneous and interlinked spaces, fostering the perception of a linear and continuous movement all over the diegetic documentary space. Also, the sense of continuity between fragments and spaces may be assured by a continuous soundscape or by a smooth transition of sound between different locations.

The topographical diegetic spaces of interactive documentaries are not necessarily constructed by landscapes or interior scenes. In the interactive documentary *Bear 71*, the representation of space is revealed by the interface design, in a stylized topographical map of Banff National Park, in Alberta, Canada. A white screen with variable dots, which change dynamically and responsively

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<sup>40</sup> The concept of *sense of place* has been explored by diverse fields of study, such as Anthropology (Low, 1992; Low & Altman, 1992), to address the symbolic relationship that people culturally create with a particular space, Geography (Tuan, 1990), describing the variations of affective bonds between people and places, Architecture (Jackson, 1994), as the attachment that inhabitants create within the course of time as a result of habit or custom, and Sociology (Hummon, 1992), which explores the subjective perceptions of communities about their environments.

according to the audience's navigation, replaces the indexical images usually used by documentaries to represent actual places.



Figure 35. Bear 71's topographical interface

When the users move the mouse across the screen, the interface allows traveling through the space of the park, coming across with the main topographical details and following the animals, as well as encountering other humans navigating through the territory. By the process of exploring the map the user gains an understanding of the landscape, recognizing natural and constructed landmarks and fostering an apperception of the space. While the minimalist design lacks the rich imagery of the real footage, the diegetic soundscape contributes to an immersive perception experience of the land. While traveling in the park, the audience listens to the train, and the highway traffic, gets closer to the river and explores the arboretums where several animals take refuge. Also, Bear 71's narration elicits the bodily sensations of experiencing the space, when the character describes the spring smells over the park, the cold winters and the icy breeze in her nose.

Moreover, in order to support the viewer's spatial orientation and contribute for wayfinding, the interactive documentary *Bear 71* presents a two-dimensional map of the park, identifying the users and the other characters' locations, pointing out the explored and unexplored regions of the park. This feature provides to the viewer the spatial awareness needed to proceed the pleasure of discovering unexplored areas.



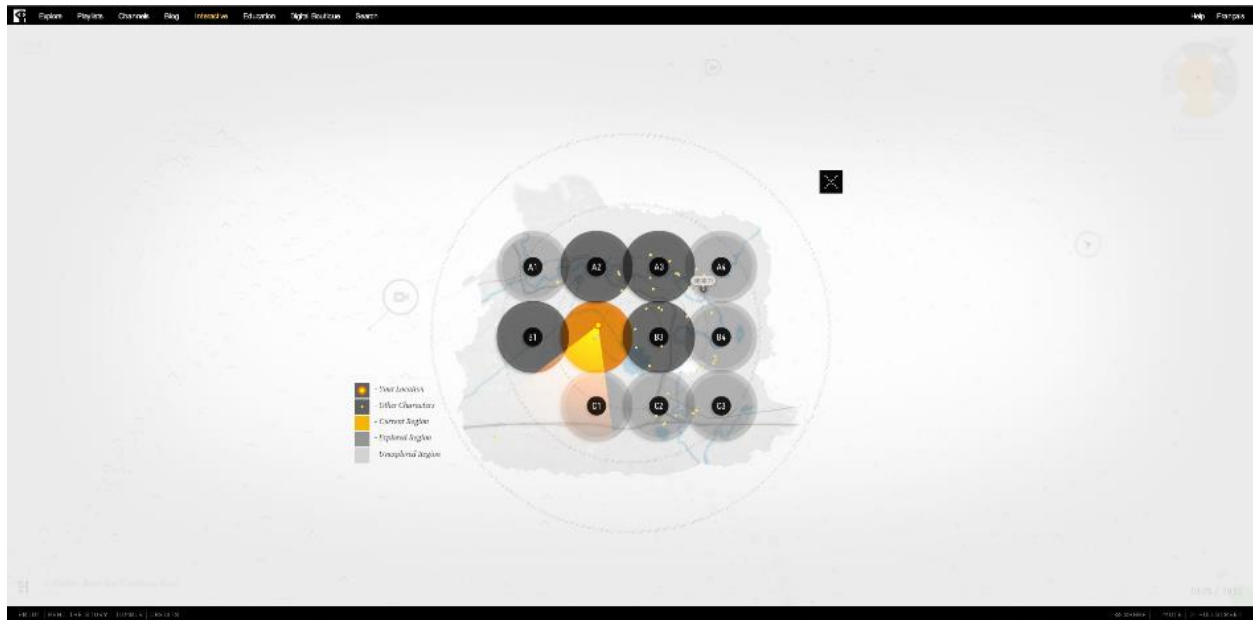


Figure 36. *Bear 71*'s grid pointing out the explored and unexplored regions, as well as the identification of users and animals within the park.

On the other hand, *Fort McMurray* explores the neighborhood through indexical images of Fort McMurray, portraying streets and buildings, icy landscapes and forests. To progress through the story, the viewer must visit various locations and get to know the region, moving across the virtual environment and constructing a “spatial narrative” (Jenkins, 2004). By virtue of its imagery, not only the documentary provides an immersive and compelling representation of the place, as also allows and even requests the audience to explore the territory. The enjoyment of interacting with the contents develops into the pleasure of discovering Fort McMurray and becoming familiar with the area, contributing to a *sense of place* within the interaction experience.

Also, the strategy of placing the user as the role-playing element forges a strong identification both with the protagonist and with camera movements, since the user is the one who pushes forward the main character’s expedition across space. In these terms, the progression through the virtual environment represents what Vivian Sobchack considers an “embodied activity”, as an extension of the physical movement in the world, or of the audience’s consciousness, since the viewer is “embodied in the world and able to accomplish and express the tasks and projects of living” (Sobchack, 1982, p. 318).

Interactors, however, do not merely occupy the space. In the interactive documentary *Fort McMoney*, they are invited to vote for referendums, reimagine and reinvent the city's configuration, and envision an alternative Fort McMurray. Such feature may be understood as a process of placemaking, since the virtual community's aspirations and desires, as well as the opinions, are taken into consideration for conceptualizing a sustainable and friendly city. The process strengthens the connection between users and the place, as she or he feels represented in the decision-making process and fosters a topophilia<sup>41</sup> towards the constructed world.



Figure 37. Fort McMoney's forums and referendums.

## Sense of Belonging

The interaction strategy of inviting the users to collectively redesign an alternative Fort McMurray also affords to the audience the chance of a shared experience of the place, fostering among users a *sense of belonging*. Besides the individual pleasure of discovering and interacting

<sup>41</sup> The term *topophilia* was used by Gaston Bachelard in *The Poetics of Space* (1964), for describing the affective bonds between human beings and certain places or settings, which contributes for a strong *sense of place*.

with the contents, the audience is stimulated for constituting a virtual community by developing social and cultural interventions. The will of advocating political and social views as well as the pursuit for companionship may prompt the interactors' participation in the virtual decision-making process. Nevertheless, when the audience takes part in the collective discussion and decision, the interactive experience triggers the perception of a reciprocal and interdependent relationship with others, in which each is seen as equal and contributes for a common purpose based on the group wellbeing.

In the broadest approach, the *sense of belonging* is a social and psychological need of human beings to be accepted as group members within their individual and social structures, whether in the family, among friends and co-workers, as part of a religious group, and so on. Through life individuals establish connections with other human beings, seeking for acceptance and empathy, and fostering feelings of membership and affiliation with several groups. The psychologist Abraham Maslow (1943) places the need of belonging halfway within his pyramid of human needs, suggesting that belong plays a crucial role in increasing the individual confidence and self-esteem.

Applying the *sense of belonging* to digital interactive environments, particularly to interactive documentary's experience, *sense of belonging* is the audience's perceptions of connectedness and virtual relationship with other participants, which elicit feelings of identification and affiliation. The *sense of belonging* may positively influence spectator's subjective interaction experience, encouraging her or him to interact with the digital object continuously, and by extent with other audience members, as well as eventually returning consecutively to the performative interaction. By assigning to the audience active and constructive roles, the interactive experience stimulates the interactors in looking at each other's experiences, nurturing empathy among participants and building insights that may lead to virtual relationships. Whereas new technologies contribute for social isolation, since the interactive experience usually occurs in an individual environment, the strategies of interactive documentary which feed this *sense of belonging* contribute for providing the audience with the affection of constructing social bonds and virtual communities across the internet.

On its turn, as a participative interactive documentary, *A Journal of Insomnia* provides a more profound *sense of belonging* to its participants than *Fort McMONEY*. Not only *A Journal of Insomnia* contradicts the loneliness and sadness arising from long and sleepless nights of insomnia, virtually gathering the viewers across dispersed screens, as provides the sense of a shared experience when the users contribute for constructing the digital archive with their own testimonies. By accepting the invitation of sharing their personal story of insomnia and sending their contents to the documentary the users embrace the role of active participants and become part of the documentary's diegetic world. The audience overcomes the role of interactor and becomes an actual intervener, inscribing the Self in the interactive documentary work and becoming engaged in the process of embodied meaning-making.



Figure 38. *A Journal of Insomnia*'s participants digital archive

Through the affective experience of contributing for participative interactive documentaries, the viewers have the impression of being listened and considered, as also enjoy the impression of becoming virtually included among peers, reinforcing their *sense of belonging* towards the insomniac's community.

Furthermore, the assembling of all the contents in an archive, placing the Self and the Other side by side, at the same level, provides a sensuous encounter and creates the illusion of a

reciprocal relationship between contributors, engaging Self and Other in a bodily perceptive and positive tension. Also, by sharing the experience of collectively constructing the interactive documentary, the spectators are both contributing for intersubjective digital work and being connected with other participants through the conception of *intercorporeality*<sup>42</sup>. The spectators experience a way of ‘touching’ other participants, by interacting with their contents, watching their images, listening to their thoughts, in sum, establishing a perception-action loop between Self and Other. They mutually shape each other in a system fed by the circularity of the contents.

### **Sense of Almightyness**

The desimbodiment and subsequent relocation of the Self, or reimbodiment, in the diegetic documentary world induces in the audience the sense of inhabiting the cinematic and electronic space through an external abstract entity. The interactor absorbs a bodily extended Self, capable of navigating through the virtual environment, personifying and manipulating characters, shaping the virtual future, and deciding the narrative's forthcoming. The interactor adopts an intentional stance towards the world and wields all the interactive documentary features from a privileged position. At home or the office, behind the screen, placed into a virtual environment, she or he is lead to believe that nothing can harm her or him. The spectator knows everything about everything and everyone all the time, embracing the sense of being omnipresent, following the narrative all along the experience, and omnipotent, being able of deciding the characters' and the place's future.

From this seemingly untouchable position, the interactive audience experiences a new form of embodiment translated as a *sense of Almightyness*, conceived as a Supreme Being fantasizing about domination and control, in sum, playing God. From the user's transcendent viewpoint, the incorporeality of the digital Self allows her or him shaping the narrative while being changeless, overseeing the diegetic space and remaining unobservable, controlling the character's destiny at her or his will as a free and autonomous being, evolving into a reciprocal loop where the audience

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<sup>42</sup> *Intercorporeality* is a concept proposed by Maurice Merleau-Ponty (2002) to address the relationship between one's own body and other's corporeality. For Ponty, *intercorporeality* encompasses a reciprocal perception and reaction between the self and the other.

directly controls an external entity. The interactor's body becomes what Merleau-Ponty defines as a "second body" (2002, pp. 104–105), a body absent from the objective space, which sees and touches the world but it cannot be seen or touched, offering to the audience space for mortality denial.

In the interactive documentary *Bear 71*, almost all along the narrative, the viewer beholds the topographical representation of Banff National Park from a high angle perspective, a transcendental aerial view, also called as God's point-of-view. Although the stylized map of the park is rooted in reality, it is also removed from that same reality as experienced by the park's visitants *in loco*. As it is designed, the interface simplifies the structures on the ground and de-familiarizes the space, providing an utterly new perspective on the park and producing different views of the existing reality. The elements seem small, squat and flattened, even the ones that the viewer consciously knows are immense, like mountains and trees. The characters look insignificant, only pinpointed with dynamic and manipulable dots. When contemplating the earth's surface from above, the interactor is provided with the impression of flying over the space and controlling events on the ground from a godhood position.

Also, in interactive documentaries which place the interactors in the leading role, as *Fort McMoney*, the camera and the spectator are combined and bound together, providing to the later an embodied agency and presence within the documentary world. Through the camera's lenses, the user is granted with an observable representation of the enworlded body, moving accordingly with the audience's interactions within the digital environment. The camera performs its perceptual role and becomes a vehicle which drives the embodied subject and responds to her or his wills. Furthermore, the camera serves as an extension of the spectator's body: the camera movements personify the audience's navigation within the space, granting a kinaesthetic perception of strolling through the narrative, extending the user's eyes, ears and fingers, and re-locating her or his bodily self-awareness into the diegetic world. Moreover, the perceived control over the character's movements, actions and faith within the story fulfills a pleasurable experience and contributes for reinforcing the *sense of Almightiness*. The documentary's characters become mere instrumental elements for the audience's achievements, who use them according to their own convenience to proceed through the narrative and accomplish an ending.

On the other hand, in *A Journal of Insomnia* the interactors are vulnerable and aware that their Self is one among many. Instead of experiencing a sense of eminence over the other interveners the users share the consciousness of a collective portrait, in a mediated alterity relationship, and the Self is diluted between the various representations.

The *sense of Almightiness* may persist throughout the interactive experiences until the moment when the spectator encounters her or his own image represented in the screen, such as happens in *Bear 71* and *A Journal of Insomnia*. At that particular instance, the viewer's immanence is manifested in the diegetic space and the self-aware audience recognizes her or his own body's presence in the digital environment, a "body-image" as Merleau-Ponty (2002, p. 114) would point out, through which the experience appears as meaningful. The interactor becomes aware of being as vulnerable as other participants and characters of the interactive documentary and come down to earth, so to speak.

### **Sense of Endlessness**

Interactive documentaries are by its nature multilinear narratives with rhizomatic structures, which not only allow but mostly demand from the audience a dramatic agency, selecting fragmented parts and following pathways. Although the interactive objects grant to the audience the freedom of choosing their own narrative developments, they also necessarily leave certain aspects of the story open, when the interactors forsake part of the documentary's contents. As exciting as navigating through the narrative may feel, its openness comprises unwatched ramifications of the story, questioning the coherence and closure of the narrative while induces dramatic ambiguity. The massive amount of contents that constitutes the structure of interactive documentaries, some of them that will necessarily remain unwatched, leads the audience to a sensation of infinitude. During the interactive procedural action, the audience dives into the documentary's database, selects options, watches segments and chooses gateways, progressively becoming aware of the difficulty of experiencing all the contents available. The pursuit of a "complete" interaction process may hypothetically result in an interminable process of interacting and, consequently, generates in the viewers a restless *sense of endlessness*.

While some documentaries are constructed with a narrow amount of contents, such as *Bear 71* and *Out My Window*, allowing users navigate through few options and realizing their choices have limited impact on the narrative's development, other documentaries present databases compounded by numerous segments and constituents, complex and heterogenic contents, with a structure based in a non-centric distribution and a non-hierarchical organization. Digital non-fiction works as *Fort McMoney*, *Prison Valley* and *Waterlife* play with the multidirection options and, to a certain extent, with the unpredictability of the narrative's development. In such cases, the *sense of endlessness* becomes more compelling and leads their interactors to multilayered perceptual experience. In fact, categorical interactive documentaries compounded by a vast number of contents and apparently with no inner technological order reinforces the *sense of endlessness*. Also, as far as *Fort McMoney* and *Prison Valley* regard, employing its interaction strategy characteristic, framed under what Gaudenzi named as conversational mode, the computer system provides to the audience a pretended inner dialogue simulating artificial feedback and extending the *sense of endlessness* for the interactors.

Moreover, in documentaries with multiple possible choices, the contents may be subject to manifold recombinations, generating alternative versions of the same digital object and expanding the audience's prospects for further developments and endings. The spectator follows an iterative process of discovering the unknown segments, pursuing the eager of fully exploring the interactive documentary's contents and reach several possible endings. Such peculiarity provides a seemingly perpetual feedback between the interactors' choices and the several narratives developed during the interaction experience. The documentaries' narrative and its associated meanings necessarily change depending on the sequence of contents selected, which generates a cybernetic loop between the user's consciousness and the documentary's feedback, enlarging the *sense of endlessness* in the viewers.

The participative interactive documentaries, with expansive and overgrowing databases, allow the constant inclusion of further segments to the existent digital archive. The participants may keep sending their contents, and the viewers may keep watching and interacting with them seemingly *ad aeternum*. Such interactive documentaries based in participatory strategies, as *A Journal of Insomnia*, are objects of never-ending openness and extensive endlessness, stretching the *sense of endlessness* to an efficient entangled process of continuum and combining the



hypothetical perpetuity of the interaction experience with an evolving twofold strategy of participation and interaction. Scrolling down through the evolving database with countless contributions raises the audience's conscious awareness for a myriad of interactive connections, multifaceted viewpoints and multiple interpretations. The experience of interacting with these participative documentaries becomes a collective virtual conversation of the users' coexistence, exposed to other "realities". Also, the audience experiences the unpredictability of the interactive documentary through the adaptive dynamics that lead to a multidimensionally narrative development, comprising both the contents itself and the various possible combinations. While the interactors are aware of their physical and existential finitude within the universe, they face a continuum and endlessness process of interacting with the digital object.

### **Sense of Incompleteness**

If on the one hand, such seeming infinitude of contents in interactive documentary may engage the audience in a persistent and continuous interaction experience, on the other hand, may lead the viewers into an unpleasant sensation of may be overlooking relevant details and missing part of the story, perceiving the experience as a perpetual incomplete narrative. In order to proceed throughout the experience, the interactors must make choices, and in most cases leave behind unexplored spaces and undiscovered options. In this sense, the interaction with the objects of understanding remains necessarily incomplete, since their meaning is never entirely exhausted by the interactor. Incompleteness, gaps, interruptions and faulty alignments of contents may induce into an illusory narrative and mislead the perceptual understanding of the story's general and accurate meaning, outpacing the audience's ability to fully grasp its complexity. Whereas the navigation through a partial narrative may fulfill a certain sense of closure, the audience's awareness of experiencing a partial and shortfall narrative, along with the unfamiliarity of all the other neglected and unchosen options, may induce in the interactive audience a *Sense of Incompleteness*.

Moreover, the neglected segments could eventually have contributed to providing further details and a broader context to the narrative. Such context may be of great significance for creating a compelling narrative, capable of generating emotional involvement in response to the represented

events, characters and places, and increasing the overall experience's gratification. Also, to proceed throughout the narrative, after encountering certain characters the interactors must leave them behind, which may decrease the potential empathy and involvement with the individual stories that contribute for a coherent and faultless whole. In order to entirely understand the story and appreciate all its dimensions, the audience may feel the need of repeatedly returning to the interactive documentary to watch what she or he have missed, also motivated by the desire to observe how alternative decisions and choices may lead (or not) to different developments and endings.

The concept of *incompleteness* has been approached from a psychological and medical perspective, heavily associated with an Obsessive–Compulsive Personality, which explanation may contribute metaphorically for a better understanding of the digital *sense of incompleteness* related with the interactive documentary's experience. From a medical viewpoint, the *sense of incompleteness* is generated by an obsessive-compulsive disorder, where patients are unable to control their thoughts or activities, feeling the need of regularly perform specific routines and repeatedly check things (National Institute of Mental Health, 2016), pursuing sensory perfectionism. Both in the documentary *Bear 71* and *Fort McMoney*, the compulsion for a repeatedly return to the interactive experience may contribute for satisfying the desire of discovering new options and details while, nonetheless, leads the users to the impression that other pathways and contents remain unseen and, thus, develops the *sense of incompleteness*.

In each interactive documentary, particularly categorical webdocs composed by numerous contents like *Waterlife*, and especially the participative mode documentaries like *A Journal of Insomnia*, which comprise digital overgrowing archives, the *sense of incompleteness* may trigger a metaphorical hoarding behavior, a derivative disorder from the obsessive compulsion, where people feel the need of accumulating objects regardless its actual value. The user becomes a kind of extreme collector, watching more and more segments, eager to assembling as many documentary contents and fragments as possible. In a Freudian perspective, the users feel an emotional and almost physical need to possess a particular "object of desire", obtaining in exchange a feeling of simulated comfort and security. The more unique and difficult is to own the object, or in this case segment, the more desirable it becomes. However, for each fragment

gathered there will be other contents uncollected, or at least the impression of it, which maintains the audience's *sense of incompleteness* alive.

## Conclusions

The previous sensory accounts arise from the descriptive and subjective experience of interacting with the digital objects selected as *the corpus* of study. The diversity and multiform interactive structures contribute to a varied explanation of the user's subjectivity, positioned as internal representations, such as sensations, perceptions and *affections*. In this perspective, through different *ways of affection*, interactive documentaries seduce the audience into an immersive and engaging interplay between perception and interaction. The spectators become absorbed into and by the interactive experience, involved in the flow of images and sounds, and engendered in the procedural action of interacting. Whilst the users acquire the ability to shape the documentary's narrative, by means of their performative act of making choices and decisions, during the interactive experience they become vulnerable to the documentary's persuasion and yield their position to perform an embodied perceptual experience.

These proposed *ways of affection*, or *senses of*, are not fixed to a particular audience member, not even to a given interactive experience. Such as the modes of interaction may flow from one to the other within the same interactive documentary, so the audience's perceptual experience is fluid and changes throughout the interactive performance according to specific situations and environments. The induced senses may even evolve from other perceived affections and overlap each other. Nevertheless, some interactive documentaries' modes are more related with certain *ways of affection* than others.

Table 2. Interactive documentaries of the *corpus of study* and their related *ways of affection*

Interactive documentary	Interaction mode	Senses
<i>Bear 71</i> (Allison & Mendes, 2012)	Hyperlink documentary	sense of control sense of presence sense of Almightiness sense of endlessness sense of incompleteness
<i>Fort McMoney</i> (Dufresne, 2013b)	Conversational documentary	sense of control sense of presence sense of place sense of Almightiness Sense of Self
<i>A Journal of Insomnia</i> (Choiniere et al., 2013)	Participative documentary	Sense of control Sense of presence Sense of belonging Sense of Self sense of endlessness sense of incompleteness

Both the *sense of control* and the *sense of presence* are transversal affections embodied by an engaged audience during the interaction experience all along, regardless the documentary's interaction structure and how the interactive mode addresses the audience. Nevertheless, the *sense of control* induced in the interactors by the digital documentary varies according to the interactive structure. The more open the documentary structure is, a higher degree of *sense of control* will be generated in the users. Likewise, both the *sense of endlessness* and the *sense of incompleteness* may intersect documentaries with various architectural structures and be induced during different interaction experiences. These senses are not necessarily perceived as gratifying feelings but may contribute for encouraging the users pursuing the interaction procedural action.

Also, the relevance of the audience's induced affections depends on the number of contents available and its distribution through the documentary's structure. The larger and more numerous the database of contents is, the higher *sense of control* the audience will feel, while the *sense of endlessness* and the *sense of incompleteness* becomes more conspicuous. Besides, the less hierarchical and organized the contents are, the more the audience will experience the *sense of endlessness* and the *sense of incompleteness*. On the other hand, the apparently non-hierarchical and non-organized distribution of contents will lead the audience to a deeper *sense of control* over the narrative and the story.

The perceptual illusion of inhabiting a certain space and interacting with it will provide to the interactive audience a *sense of presence* within the digital environment. Despite the various dimensions of *sense of presence*, distinguished by Heeter (1992), may elicit different levels and modes of presence, the perceptual impression of an unmediated living experience greatly contributes for the interactor's immersion in the diegetic documentary world. Directly dependent upon the *sense of presence*, particularly ensuing the *sense of environmental presence*, the *sense of place* is mostly experienced in interactive documentaries portraying geographic spaces, which require from the interactors undertaking a journey and virtually traveling throughout the territory in order to construct the narrative. The audience may experience the impression of strolling through the documentary's world and momentarily inhabiting the diegetic space.

By combining the *sense of control* and the *sense of presence*, the viewers experience a projection-identification<sup>43</sup> process with their own selves. Instead of merely going through affective participation, as in non-interactive movies where the spectator projects the self onto one of the characters, the interactive audience is granted with a *sense of Self*, by projecting and deceptively transferring their own beings into the digital environment and become part of it. Also, in some instances where interactive documentaries enhance a confident *sense of Self*, the interactors may feel especially pervasive and ubiquitous, with the ability to play God and, thus, experiencing a *sense of Almightyness*.

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<sup>43</sup> The term projection-identification is employed by Edgar Morin to describe the way how the film spectator, through an affective participation, "instead of projecting himself into the world, absorbs the world into himself (2005, p. 86).

On its turn, the *sense of belonging* depends upon the induced affect of being included into the interactive documentary world, i. e. the *sense of presence*. Enhanced by collaborative and participatory strategies, the *sense of belonging* evolves specifically from the *sense of social presence* which provides the awareness of being accompanied in the virtual environment and encourages the users' interacting with each other, reinforcing their perception of virtual connectedness. Conversely, while experiencing a *sense of belonging* during the interactive performance and participating in the collective construction of the digital object, the users are unable to experience a *sense of Almightiness*. When placed next to other participants and interacting with them, the viewer recognizes others as equals and is absorbed into an alterity relationship, assuming the existence of an alternative viewpoint and, thus, acknowledging to be one among others.



## CHAPTER 8

### THE DIGITAL GAZE

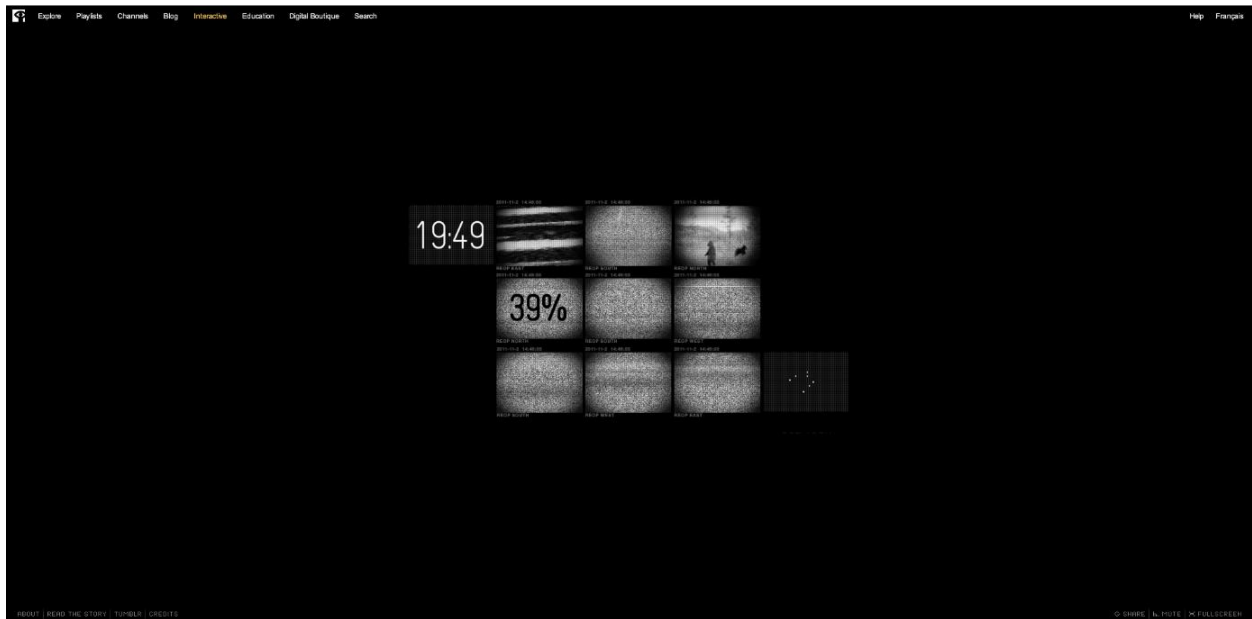


Figure 39. *Bear 71's* landing page

The countdown displayed on the screen indicates the waiting time for initiating the experience of interactive documentary. As the interactive experience unfolds, progressively and intentionally the audience yields to the interaction process. First, they perceive a *sense of control*, by shaping and manipulating the story according to their desires. Secondly they experience a *sense of presence* by relocating the Self into the diegetic world, and, finally, they virtually construct and inhabit the space obtaining the induced feeling of becoming the Almighty subject of the entire interactive experience.

Such like other digital spaces, interactive documentaries may be framed under what Sherry Turkle describes as "simulation spaces", which allow users experiencing a dreamlike reality, free



of physical constraints, where they may discover a self inhabiting environment where "objects fly, spin, accelerate, change shape and color, disappear and reappear" (1995, p. 66). On Turkle's postmodern perspective the cyberspace has the ability to develop the users' sense of Self through their own particular volition, providing them the opportunity of creating a multiple, decentered and fluid identity. Through such deconstructed Self, each user may explore various desired parts of identity and discover one's "inner diversity of being" (1995, p. 256), interplaying between multiple selves<sup>44</sup>. Such perspective doesn't deny the existence of one single Self, as argued by authors as Jacques Lacan, Christian Metz and Gilles Deleuze, but believes that due to contemporary everyday life pressure people doesn't see themselves anymore as unitary actors. Also, the ubiquity of digital devices enabled the people's ability for unrevealing a manifold of facets of the Self, spread across various online contexts.

Likewise, within the procedural action of interacting with interactive documentaries, users are provided with the pleasure of navigating from one environment to another, embodying several identities and elapsing multiplied iterations of the subject. Through such process, they build up their fluid and dynamic subjectivity, projecting their deepest dreams and desires in a constructed digital alter-ego and identifying themselves with it. As the interaction evolves, the digital Self arises crafted upon a combination of the user's digital experiences and her or his aspiring online existence. Such digital Self isn't inborn; it's a *selfobject*<sup>45</sup> which derives from the Self and is experienced as part of it, acting on behalf of the interactor throughout the interaction process with the digital environment. In this sense, the interactor is bound by the agency of the digital Self, who carries out entrusted actions and incorporates the fantasies and desires of her or his related subject.

Hence, the digital Self doesn't stand on its own; it's an extension of the subject's imaginary, and its existence remains entirely dependent on the true Self. As the digital environment provides

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<sup>44</sup> The idea of multiple selves was developed by Sherry Turkle in *Life on the Screen* (1995) for explaining the player's embodiment of several identities in MUDs (Multi-User Domains games), where she extends Lacan's ideas about the Self and argues "the unitary self is an illusion" (1995, p. 15), since "the culture of simulation may help us achieve a vision of a multiple but integrated identity whose flexibility, resilience, and capacity for joy comes from having access to our many selves" (1995, p. 268).

<sup>45</sup> The concept of *selfobject* or self-object, was developed by Heinz Kohut for addressing any narcissistic experience in which the other serves the desires of the self. In *The Analysis of the Self* (1971), Kohut defines selfobject as the object of an obsession that is the reason for a narcissistic transference. In his view, although the selfobject is an external object works as part of the subject and is not perceived as separate or independent from the Self.

interactors with the opportunity of abstracting themselves from the material, real subject, they immediately experience as much as project themselves into the digital Self. Moreover, when the users interact with their digital Selves they are not experiencing the material existence, but dealing with the virtual image of the Self, transferred to the digital environment and projected by and in their imaginary. Whereas the digital Self is an elusive construction in the virtual environment still represents the subject, insofar as it structures the interactor's way of dealing with the Self. The digital Self may be considered what Don Ihde describes as a "virtual body", a quasi-other identified as oneself, that experiences a multidimensional gestalt "in the here-body of the embodied perspective, whereas the visual objectification out-there is spectacle-like" (Ihde, 1998, p. 350). In such perspective, the digital Self plays with the dialectics of embodiment/disembodiment, between the material "here-body" and the "over-there" image-body. The digital Self is, thus, a virtual and manipulable affiliation of the real Self, a virtual re-presentation of the Ideal Ego which occupies a digital and detached position from the "I", even if it is intrinsically connected to the spectator's body, sharing feelings, dreams and pleasures.

Both the *sense of control* over the diegetic world and the *sense of presence* positioning the interactor role-playing the narrative leads the audience to a continuous perceptual form of self-identification. As the procedural form of interaction pushes the viewers into an embodied participation, the interactive environment becomes a realization of their imaginary and instills them into exploiting an intra-diegetic gaze, experiencing an illusory self-awareness of perceiving the virtual Self as their bodily presence in the virtual environment. Even if the interactors don't literally see their faces in the digital documentary, they are interacting and shaping the object from inside, placed in the narrative's subjective world in order to perceive the digital inner experiences of the Self and become an extension of their own subjectivity.

If in the Lacanian mirror stage (2006) the child becomes aware of her or his own body and existence through the reflected image in the mirror and constructs an ideal version of the Self, film theories developed on the 1970's by authors as Jean-Louis Baudry (1974) and Christian Metz (1982) compare the film screen with a mirror where the spectator receives a reflection of itself as master of those images. Metz particularly states the spectators' recognition of their likeness on the screen is the "primal form" of identification, an identification with the gaze and through which the audience makes sense of the film. When comparing the digital screen with the Lacanian mirror,

the interactive audience doesn't feel the need of undergoing through a projection-identification process as proposed by such film theories, insofar as the digital device already reflects back to the interactor the agency and image of her or his own Self, leading the viewers to self-identify with their disembodied extensions, constructed upon the felt *sense of Self*. More than a mirror which reflects back the image, the digital screen becomes a space of in-betweenness the real and virtual worlds, a communication chamber which mediates the relationship between the virtual alter-ego and the Self and functions as a portal that allows users to get in touch with their digital Selves.

While the interactor recognizes the digital Self as the extension of her or his own body, also conceives an improved image of selfhood based on the constructed digital alter-ego, perceived as more complete, more perfect and more powerful than experienced in her or his own bodily existence. The user beholds her or his digital Self as real, but it's a merely imaginary entity, an Ideal Ego anticipating what she or he wishes to be. Furthermore, the audience's identification with their digital alter-ego extends the notion of *méconnaissance* (Lacan, 2006), (in English, misrecognition), insofar as the spectators become alienated from their Selves and perceive their selfhood through a distorted and improved image created in and by the digital environment. The illusion of the mirror stage is enhanced by the digital screen, which provides the audience with the opportunity of perceiving oneself through the virtual persona. At this point, the virtual world works as an echo chamber that intensifies the spectator's misrecognition, who sees oneself based on the likeness of the constructed digital alter-ego. Even when the audience actively seeks the "I" beyond the Self fails to recognize it, loaded as it is with the satisfaction and pleasure of finding oneself in the diegetic world and dazzled with the seemingly magnificent Self.

Nonetheless, the interactor's misrecognition cannot be circumscribed to the subject's misunderstanding of its image in the digital object, through a distorted and overestimated likeness. As the interactor fails to recognize oneself also perceives the distressful feeling of being absent from the digital object, seeking for the Self within the diegetic world. The digital Self becomes thus the site of the gaze, an unobtainable object that remains invisible to the audience's eyes and ultimately drives their unconscious desire, triggering and feeding the eager of continuously proceed interacting. The users try to overcome the flatness of the screen and see beyond its surface but are unable to grasp it, making them aware that although they experience a *sense of presence* within the digital environment remain as an absence. This is the point where

the subject's trauma lays, "this point at which something appears to be *invisible*, this point at which something appears to be missing from representation, some meaning left unrevealed, is the point of the Lacanian gaze" (Copjec, 2000, p. 300) <sup>46</sup>.

The realization of the digital Self, which inhabits the virtual environment, is never sufficiently achieved by the interactor, but simply mediated by her or his desire to obtain it, an object of desire which the subject pursues and tries to possess; the interactor beholds the narrative and wishes anticipate to become that alter-ego – ostensible omnipresent, omnipotent, omniscient. As a desiring-being, the digital Self corresponds to what Lacan (1977, pp. 67–121) describes in the *seminar XI* as the *objet petit a*,<sup>47</sup> a wishful and unattainable object which expresses the interactor's fantasy. Nevertheless, the digital Self, or in this Lacanian perspective the "*autre*", is also the object which causes that same desire. With the impossibility of completely grasping the digital Self, the subject tries to overcome its absence by possessing the ideal image, through an internalizing process of embodying the Self into her or his own subjectivity. The audience gazes at the digital Self and develops a fetishistic pleasure of self-voyeurism, a scopophilia by the Self. The audience loves its image but desires what exceeds the image, the Self behind the Self which drives the subject into the ideal-ego, the "point at which he desires to gratify himself in himself" (Lacan, 1977, p. 257).

However, technology allows the freedom of desiring as much as it means limitations. Such as Don Ihde notes, the question arising from our existential involvement with technologies comes to be how those technologies embody our desires and fantasies:

The desire is to see, but seeing is seeing through instrumentation. Negatively, the desire for pure transparency is the wish to escape the limitations of the material technology. It is a Platonism returned in a new form, the desire to escape the newly

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<sup>46</sup> Elaborating around Lacan's *seminar XI* (1977), Joan Copjec (2000) recovered one of the founding ideas of psychoanalysis – the unconscious desire – for understanding the film spectator. Instead of comparing the film screen with a mirror in which the spectators can project and identify themselves, creating an illusion of visual omnipotence, Copjec argues the spectator's absence from the screen is what triggers his desire, a desire which relays beyond the limits of the image's visibility.

<sup>47</sup> Although "*objet petit a*" may be understood in English as "little object a", Lacan (2006) insisted the term should remain untranslated. In his writings (1977), *a* stands for the French word "*autre*", meaning Other. So, the *objet petit a* is the object of desire which the subject seeks in the other.

extended body of technological engagement. In the wish there remains the contradiction: the user both wants and does not want the technology. The user wants what the technology gives but does not want the limits, the transformation that a technologically extended body implies. (Ihde, 1990, pp. 75–76)

Furthermore, unlike the film experience, where “there is one thing and one thing only that is never reflected in it [the mirror]: the spectator’s own body” (Metz, 1982, p. 46), in interactive documentary the interactors may inscribe themselves into the digital work. Either by leaving behind subtle traces which disclose the user’s interaction or by actually including an image of the “I” in the digital object, as a “selfie inscription” performed through collaborative strategies. The interactor occupies a place in the scopic field and becomes both immersed in the film-world and part of it, spectating from within himself, present and absent on screen. As the screen exposes the image of the interactor’s own body, she or he experiences a freeze in the flow of time. The flood of pixels takes a pause, and the subject gazes at her or his own depicted image, beholding her or his own body. The audience is, thus, provided with the self-satisfaction of seeing oneself on screen and being seen by other interactors. The digital Self is unveiled, displayed at the digital environment, as a spectacle to be looked at, always exposed, visible to the interactor’s eyes and gaze, subjected to the narcissistic look from outside, either by the “I” or by other participants.

Not only the viewer’s inscription in the interactive documentary fulfills the pleasure for a narcissistic Ego, as the encounter of the “I” with the image of the digital Self is a complex and disturbing moment. In that very subtle moment, the subject becomes a specter, a point when the individual is “neither subject nor object but a subject who feels he is becoming an object” (Barthes, 1980, p. 14). When seeing oneself in the digital environment, the audience experiences an “out-of-body” sensation, looking at the Self from an external perspective, from the Otherness point-of-view. That’s also the moment when the spectator becomes conscious that the Self is placed in the reverse oppositional viewpoint, positioned in the perspective of someone who is being looked at but simultaneously is looking back. The digital gaze, thus, alienates the interactor by subjecting her or him to a look from a singular perspectival viewpoint, through the reversibility of observer and observed; the Self becomes shown as much as seeable, by being seen without being able of seeing either its observer or itself. As Lacan wrote, “I see myself seeing myself” (1977, p. 80), and by looking at myself I don’t see myself, but a merely imaginary Self who’s re-presentation on

screen is looking back at me. The interactor looks at her or his own image in the digital screen while the image of the Self looks back at the “I”, a “self-diegetic gaze” which overlaps an inner and outer perspective.

More than an intra-diegetic gaze (Chandler, 1998), represented in filmic and televisual media by a subjective point-of-view shot, the “self-diegetic gaze” addresses the audience’s experience of looking at the Self, placed into the diegetic world, from the spectator’s point-of-view. Therefore, the self-diegetic gaze may be understood as the intertwining of the intra and extra-diegetic gazes, rendering nevertheless the spectator’s gaze, who is simultaneously inside and outside the virtual environment, and providing the narcissistic pleasure of beholding and appreciating the digital Self from both an inner and outer perspective. The digital gaze returns to the viewer through her or his own eyes and involves the subject into a circularity of self-referential looks, an endless loop of observation, which establishes a mutual and reciprocal *mise-en-abyme* and traps the interactive audience into the digital gaze.

Behind and beyond the screen, when other audience members watch the interactors’ depicted image online, they are performing a pervasive action of beholding the subject through her or his digital Self, insofar as the gaze of other participants overlap with the viewers’ subjective look, feeding the viewers’ pleasure for her or his participation from the Otherness perspective. Once the interactive documentary provides the structure for a voyeuristic gaze, the subjects become the actors of the events in the digital environment, and the audience becomes the gaze of their own performative actions. As self-voyeurs, the interactors wish to be seen as seers and seek for the audience’s regard but are unable to recognize it, remaining self-aware of the desired object and gazing blankly into the digital Self.



## FINAL CONSIDERATIONS

My motivation for undertaking this research was the curiosity to discover how interactivity is changing documentary film. As both researcher and filmmaker, I was intrigued by the novel and disruptive interactive documentary works that emerged over the last 15 years, rapidly growing and evolving. Since 2010 renowned international film festivals, such as the International Documentary Film Festival Amsterdam (IDFA), Sundance Film Festival and Tribeca Film Festival, among others, started featuring interactive works in their programs. Also, prominent filmmakers like Ridley Scott and Wes Anderson embarked onboard the interactive aesthetic movement, daring to experiment this new form of production. Whereas interactive documentary tries to stand out and to establish its own aesthetic and form also claims to be an evolution of the traditional genre, preserving its fundamental heritage. The question is far more complex than this, and it is still to be unveiled, as Rodowick argues:

The old (cinematic) and the new (electronic and digital) media find themselves in a curious genealogical *mélange* whose chronology is by no means simple or self-evident. As ‘film’ disappears in the successive substitutions of the digital for the analog, what persists is cinema as a narrative form and a psychological experience – a certain modality of articulating visuality, signification, and desire through space, movement, and time. Indeed, while computer-generated imagery longs to be ‘photographic’, many forms of interactive media long to be ‘cinematic’. (Rodowick, 2007, pp. 184–185)

As outlined within this dissertation, interactive documentaries significantly change the form and the film watching experience by breaking the narrative of the represented reality into pieces, altering the reception conditions and venues and partly withdrawing the creative process from the director’s domain to the audience’s hands, allowing the manipulation of the fragmented contents and affording self-centered and sometimes even self-referential experiences. Within the several transformations, perhaps the most significant one introduced by interactive documentary, when compared with unfolding or more traditional forms of audiovisual works, lies in the user’s



role, insofar as the audience performs an operation during the film viewing process. Such digital objects not only allow as mostly demand an action from the viewer to activate all its features and proceed the multilinear structure onwards.

Nowadays we are drawing with images and sounds. Not only we consume contents, but also produce, change (remix), appropriate, circulate, and broadcast these materials. We do it because we can. We have the means, the opportunity and the will to do it. However, it is not clear why we do it. In the “convergence age” (Jenkins, 2006a), grasping the perceptual experience becomes even more pertinent. We must understand how audience makes sense of the contents and what the perception is while interaction occurs. It certainly is an exciting moment for researching audiences, particularly in new media experiences. The possibilities and approaches to interactive documentary are infinite regarding the objects’ aesthetics and forms, the levels of participation and how such revolution affects the interactor’s experience. More than watching and interpreting, in interactive documentary spectator becomes what Sandra Gaudenzi names a “*doer*”, rather than a viewer. In this perspective, the interactor is included as part of the system and manipulates it from inside, tied together with the artifact in a dynamic feedback loop of action-reaction (Gaudenzi, 2013, p. 15).

All and all, within the prevailing research on interactive documentary, the audience has been portrayed as an active element (Cohen, 2001; Gaudenzi, 2013; Gifreu, 2013) and notwithstanding the scarceness of investigation undertaken specifically on audience in interactive documentary, the few research works published have been focusing in the interactor’s impact in the digital work; i. e. how the interactor, as the active element of the interaction process, manipulates and shapes the interactive documentary’s configuration (Gaudenzi, 2014; Nash, 2014b, 2014c). Whereas I acknowledge the importance of considering the new documentary’s affordances and the audience’s active performance over the digital artifacts, I do understand the viewer’s interaction and choices are limited and, more importantly, induced by the object of interaction.

Perhaps the most significant finding in this research lies in understanding how interactive documentary affects the audience. Instead of analyzing how viewers shape interactive documentaries, I approach the research focusing on the reverse perspective and explore the ways

in which interactive documentaries affect users. I propose that interactive documentary's distinctive characteristics affect the perceptual interaction experience in several dimensions that I address as *ways of affection*. As an external material body, interactive documentary provides impressions and induces sensations which shape the audience's perceptual experience of the interaction practice and triggers actions throughout the narrative. As result of the subjective interaction with the three interactive documentaries selected as *corpus of study*, chapter 7 describes the eight proposed *ways of affection: sense of control, sense of presence, sense of Self, sense of place, sense of belonging, sense of Almightiness, sense of endlessness and sense of incompleteness*.

These *ways of affection* are multifarious, involuntary, sometimes paradoxical and, nonetheless, constitutive of the audience's subjectivity. In this perspective, the interactor is subjected to perceptual and experiential senses mediated by technology, that open questions about control and agency. Both the technological and the interactive dimensions of interactive documentary structure the subjectivity of the viewer, insofar as the digital screen may be framed within what Crary describes as "optical devices": "as sites of both knowledge and power that operate directly on the body of the individual" (1992, p. 7). Interactive documentary, therefore, possesses its distinct bodily agency, intentionality, and subjectivity that is experienced by the user through an embodied, dynamic and fluid performance of operating a re-presentation of the world. The diegetic environment effaces the limits of the material and virtual world and the absorbs the spectator.

As so, the Self evolves as a double entity composed of an individual, material and sensory being, and a fragmented, detached and virtual entity addressed as digital Self. These two entities are, nevertheless, linked and connected through neural and sensory bonds, reciprocally and mutually shaping one another and, thus, significantly contributing to a complex and intricate subjectivity. Through a binary opposition between the corporeal Self and its digital counterpart, interactive documentary creates a self-reflexive interface, eluding the boundaries between both entities and interplaying the perception of being in a two-way, dynamic and interactive process, where each is reflected in the other as one continuous framework. Such as the corporeal Self informs its virtual alter Ego's behavior and existence, the digital Self intervenes in the perception of the physical body and the interactor experiences an expansive sensorial "sameness" within the virtual environment. The crossover of the Self and its digital image becomes the engagement of

both in a *mise-en-abyme* process of self-reflection, as a reversibility sequence that may be compared to what Merleau-Ponty (1993, pp. 124–125) describes as an “extraordinary overlapping”<sup>48</sup>.

The subjective experience of interaction in digital environments represents an altered state of consciousness, insofar as the interactive audience loses the awareness of their feelings and existence, to form a new virtual identity translating their self-consciousness (or the intended self-consciousness) through self-referential experiences. Moreover, by projecting the Self into the virtual environment and affording the interactor with *ways of affection*, interactive documentary engenders an intersubjective engagement that allows oneself to experience the diegetic space, the characters and the virtual presence of other users not as objects but as subjects, developing empathetic affinities towards them based on one’s recognition of their subjective experience. This intersubjective encounter of the viewer with others and with her or his own image portrayed in the screen leads the interactor to an awareness that she or he is also a subject and, thus, becomes visible to others as a subjective and intentional being.

This act of looking, seeing and being seen, simultaneously from an inner and outer perspective, is what I describe as the *digital gaze*, a disturbing sensation of being observed which causes anxiety but, nevertheless, contributes for a scopophilic pleasure of watching oneself in the digital environment and being aware that others can see one’s image too. In the psychoanalytic Lacanian perspective (2006), the digital screen becomes a mirror which reflects the audience's image and emanates the electrical power to implicate and fascinate the subject through an obsessive and narcissistic gaze. The digital Self becomes the pleasurable object of desire, vulnerable and exposed for self-contemplation. Moreover, the precise moment when the interactive audience faces her or his own representation inscribed into the object of interaction is an unsettling and crucial moment, insofar as the interactive viewer is immersed in a virtual environment that is also occupied by its digital Self. The reflected image raises the audience’s awareness about the Self as Other, and the interactor experiences an internal duality in the

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<sup>48</sup>Elaborating on Art, especially painting, Merleau-Ponty describes the “extraordinary overlapping” as a body immersed in the world, itself visible: “...my body simultaneously sees and is seen. That which looks at all things can also look at itself and recognize, in what it sees, the ‘other side’ of its power of looking. It sees itself seeing; it touches itself touching; it is visible and sensitive for itself” (Merleau-Ponty, 1993, p. 124).

awareness of both the Self and its digital counterpart within the diegetic environment, while struggles to understand the fundamental separation between one's internal and external worlds.

The image depicted on the screen doesn't necessarily translates the audience's imaginary about the Self but provides the delightful gratification of existing elsewhere, where others can see and identify it. Furthermore, the *digital gaze* is a purely alienation experience, insofar as the unify and unifying image reflected in the digital environment is never positioned in the place from which the audience sees it. The audience assumes a self-reflexive stance observing the reflected digital Self always detached from the subject and oblivious from the true Self, alien to the self-being, always other than the I viewed from somewhere else. The overlapping of the interactor's identity and its image portrayed as otherness, mediated by the technological interface, leads her or him back to the phenomenon of *méconnaissance*, such as the child in the Lacanian mirror stage (2006) who sees in the mirror a misrecognition of the actual physical reality.

Both the proposed *ways of affection* framework and the *digital gaze* concept have been developed with two key affordances in mind. Firstly, they can be employed as an analytical framework for the critical discussion of the audience's perceptual experience of interacting with non-linear digital documentaries, contributing for an understanding of how the audience is affected by the experience of engaging with and manipulating a representation of reality, while shape one's subjectivity. Secondly, they provide a basis for the critical exploitation of other virtual worlds. Although the suggested conceptions lend themselves to an analytical deconstruction of web-based documentaries, I foresee the tremendous potential for investigating interactive environments such as Virtual Reality documentaries, interactive installations and even glancing on social media platforms. Particularly Virtual Reality documentaries afford the possibility of an exponential immersion and consequently enhance the affect on the audience's engagement. As a profoundly immersive medium, VR provides the viewer with a transformative experience of alienation and affection. Whereas in 2013, when I started my research, Virtual Reality documentaries were in its early days of development, and there weren't significant examples for analysis, the fast pace evolution of works over the last years provides fertile ground for further expanding the critical understanding of audience's engagement within the realm of documentary, as well as in other interactive environments.



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